COMPACT CATALOGUE
English

HANSA FLEX

COMPACT CATALOGUE
English

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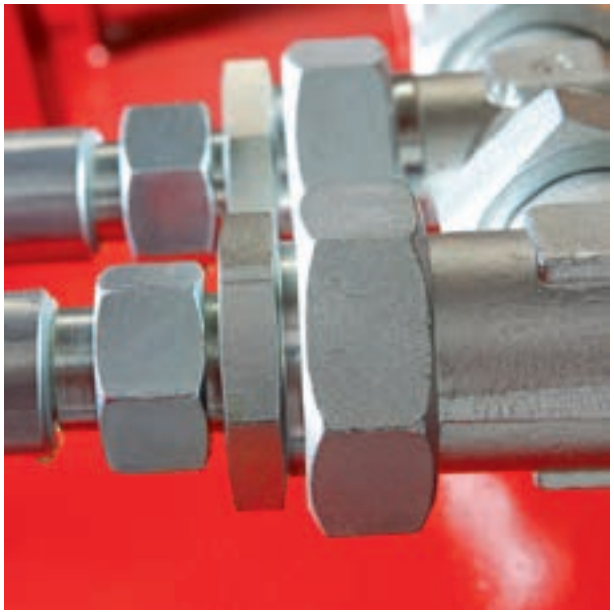
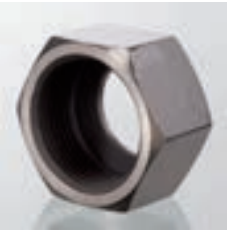
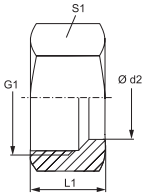


Line technology

UEM Union nut





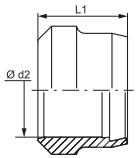
Connection 1: metric nut thread
Standard: DIN 3870
Surface protection: electro galvanised
Product versions: UEM VA, Union nut, VA, Stainless steel
UEM MG, Union nut MG, Brass

Design: Union nut
Material: Steel

Identification	Series	Ø d2 mm	G1	L1 mm	S1
UEM 04 LL	LL	4	M 8 x 1	11,5	10
UEM 05 LL	LL	5	M 10 x 1	12,0	12
UEM 06 LL	LL	6	M 10 x 1	12,0	12
UEM 08 LL	LL	8	M 12 x 1	12,5	14
UEM 10 LL	LL	10	M 14 x 1	13,5	17
UEM 12 LL	LL	12	M 16 x 1	13,5	19
UEM 16 LL	LL	16	M 22 x 1.5	17,5	27
UEM NW 04 L	L	6	M 12 x 1.5	15,0	14
UEM NW 06 L	L	8	M 14 x 1.5	15,0	17
UEM NW 08 L	L	10	M 16 x 1.5	16,0	19
UEM NW 10 L	L	12	M 18 x 1.5	16,0	22
UEM NW 13 L	L	15	M 22 x 1.5	17,5	27
UEM NW 16 L	L	18	M 26 x 1.5	18,5	32
UEM NW 16 L 27	L	18	M 27 x 2	18,0	32
UEM NW 20 L	L	22	M 30 x 2	20,5	36
UEM NW 25 L	L	28	M 36 x 2	21,5	41
UEM NW 32 L	L	35	M 45 x 2	24,5	50
UEM NW 40 L	L	42	M 52 x 2	24,5	60
UEM NW 03 S	S	6	M 14 x 1.5	17,0	17
UEM NW 04 S	S	8	M 16 x 1.5	17,0	19
UEM NW 06 S	S	10	M 18 x 1.5	18,0	22
UEM NW 08 S	S	12	M 20 x 1.5	18,0	24
UEM NW 10 S	S	14	M 22 x 1.5	21,0	27
UEM NW 13 S	S	16	M 24 x 1.5	21,0	30
UEM NW 16 S	S	20	M 30 x 2	24,5	36
UEM NW 20 S	S	25	M 36 x 2	27,5	46
UEM NW 25 S	S	30	M 42 x 2	29,5	50
UEM NW 32 S	S	38	M 52 x 2	33,0	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

SRD — Cutting ring



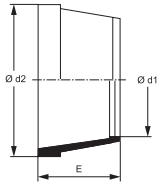
Design: Cutting ring
Material: Steel
Product versions : SRD MG, Cutting ring, Brass
SRD VA, Cutting ring, Stainless steel

Standard: DIN 3861
Surface protection: electro galvanised

Identification	Series	Ø d2 mm	L1 mm	Identification	Series	Ø d2 mm	L1 mm
SRD 04 LL	LL	4	6,0	SRD 15	L	15	10,0
SRD 05 LL	LL	5	7,0	SRD 16	S	16	10,5
SRD 06 LL	LL	6	7,0	SRD 18	L	18	10,0
SRD 08 LL	LL	8	7,0	SRD 20	S	20	12,5
SRD 10 LL	LL	10	7,0	SRD 22	L	22	10,5
SRD 12 LL	LL	12	7,5	SRD 25	S	25	12,5
SRD 16 LL	LL	16	9,0	SRD 28	L	28	10,5
SRD 06	L/S	6	9,5	SRD 30	S	30	13,0
SRD 08	L/S	8	9,5	SRD 35	L	35	13,0
SRD 10	L/S	10	10,0	SRD 38	S	38	13,5
SRD 12	L/S	12	10,0	SRD 42	L	42	13,0
SRD 14	S	14	10,0	SRD 65	L	65	21,2

Series: LL = Very light L = Light S = Heavy Ø d2 = External pipe diameter
PN = Nominal pressure PB = Max. operating pressure
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

SRWD-VI — Soft seal for cutting ring

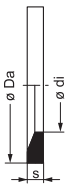


Design: Soft seal for cutting ring
Material: FPM (Viton)

Identification	Series	Ø d1 mm	Ø d2 mm	E mm
SRWD 06 VI	L/S	6	9,1	7,3
SRWD 08 VI	L/S	8	8,0	7,3
SRWD 10 VI	L/S	10	13,3	7,3
SRWD 12 VI	L/S	12	15,3	7,0
SRWD 14 VI	S	14	18,8	7,2
SRWD 15 VI	L	15	19,0	7,2
SRWD 16 VI	S	16	20,8	7,5
SRWD 18 VI	L	18	22,8	7,7
SRWD 20 VI	S	20	25,8	9,3
SRWD 22 VI	L	22	26,3	7,9
SRWD 25 VI	S	25	31,5	8,9
SRWD 28 VI	L	28	32,3	8,0
SRWD 30 VI	S	30	37,3	8,2
SRWD 35 VI	L	35	41,3	8,0
SRWD 38 VI	S	38	46,0	8,2
SRWD 42 VI	L	42	48,3	8,2

Series: LL = Very light L = Light S = Heavy Ø d1 = External pipe diameter
Permissible operating temperature (Viton): - 25 °C to + 200 °C.

WD — Soft seal for ED fittings

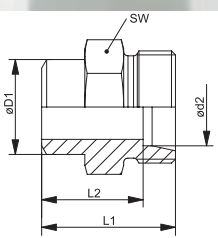


Design: Soft packing
Material: NBR
Product versions: WD V, Soft seal for ED fittings, FPM (Viton)

Standard: DIN 3869

Identification	for thread	for thread	Ø Da mm	Ø di mm	S mm
WD 8-1	M 8 x 1	-	9,9	6,5	1,0
WD 10-1 R1/8	M 10 x 1	G 1/8"	11,9	8,4	1,0
WD 12-1.5	M 12 x 1.5	-	14,4	9,8	1,5
WD 14-1.5 R1/4	M 14 x 1.5	G 1/4"	16,5	11,6	1,5
WD 16-1.5	M 16 x 1.5	-	18,9	13,8	1,5
WD R3/8	-	G 3/8"	18,9	14,7	1,5
WD 18-1.5	M 18 x 1.5	-	20,9	15,7	1,5
WD 20-1.5	M 20 x 1.5	-	22,9	17,8	1,5
WD R1/2	-	G 1/2"	23,9	18,5	1,5
WD 22-1.5	M 22 x 1.5	-	24,3	19,6	1,5
WD 26-27-R3/4	M 26 x 1.5	G 3/4"	29,2	23,9	1,5
WD 33-2 R 1	M 33 x 2	G 1"	35,7	29,7	2,0
WD 42-2 R1 1/4	M 42 x 2	G 1.1/4"	45,8	38,8	2,0
WD 48-2 R1 1/2	M 48 x 2	G 1.1/2"	50,7	44,7	2,0
WD R2	-	G 2"	66,0	56,0	4,0

XSA — Welded on fitting



Connection 1: Welded on socket for metric pipe
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: phosphate treated and oiled (Znphr5f)
Product versions: XSA VA, Welded on fitting, Stainless steel
SA, Welded on fitting, Steel

Connection 2: metric cylindrical outer thread
Design: Welded on fitting
Standard: DIN 2353
Material: Steel

Identification	Series	Working pressure bar	Ø d2 mm	Ø D1 mm	L1 mm	L2 mm	SW mm
XSA NW 04 HL	L	PN 315	6	10	21	14,0	14
XSA NW 06 HL	L	PN 315	8	12	23	16,0	14
XSA NW 08 HL	L	PN 315	10	14	25	18,0	17
XSA NW 10 HL	L	PN 315	12	16	25	18,0	19
XSA NW 13 HL	L	PN 315	15	19	29	22,0	22
XSA NW 16 HL	L	PN 315	18	22	31	23,5	27
XSA NW 20 HL	L	PN 160	22	27	36	28,5	32
XSA NW 25 HL	L	PN 160	28	32	38	30,5	41
XSA NW 32 HL	L	PN 160	35	40	43	32,5	46
XSA NW 40 HL	L	PN 160	42	46	46	35,0	55
XSA NW 03 HS	S	PN 630	6	11	26	19,0	14
XSA NW 04 HS	S	PN 630	8	13	28	21,0	17
XSA NW 06 HS	S	PN 630	10	15	30	22,5	19
XSA NW 08 HS	S	PN 630	12	17	32	24,5	22
XSA NW 10 HS	S	PN 630	14	19	35	27,0	24

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

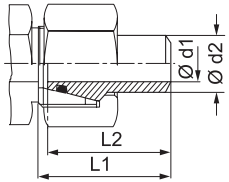
XSA (Continuation) Welded on fitting

Identification	Series	Working pressure bar	Ø d2 mm	Ø D1 mm	L1 mm	L2 mm	SW mm
XSA NW 13 HS	S	PN 400	16	21	35	26,6	27
XSA NW 16 HS	S	PN 400	20	26	40	29,5	32
XSA NW 20 HS	S	PN 400	25	31	44	32,0	41
XSA NW 25 HS	S	PN 400	30	36	49	35,5	46
XSA NW 32 HS	S	PN 315	38	44	54	38,0	55

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

SA DKOL Welded on sealing cone



Connection 1: Welded on socket for metric pipe
Design: Welded on sealing cone
Standard: DIN 3865
Surface protection: phosphate treated and oiled (Znphr5f)
Product versions: SA DKOL VA, Welded on sealing cone, Stainless steel

Sealing form 2: 24° outer cone with O-ring
Construction: straight
Material: Steel

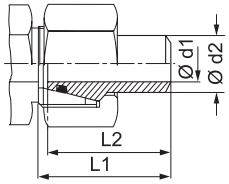
Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	L1 mm	L2 mm	OR
SA NW 04 DKOL 1	L	PN 315	3	6	32,0	30,5	4.0 x 1.5
SA NW 06 DKOL 1	L	PN 315	5	8	32,0	30,5	6.0 x 1.5
SA NW 08 DKOL 1	L	PN 249	8	10	33,5	32,5	7.5 x 1.5
SA NW 10 DKOL 1.5	L	PN 315	7	12	33,5	32,5	9.0 x 1.5
SA NW 13 DKOL 2.5	L	PN 315	10	15	35,0	34,5	12.0 x 2.0
SA NW 16 DKOL 2.5	L	PN 315	13	18	37,0	36,0	15.0 x 2.0
SA NW 20 DKOL 2.5	L	PN 160	17	22	39,5	37,5	20.0 x 2.0
SA NW 25 DKOL 2.5	L	PN 160	23	28	53,0	48,0	26.0 x 2.0
SA NW 25 DKOL 3	L	PN 160	22	28	42,5	47,0	26.0 x 2.0
SA NW 32 DKOL 3	L	PN 160	29	35	61,0	52,0	32.0 x 2.5
SA NW 32 DKOL 3.5	L	PN 160	28	35	49,5	47,0	32.0 x 2.5
SA NW 40 DKOL 2	L	PN 129	38	42	50,0	47,0	38.0 x 2.5
SA NW 40 DKOL 3	L	PN 160	36	42	50,0	47,0	38.0 x 2.5

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure d2 = for external pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

SA DKO

Welded on sealing cone



Connection 1: Welded on socket for metric pipe
Design: Welded on sealing cone
Standard: DIN 3865
Surface protection: phosphate treated and oiled (Znphr5f)
Product versions: SA DKO VA, Welded on sealing cone, Stainless steel

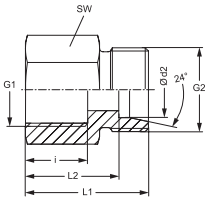
Sealing form 2: 24° outer cone with O-ring
Construction: straight
Material: Steel

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	L1 mm	L2 mm	OR
SA NW 03 DKO 1.5	S	PN 528	3	6	32,5	31,0	4.0 x 1.5
SA NW 04 DKO 1.5	S	PN 414	5	8	32,0	30,0	6.0 x 1.5
SA NW 04 DKO 2	S	PN 528	4	8	31,5	31,0	6.0 x 1.5
SA NW 06 DKO 1	S	PN 249	8	10	33,5	32,5	7.5 x 1.5
SA NW 06 DKO 1.5	S	PN 358	7	10	33,5	31,5	7.5 x 1.5
SA NW 06 DKO 2	S	PN 460	6	10	33,5	31,5	7.5 x 1.5
SA NW 08 DKO 1.5	S	PN 305	9	12	33,5	31,5	9.0 x 1.5
SA NW 08 DKO 2	S	PN 393	8	12	33,5	31,5	9.0 x 1.5
SA NW 08 DKO 2.5	S	PN 476	7	12	33,5	31,5	9.0 x 1.5
SA NW 08 DKO 3	S	PN 551	6	12	33,5	32,5	9.0 x 1.5
SA NW 10 DKO 2	S	PN 343	10	14	40,0	37,5	10.0 x 2.0
SA NW 10 DKO 3	S	PN 487	8	14	39,5	38,5	10.0 x 2.0
SA NW 13 DKO 1.5	S	PN 234	13	16	40,5	37,5	12.0 x 2.0
SA NW 13 DKO 2	S	PN 305	12	16	40,5	37,5	12.0 x 2.0
SA NW 13 DKO 2.5	S	PN 372	11	16	40,5	37,5	12.0 x 2.0
SA NW 13 DKO 3	S	PN 400	10	16	40,5	37,5	12.0 x 2.0
SA NW 16 DKO 2	S	PN 249	16	20	47,0	43,5	16.3 x 2.4
SA NW 16 DKO 2.5	S	PN 305	15	20	46,5	43,0	16.3 x 2.4
SA NW 16 DKO 3	S	PN 358	14	20	46,5	43,0	16.3 x 2.4
SA NW 16 DKO 3.5	S	PN 400	13	20	47,5	43,5	16.3 x 2.4
SA NW 16 DKO 4	S	PN 400	12	20	46,5	43,0	16.3 x 2.4
SA NW 20 DKO 2	S	PN 201	21	25	53,0	48,0	20.3 x 2.4
SA NW 20 DKO 3	S	PN 294	19	25	53,0	48,0	20.3 x 2.4
SA NW 20 DKO 4	S	PN 379	17	25	53,0	48,0	20.3 x 2.4
SA NW 20 DKO 5	S	PN 400	15	25	53,0	48,0	20.3 x 2.4
SA NW 25 DKO 3	S	PN 249	24	30	57,5	51,5	25.3 x 2.4
SA NW 25 DKO 4	S	PN 323	22	30	57,5	51,5	25.3 x 2.4
SA NW 25 DKO 5	S	PN 393	20	30	57,5	51,5	25.3 x 2.4
SA NW 25 DKO 6	S	PN 400	18	30	57,0	52,0	25.3 x 2.4
SA NW 32 DKO 4	S	PN 261	30	38	64,0	55,0	33.3 x 2.4
SA NW 32 DKO 5	S	PN 315	28	38	64,0	55,0	33.3 x 2.4
SA NW 32 DKO 6	S	PN 315	26	38	64,0	55,0	33.3 x 2.4
SA NW 32 DKO 7	S	PN 315	24	38	64,0	56,5	33.3 x 2.4

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XGAR Screw-on fitting



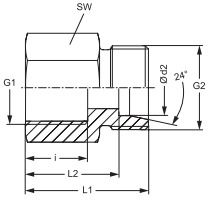
Connection 1: BSP cylindrical internal threads
Connection 2: metric cylindrical outer thread
Design: Screw-on fitting
Standard: DIN 2353
Material: Steel
Product versions: XGAR VA, Screw-on fitting, Stainless steel
GAR, Screw-on fitting, Steel

Sealing form 1: Shape A
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	i mm	L1 mm	L2 mm	SW mm
XGAR NW 04 HL	L	PN 315	6	G 1/8" -28	M 12 x 1.5	12,0	26,0	19,0	14
XGAR NW 04 HL 1/4	L	PN 315	6	G 1/4" -19	M 12 x 1.5	17,0	31,0	24,0	19
XGAR NW 04 HL 3/8	L	PN 315	6	G 3/8" -19	M 12 x 1.5	17,0	32,0	25,0	22
XGAR NW 06 HL	L	PN 315	8	G 1/4" -19	M 14 x 1.5	17,0	31,0	24,0	19
XGAR NW 06 HL 3/8	L	PN 315	8	G 3/8" -19	M 14 x 1.5	17,0	32,0	25,0	22
XGAR NW 06 HL 1/2	L	PN 315	8	G 1/2" -14	M 14 x 1.5	20,0	36,0	29,0	27
XGAR NW 08 HL	L	PN 315	10	G 1/4" -19	M 16 x 1.5	17,0	32,0	25,0	19
XGAR NW 08 HL 3/8	L	PN 315	10	G 3/8" -19	M 16 x 1.5	17,0	33,0	26,0	22
XGAR NW 08 HL 1/2	L	PN 315	10	G 1/2" -14	M 16 x 1.5	20,0	37,0	30,0	27
XGAR NW 10 HL 1/4	L	PN 315	12	G 1/4" -19	M 18 x 1.5	17,0	32,0	25,0	19
XGAR NW 10 HL	L	PN 315	12	G 3/8" -19	M 18 x 1.5	17,0	33,0	26,0	22
XGAR NW 10 HL 1/2	L	PN 315	12	G 1/2" -14	M 18 x 1.5	20,0	37,0	30,0	27
XGAR NW 13 HL 3/8	L	PN 315	15	G 3/8" -19	M 22 x 1.5	17,0	34,0	27,0	24
XGAR NW 13 HL	L	PN 315	15	G 1/2" -14	M 22 x 1.5	20,0	38,0	31,0	27
XGAR NW 16 HL	L	PN 315	18	G 1/2" -14	M 26 x 1.5	20,0	38,0	30,5	27
XGAR NW 20 HL	L	PN 160	22	G 3/4" -14	M 30 x 2	22,0	43,0	35,5	32
XGAR NW 25 HL	L	PN 160	28	G 1" -11	M 36 x 2	24,5	45,5	38,0	41
XGAR NW 32 HL	L	PN 160	35	G 1.1/4" -11	M 45 x 2	26,5	51,5	41,0	50
XGAR NW 40 HL	L	PN 160	42	G 1.1/2" -11	M 52 x 2	28,5	53,5	42,5	55
XGAR NW 03 HS	S	PN 400	6	G 1/4" -19	M 14 x 1.5	17,0	33,0	26,0	19
XGAR NW 04 HS	S	PN 400	8	G 1/4" -19	M 16 x 1.5	17,0	33,0	26,0	19
XGAR NW 06 HS	S	PN 400	10	G 3/8" -19	M 18 x 1.5	17,0	34,0	26,5	24
XGAR NW 08 HS	S	PN 400	12	G 3/8" -19	M 20 x 1.5	17,0	34,0	26,5	24
XGAR NW 10 HS	S	PN 400	14	G 1/2" -14	M 22 x 1.5	20,0	40,0	32,0	27
XGAR NW 13 HS	S	PN 400	16	G 1/2" -14	M 24 x 1.5	20,0	40,0	31,5	27
XGAR NW 16 HS	S	PN 315	20	G 3/4" -14	M 30 x 2	22,0	45,0	34,5	36
XGAR NW 20 HS	S	PN 315	25	G 1" -11	M 36 x 2	24,5	49,5	37,5	41
XGAR NW 25 HS	S	PN 315	30	G 1.1/4" -11	M 42 x 2	26,5	55,5	42,0	50
XGAR NW 32 HS	S	PN 250	38	G 1.1/2" -11	M 52 x 2	28,5	59,5	43,5	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XGAM Screw-on fitting



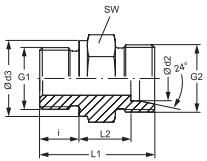
Connection 1: metric cylindrical inner thread
Connection 2: metric cylindrical outer thread
Design: Screw-on fitting
Standard: DIN 2353
Material: Steel
Product versions: XGAM VA, Screw-on fitting, Stainless steel
GAM, Screw-on fitting, Steel

Sealing form 1: Shape A
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	i mm	L1 mm	L2 mm	SW mm
XGAM NW 04 HL	L	PN 315	6	M 10 x 1	M 12 x 1.5	12,5	26,5	19,5	14
XGAM NW 04 HL 22	L	PN 315	6	M 22 x 1.5	M 12 x 1.5	19,0	35,0	28,0	27
XGAM NW 06 HL	L	PN 315	8	M 12 x 1.5	M 14 x 1.5	17,0	31,0	24,0	17
XGAM NW 06 HL 22	L	PN 315	8	M 22 x 1.5	M 14 x 1.5	19,0	35,0	29,0	27
XGAM NW 08 HL	L	PN 315	10	M 14 x 1.5	M 16 x 1.5	17,0	32,0	25,0	19
XGAM NW 08 HL 22	L	PN 315	10	M 22 x 1.5	M 16 x 1.5	19,0	36,0	29,0	27
XGAM NW 10 HL	L	PN 315	12	M 16 x 1.5	M 18 x 1.5	17,0	33,0	26,0	22
XGAM NW 10 HL 18	L	PN 315	12	M 18 x 1.5	M 18 x 1.5	17,0	34,0	27,0	24
XGAM NW 10 HL 22	L	PN 315	12	M 22 x 1.5	M 18 x 1.5	19,0	36,0	29,0	27
XGAM NW 13 HL	L	PN 315	15	M 18 x 1.5	M 22 x 1.5	17,0	35,0	28,0	24
XGAM NW 13 HL 22	L	PN 315	15	M 22 x 1.5	M 22 x 1.5	19,0	37,0	30,0	27
XGAM NW 16 HL	L	PN 315	18	M 22 x 1.5	M 26 x 1.5	19,0	37,0	29,5	27
XGAM NW 20 HL	L	PN 160	22	M 26 x 1.5	M 30 x 2	21,0	42,0	34,5	32
XGAM NW 25 HL	L	PN 160	28	M 33 x 2	M 36 x 2	24,0	45,0	37,5	41
XGAM NW 32 HL	L	PN 160	35	M 42 x 2	M 45 x 2	26,0	51,0	40,5	55
XGAM NW 40 HL	L	PN 160	42	M 48 x 2	M 52 x 2	28,0	53,0	42,0	60
XGAM NW 03 HS	S	PN 400	6	M 12 x 1.5	M 14 x 1.5	17,0	33,0	26,0	17
XGAM NW 04 HS	S	PN 400	8	M 14 x 1.5	M 16 x 1.5	17,0	33,0	26,0	19
XGAM NW 06 HS	S	PN 400	10	M 16 x 1.5	M 18 x 1.5	17,0	34,0	26,5	22
XGAM NW 08 HS	S	PN 400	12	M 18 x 1.5	M 20 x 1.5	17,0	35,0	27,5	24
XGAM NW 10 HS	S	PN 400	14	M 20 x 1.5	M 22 x 1.5	19,0	39,0	31,0	27
XGAM NW 13 HS	S	PN 400	16	M 22 x 1.5	M 24 x 1.5	19,0	39,0	30,5	30
XGAM NW 16 HS	S	PN 315	20	M 27 x 2	M 30 x 2	22,0	45,0	34,5	36
XGAM NW 20 HS	S	PN 315	25	M 33 x 2	M 36 x 2	24,0	49,0	37,0	41
XGAM NW 25 HS	S	PN 315	30	M 42 x 2	M 42 x 2	26,0	55,0	41,5	55
XGAM NW 32 HS	S	PN 250	38	M 48 x 2	M 52 x 2	28,0	59,0	43,0	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XVR Screw-in fitting



Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Screw-in fitting
Standard: DIN 2353
Material: Steel
Product versions: XVR VA, Screw-in fitting, Stainless steel
VR, Screw-in fitting, Steel

Sealing form 1: Shape B
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	Ø d3 mm	i mm	L1 mm	L2 mm	SW mm
XVR NW 04 HL	L	PN 315	6	G 1/8" -28	M 12 x 1.5	14	8	23,5	8,5	14
XVR NW 04 HL 1/4	L	PN 315	6	G 1/4" -19	M 12 x 1.5	18	12	29,0	10,0	19
XVR NW 04 HL 3/8	L	PN 315	6	G 3/8" -19	M 12 x 1.5	22	12	30,5	11,5	22
XVR NW 04 HL 1/2	L	PN 315	6	G 1/2" -14	M 12 x 1.5	26	14	33,0	12,0	27
XVR NW 06 HL 1/8	L	PN 315	8	G 1/8" -28	M 14 x 1.5	14	8	24,0	9,0	14
XVR NW 06 HL	L	PN 315	8	G 1/4" -19	M 14 x 1.5	18	12	29,0	10,0	19
XVR NW 06 HL 3/8	L	PN 315	8	G 3/8" -19	M 14 x 1.5	22	12	30,5	11,5	22
XVR NW 06 HL 1/2	L	PN 315	8	G 1/2" -14	M 14 x 1.5	26	14	33,0	12,0	27
XVR NW 08 HL 1/8	L	PN 315	10	G 1/8" -28	M 16 x 1.5	14	8	25,5	10,5	17
XVR NW 08 HL	L	PN 315	10	G 1/4" -19	M 16 x 1.5	18	12	30,0	11,0	19
XVR NW 08 HL 3/8	L	PN 315	10	G 3/8" -19	M 16 x 1.5	22	12	31,5	12,5	22
XVR NW 08 HL 1/2	L	PN 315	10	G 1/2" -14	M 16 x 1.5	26	14	34,0	13,0	27
XVR NW 10 HL 1/8	L	PN 315	12	G 1/8" -28	M 18 x 1.5	14	8	26,5	11,5	19
XVR NW 10 HL 1/4	L	PN 315	12	G 1/4" -19	M 18 x 1.5	18	12	31,0	12,0	19
XVR NW 10 HL	L	PN 315	12	G 3/8" -19	M 18 x 1.5	22	12	31,5	12,5	22
XVR NW 10 HL 1/2	L	PN 315	12	G 1/2" -14	M 18 x 1.5	26	14	34,0	13,0	27
XVR NW 10 HL 3/4	L	PN 315	12	G 3/4" -14	M 18 x 1.5	32	16	37,0	14,0	32
XVR NW 13 HL 1/4	L	PN 315	15	G 1/4" -19	M 22 x 1.5	18	12	32,0	13,0	24
XVR NW 13 HL 3/8	L	PN 250	15	G 3/8" -19	M 22 x 1.5	22	12	33,0	14,0	24
XVR NW 13 HL	L	PN 250	15	G 1/2" -14	M 22 x 1.5	26	14	35,0	14,0	27
XVR NW 13 HL 3/4	L	PN 250	15	G 3/4" -14	M 22 x 1.5	32	16	38,0	15,0	32
XVR NW 13 HL 1	L	PN 250	15	G 1" -11	M 22 x 1.5	39	18	42,5	17,5	41
XVR NW 16 HL 3/8	L	PN 250	18	G 3/8" -19	M 26 x 1.5	22	12	33,5	14,0	27
XVR NW 16 HL	L	PN 250	18	G 1/2" -14	M 26 x 1.5	26	14	36,0	14,5	27
XVR NW 16 HL 3/4	L	PN 250	18	G 3/4" -14	M 26 x 1.5	32	16	38,0	14,5	32
XVR NW 16 HL 1	L	PN 250	18	G 1" -11	M 26 x 1.5	39	18	40,5	15,0	41
XVR NW 20 HL 1/2	L	PN 160	22	G 1/2" -14	M 30 x 2	26	14	38,0	16,5	32
XVR NW 20 HL	L	PN 160	22	G 3/4" -14	M 30 x 2	32	16	40,0	16,5	32
XVR NW 20 HL 1	L	PN 160	22	G 1" -11	M 30 x 2	39	18	43,0	17,5	41
XVR NW 25 HL 1/2	L	PN 160	28	G 1/2" -14	M 36 x 2	26	14	40,0	18,5	41
XVR NW 25 HL 3/4	L	PN 160	28	G 3/4" -14	M 36 x 2	32	16	41,0	17,5	41
XVR NW 25 HL	L	PN 160	28	G 1" -11	M 36 x 2	39	18	43,0	17,5	41
XVR NW 25 HL 1 1/4	L	PN 160	28	G 1.1/4" -11	M 36 x 2	49	20	46,0	18,3	50
XVR NW 32 HL 3/4	L	PN 160	35	G 3/4" -14	M 45 x 2	32	16	45,0	18,5	46
XVR NW 32 HL 1	L	PN 160	35	G 1" -11	M 45 x 2	39	18	47,0	18,5	46
XVR NW 32 HL	L	PN 160	35	G 1.1/4" -11	M 45 x 2	49	20	48,0	17,5	50
XVR NW 32 HL 1 1/2	L	PN 160	35	G 1.1/2" -11	M 45 x 2	55	22	51,0	18,5	55
XVR NW 40 HL 1 1/4	L	PN 160	42	G 1.1/4" -11	M 52 x 2	49	20	50,0	19,0	55

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

XVR (Continuation) Screw-in fitting

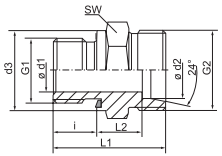
Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	Ø d3 mm	i mm	L1 mm	L2 mm	SW mm
XVR NW 40 HL	L	PN 160	42	G 1.1/2" -11	M 52 x 2	55	22	52,0	19,0	55
XVR NW 03 HS 1/8	S	PN 400	6	G 1/8" -28	M 14 x 1.5	14	8	27,5	12,5	14
XVR NW 03 HS	S	PN 400	6	G 1/4" -19	M 14 x 1.5	18	12	32,0	13,0	19
XVR NW 03 HS 3/8	S	PN 400	6	G 3/8" -19	M 14 x 1.5	22	12	32,5	13,5	22
XVR NW 03 HS 1/2	S	PN 400	6	G 1/2" -14	M 14 x 1.5	26	14	35,0	14,0	27
XVR NW 04 HS	S	PN 400	8	G 1/4" -19	M 16 x 1.5	18	12	34,0	15,0	19
XVR NW 04 HS 3/8	S	PN 400	8	G 3/8" -19	M 16 x 1.5	22	12	34,5	15,5	22
XVR NW 04 HS 1/2	S	PN 400	8	G 1/2" -14	M 16 x 1.5	26	14	37,0	16,0	27
XVR NW 06 HS 1/4	S	PN 400	10	G 1/4" -19	M 18 x 1.5	18	12	34,0	14,5	19
XVR NW 06 HS	S	PN 400	10	G 3/8" -19	M 18 x 1.5	22	12	34,5	15,0	22
XVR NW 06 HS 1/2	S	PN 400	10	G 1/2" -14	M 18 x 1.5	26	14	39,0	17,5	27
XVR NW 08 HS 1/4	S	PN 400	12	G 1/4" -19	M 20 x 1.5	18	12	36,0	16,5	22
XVR NW 08 HS	S	PN 400	12	G 3/8" -19	M 20 x 1.5	22	12	36,5	17,0	22
XVR NW 08 HS 1/2	S	PN 400	12	G 1/2" -14	M 20 x 1.5	26	14	39,0	17,5	27
XVR NW 08 HS 3/4	S	PN 400	12	G 3/4" -14	M 20 x 1.5	32	16	41,0	17,5	32
XVR NW 10 HS 3/8	S	PN 400	14	G 3/8" -19	M 22 x 1.5	22	12	38,5	18,5	27
XVR NW 10 HS	S	PN 400	14	G 1/2" -14	M 22 x 1.5	27	14	41,0	19,0	27
XVR NW 10 HS 3/4	S	PN 400	14	G 3/4" -14	M 22 x 1.5	32	16	43,0	19,0	32
XVR NW 13 HS 1/4	S	PN 400	16	G 1/4" -19	M 24 x 1.5	22	12	38,0	18,5	27
XVR NW 13 HS 3/8	S	PN 400	16	G 3/8" -19	M 24 x 1.5	22	12	39,0	18,5	27
XVR NW 13 HS	S	PN 400	16	G 1/2" -14	M 24 x 1.5	26	14	41,0	18,5	27
XVR NW 13 HS 3/4	S	PN 400	16	G 3/4" -14	M 24 x 1.5	32	16	45,0	20,5	32
XVR NW 16 HS 1/2	S	PN 400	20	G 1/2" -14	M 30 x 2	26	14	45,0	20,5	32
XVR NW 16 HS	S	PN 400	20	G 3/4" -14	M 30 x 2	39	18	47,0	20,5	32
XVR NW 16 HS 1	S	PN 250	20	G 1" -11	M 30 x 2	39	18	50,0	21,5	41
XVR NW 20 HS 1/2	S	PN 250	25	G 1/2" -14	M 36 x 2	26	14	49,0	23,0	41
XVR NW 20 HS 3/4	S	PN 250	25	G 3/4" -14	M 36 x 2	32	16	51,0	23,5	41
XVR NW 20 HS	S	PN 250	25	G 1" -11	M 36 x 2	39	18	53,0	23,0	41
XVR NW 20 HS 1 1/4	S	PN 160	25	G 1.1/4" -11	M 36 x 2	49	20	56,0	24,0	50
XVR NW 25 HS 3/4	S	PN 160	30	G 3/4" -14	M 42 x 2	32	16	53,0	23,5	46
XVR NW 25 HS 1	S	PN 160	30	G 1" -11	M 42 x 2	39	18	55,0	23,5	46
XVR NW 25 HS	S	PN 160	30	G 1.1/4" -11	M 42 x 2	49	20	57,0	23,5	50
XVR NW 25 HS 1 1/2	S	PN 160	30	G 1.1/2" -11	M 42 x 2	55	22	50,0	23,5	55
XVR NW 32 HS 1	S	PN 160	38	G 1" -11	M 52 x 2	39	18	60,0	26,0	55
XVR NW 32 HS 1 1/4	S	PN 160	38	G 1.1/4" -11	M 52 x 2	49	20	62,0	26,0	55
XVR NW 32 HS	S	PN 160	38	G 1.1/2" -11	M 52 x 2	55	22	64,0	26,0	55

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XVR ED

Screw-in fitting



Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Screw-in fitting
Standard: DIN 2353
Material: Steel
Product versions: XVR ED VA, Screw-in fitting, Stainless steel
VR ED, Screw-in fitting, Steel
Spare parts: WD, Soft seal for ED fittings

Sealing form 1: Shape E
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	Ø d3 mm	i mm	L1 mm	L2 mm	SW mm
XVR 04 LL ED	LL	PN 100	4	G 1/8" -28	M 8 x 1	14	8	20,0	9,5	14
XVR 06 LL ED	LL	PN 100	6	G 1/8" -28	M 10 x 1	14	8	20,0	8,0	14
XVR NW 04 HL ED	L	PN 315	6	G 1/8" -28	M 12 x 1.5	14	8	23,5	8,5	14
XVR NW 04 HL 1/4 ED	L	PN 315	6	G 1/4" -19	M 12 x 1.5	19	12	29,0	10,0	19
XVR NW 04 HL 1/2 ED	L	PN 315	6	G 1/2" -14	M 12 x 1.5	27	14	33,0	12,0	27
XVR NW 04 HL 3/8 ED	L	PN 315	6	G 3/8" -19	M 12 x 1.5	22	12	26,0	11,5	22
XVR NW 06 HL 1/8 ED	L	PN 315	8	G 1/8" -28	M 14 x 1.5	14	8	24,5	9,5	14
XVR NW 06 HL ED	L	PN 315	8	G 1/4" -19	M 14 x 1.5	19	12	29,0	10,0	19
XVR NW 06 HL 3/8 ED	L	PN 315	8	G 3/8" -19	M 14 x 1.5	22	12	30,5	11,5	22
XVR NW 06 HL 1/2 ED	L	PN 315	8	G 1/2" -14	M 14 x 1.5	27	14	33,0	12,0	27
XVR NW 08 HL 1/8 ED	L	PN 315	10	G 1/8" -28	M 16 x 1.5	14	8	25,5	10,5	17
XVR NW 08 HL ED	L	PN 315	10	G 1/4" -19	M 16 x 1.5	19	12	30,0	11,0	19
XVR NW 08 HL 3/8 ED	L	PN 315	10	G 3/8" -19	M 16 x 1.5	22	12	31,5	12,5	22
XVR NW 08 HL 1/2 ED	L	PN 315	10	G 1/2" -14	M 16 x 1.5	27	14	34,0	13,0	27
XVR NW 10 HL 1/4 ED	L	PN 315	12	G 1/4" -19	M 18 x 1.5	19	12	31,0	12,0	22
XVR NW 10 HL ED	L	PN 315	12	G 3/8" -19	M 18 x 1.5	22	12	31,5	12,5	22
XVR NW 10 HL 1/2 ED	L	PN 315	12	G 1/2" -14	M 18 x 1.5	27	14	34,0	13,0	27
XVR NW 10 HL 3/4 ED	L	PN 160	12	G 3/4" -14	M 18 x 1.5	32	16	37,0	14,0	32
XVR NW 13 HL 3/8 ED	L	PN 315	15	G 3/8" -19	M 22 x 1.5	22	12	32,5	13,5	27
XVR NW 13 HL ED	L	PN 315	15	G 1/2" -14	M 22 x 1.5	27	14	35,0	14,0	27
XVR NW 13 HL 3/4 ED	L	PN 160	15	G 3/4" -14	M 22 x 1.5	32	16	38,0	15,0	32
XVR NW 16 HL 3/8 ED	L	PN 315	18	G 3/8" -19	M 26 x 1.5	22	12	33,5	14,0	27
XVR NW 16 HL ED	L	PN 315	18	G 1/2" -14	M 26 x 1.5	27	14	36,0	14,5	27
XVR NW 16 HL 3/4 ED	L	PN 160	18	G 3/4" -14	M 26 x 1.5	32	16	38,0	14,5	32
XVR NW 20 HL 1/2 ED	L	PN 160	22	G 1/2" -14	M 30 x 2	27	14	38,0	16,5	32
XVR NW 20 HL ED	L	PN 160	22	G 3/4" -14	M 30 x 2	32	16	40,0	16,5	32
XVR NW 20 HL 1 ED	L	PN 160	22	G 1" -11	M 30 x 2	40	18	43,0	17,5	41
XVR NW 25 HL 3/4 ED	L	PN 160	28	G 3/4" -14	M 36 x 2	32	16	41,0	17,5	41
XVR NW 25 HL ED	L	PN 160	28	G 1" -11	M 36 x 2	40	18	43,0	17,5	41
XVR NW 25 HL 1 1/4 ED	L	PN 160	28	G 1.1/4" -11	M 36 x 2	50	20	46,0	18,5	50
XVR NW 32 HL 1 ED	L	PN 160	35	G 1" -11	M 45 x 2	40	18	46,0	17,5	50
XVR NW 32 HL ED	L	PN 160	35	G 1.1/4" -11	M 45 x 2	50	20	48,0	17,5	50
XVR NW 40 HL 1 1/4 ED	L	PN 160	42	G 1.1/4" -11	M 52 x 2	50	20	50,0	19,0	55
XVR NW 40 HL ED	L	PN 160	42	G 1.1/2" -11	M 52 x 2	55	22	52,0	19,0	55
XVR NW 03 HS ED	S	PN 630	6	G 1/4" -19	M 14 x 1.5	19	12	32,0	13,0	19
XVR NW 03 HS 1/2 ED	S	PN 630	6	G 1/2" -14	M 14 x 1.5	27	14	39,0	18,0	27
XVR NW 04 HS ED	S	PN 630	8	G 1/4" -19	M 16 x 1.5	19	12	34,0	15,0	19

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

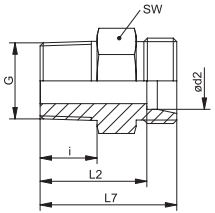
XVR ED (Continuation) Screw-in fitting

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	Ø d3 mm	i mm	L1 mm	L2 mm	SW mm
XVR NW 04 HS 3/8 ED	S	PN 630	8	G 3/8" -19	M 16 x 1.5	22	12	34,5	15,5	22
XVR NW 06 HS 1/4 ED	S	PN 630	10	G 1/4" -19	M 18 x 1.5	19	12	34,0	14,5	22
XVR NW 06 HS ED	S	PN 630	10	G 3/8" -19	M 18 x 1.5	22	12	34,5	15,0	22
XVR NW 06 HS 1/2 ED	S	PN 630	10	G 1/2" -14	M 18 x 1.5	27	14	39,0	17,5	27
XVR NW 08 HS 1/4 ED	S	PN 630	12	G 1/4" -19	M 20 x 1.5	19	12	36,0	16,5	22
XVR NW 08 HS ED	S	PN 630	12	G 3/8" -19	M 20 x 1.5	22	12	36,5	17,0	22
XVR NW 08 HS 1/2 ED	S	PN 630	12	G 1/2" -14	M 20 x 1.5	27	14	39,0	17,5	27
XVR NW 10 HS 3/8 ED	S	PN 630	14	G 3/8" -19	M 22 x 1.5	22	12	38,5	18,5	27
XVR NW 10 HS ED	S	PN 630	14	G 1/2" -14	M 22 x 1.5	27	14	41,0	19,0	27
XVR NW 10 HS 3/4 ED	S	PN 630	14	G 3/4" -14	M 22 x 1.5	32	16	45,0	21,0	32
XVR NW 13 HS 3/8 ED	S	PN 400	16	G 3/8" -19	M 24 x 1.5	22	12	38,5	18,0	27
XVR NW 13 HS ED	S	PN 400	16	G 1/2" -14	M 24 x 1.5	27	14	41,0	18,5	27
XVR NW 13 HS 3/4 ED	S	PN 400	16	G 3/4" -14	M 24 x 1.5	32	16	45,0	20,5	32
XVR NW 16 HS 1/2 ED	S	PN 400	20	G 1/2" -14	M 30 x 2	27	14	45,0	20,5	32
XVR NW 16 HS ED	S	PN 400	20	G 3/4" -14	M 30 x 2	32	16	47,0	20,5	32
XVR NW 16 HS 1 ED	S	PN 400	20	G 1" -11	M 30 x 2	40	18	51,0	22,5	41
XVR NW 20 HS 1/2 ED	S	PN 400	25	G 1/2" -14	M 36 x 2	27	14	49,0	23,0	41
XVR NW 20 HS 3/4 ED	S	PN 400	25	G 3/4" -14	M 36 x 2	32	16	51,0	23,0	41
XVR NW 20 HS ED	S	PN 400	25	G 1" -11	M 36 x 2	40	18	53,0	23,0	41
XVR NW 25 HS 1 ED	S	PN 400	30	G 1" -11	M 42 x 2	40	18	55,0	23,5	50
XVR NW 25 HS ED	S	PN 400	30	G 1.1/4" -11	M 42 x 2	50	20	57,0	23,5	50
XVR NW 32 HS 1 1/4 ED	S	PN 315	38	G 1.1/4" -11	M 52 x 2	50	20	62,0	26,0	55
XVR NW 32 HS ED	S	PN 315	38	G 1.1/2" -11	M 52 x 2	55	22	64,0	26,0	55

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XVRK Screw-in fitting



Connection 1: BSPT conical external threads
Connection 2: metric cylindrical outer thread
Design: Screw-in fitting
Standard: DIN 2353
Material: Steel
Product versions: XVRK VA, Screw-in fitting, Stainless steel
VRK, Screw-in fitting, Steel

Sealing form 1: thread seal
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G	i mm	L2 mm	L7 mm	SW mm
XVR 04 LL	LL	PN 100	4	R 1/8" K	8,0	16,0	20,0	11
XVR 05 LL	LL	PN 100	5	R 1/8" K	8,0	14,5	20,0	11
XVR 06 LL	LL	PN 100	6	R 1/8" K	8,0	14,5	20,0	11
XVR 06 LL 1/4	LL	PN 100	6	R 1/4" K	12,0	14,5	20,0	12
XVR 08 LL	LL	PN 100	8	R 1/8" K	8,0	16,5	22,0	12
XVR 08 LL 1/4	LL	PN 100	8	R 1/4" K	12,0	20,5	26,0	14
XVR 10 LL	LL	PN 100	10	R 1/4" K	12,0	20,5	26,0	14
XVR 12 LL	LL	PN 100	12	R 1/4" K	12,0	20,0	26,0	17
XVR 12 LL 3/8	LL	PN 100	12	R 3/8" K	12,0	20,0	26,0	17
XVRK NW 04 HL	L	PN 315	6	R 1/8" K	10,5	17,5	24,5	12
XVRK NW 04 HL 1/4	L	PN 315	6	R 1/4" K	14,0	22,0	29,0	17
XVRK NW 06 HL 1/8	L	PN 315	8	R 1/8" K	10,5	18,5	25,5	14
XVRK NW 06 HL	L	PN 315	8	R 1/4" K	14,0	22,0	29,0	17
XVRK NW 06 HL 3/8	L	PN 315	8	R 3/8" K	14,5	22,5	30,5	19
XVRK NW 06 HL 1/2	L	PN 315	8	R 1/2" K	18,5	27,5	34,5	22
XVRK NW 08 HL 1/8	L	PN 315	10	R 1/8" K	10,5	19,5	26,5	17
XVRK NW 08 HL	L	PN 315	10	R 1/4" K	14,0	23,0	30,0	17
XVRK NW 08 HL 3/8	L	PN 315	10	R 3/8" K	14,5	24,5	31,5	19
XVRK NW 08 HL 1/2	L	PN 315	10	R 1/2" K	18,5	28,5	35,5	22
XVRK NW 10 HL 1/4	L	PN 315	12	R 1/4" K	14,0	24,0	31,0	19
XVRK NW 10 HL	L	PN 315	12	R 3/8" K	14,5	24,5	31,5	19
XVRK NW 10 HL 1/2	L	PN 315	12	R 1/2" K	18,5	28,5	35,5	24
XVRK NW 13 HL 3/8	L	PN 315	15	R 3/8" K	14,5	25,5	24,0	33
XVRK NW 13 HL	L	PN 315	15	R 1/2" K	18,5	29,5	36,5	24
XVRK NW 16 HL 3/8	L	PN 315	18	R 3/8" K	14,5	26,0	33,5	27
XVRK NW 16 HL	L	PN 315	18	R 1/2" K	18,5	30,0	37,5	27
XVRK NW 16 HL 3/4	L	PN 160	18	R 3/4" K	20,0	31,5	39,0	32
XVRK NW 20 HL 1/2	L	PN 160	22	R 1/2" K	18,5	32,0	39,5	32
XVRK NW 20 HL	L	PN 160	22	R 3/4" K	20,0	33,5	41,0	32
XVRK NW 25 HL	L	PN 160	28	R 1" K	24,0	38,5	46,0	41
XVRK NW 32 HL 1	L	PN 160	35	R 1" K	24,0	40,5	51,0	46
XVRK NW 32 HL	L	PN 160	35	R 1.1/4" K	26,0	42,5	53,0	46
XVRK NW 40 HL	L	PN 160	42	R 1.1/2" K	27,0	43,0	54,0	55
XVRK NW 03 HS	S	PN 400	6	R 1/4" K	14,0	27,0	34,0	17
XVRK NW 04 HS	S	PN 400	8	R 1/4" K	14,0	27,0	34,0	17
XVRK NW 06 HS 1/4	S	PN 400	10	R 1/4" K	14,0	26,5	34,0	19
XVRK NW 06 HS	S	PN 400	10	R 3/8" K	14,5	27,0	34,5	19
XVRK NW 08 HS 1/4	S	PN 400	12	R 1/4" K	14,0	28,5	36,0	22

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

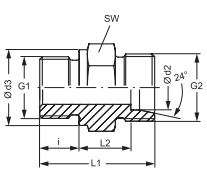
XVRK (Continuation) Screw-in fitting

Identification	Series	Working pressure bar	Ø d2 mm	G	i mm	L2 mm	L7 mm	SW mm
XVRK NW 08 HS	S	PN 400	12	R 3/8" K	14,5	29,0	36,5	22
XVRK NW 08 HS 1/2	S	PN 400	12	R 1/2" K	18,5	33,0	40,5	22
XVRK NW 10 HS 3/8	S	PN 400	14	R 3/8" K	14,5	30,5	38,5	24
XVRK NW 10 HS	S	PN 400	14	R 1/2" K	18,5	34,5	42,5	24
XVRK NW 13 HS 3/8	S	PN 400	16	R 3/8" K	14,5	30,0	38,5	27
XVRK NW 13 HS	S	PN 400	16	R 1/2" K	18,5	34,0	42,5	27
XVRK NW 16 HS	S	PN 400	20	R 3/4" K	20,0	37,5	48,0	32
XVRK NW 20 HS	S	PN 400	25	R 1" K	24,0	43,0	55,0	41
XVRK NW 25 HS 1	S	PN 400	30	R 1" K	24,0	43,5	57,0	46
XVRK NW 25 HS	S	PN 400	30	R 1.1/4" K	26,0	45,5	59,0	46
XVRK NW 32 HS	S	PN 315	38	R 1.1/2" K	27,0	49,0	65,0	55

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XVM Screw-in fitting



Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Screw-in fitting
Standard: DIN 2353
Material: Steel
Product versions: XVM VA, Screw-in fitting, Stainless steel
VM, Screw-in fitting, Steel

Sealing form 1: Shape B
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	Ø d3 mm	i mm	L1 mm	L2 mm	SW mm
XVM 16 LL	LL	PN 100	16	M 22 x 1.5	M 22 x 1.5	27	14	36,5	15,5	27
XVM 16 LL 18-1.5	LL	PN 100	16	M 18 x 1.5	M 22 x 1.5	23	12	33,5	14,5	24
XVM NW 04 HL	L	PN 315	6	M 10 x 1	M 12 x 1.5	14	8	23,5	8,5	14
XVM NW 04 HL 12	L	PN 315	6	M 12 x 1.5	M 12 x 1.5	17	12	28,0	9,0	17
XVM NW 04 HL 14	L	PN 315	6	M 14 x 1.5	M 12 x 1.5	19	12	28,0	9,0	19
XVM NW 04 HL 16	L	PN 315	6	M 16 x 1.5	M 12 x 1.5	21	12	28,0	9,0	22
XVM NW 04 HL 18	L	PN 315	6	M 18 x 1.5	M 12 x 1.5	23	12	28,5	9,5	24
XVM NW 04 HL 22	L	PN 315	6	M 22 x 1.5	M 12 x 1.5	27	14	31,0	10,0	27
XVM NW 06 HL	L	PN 315	8	M 12 x 1.5	M 14 x 1.5	17	12	29,0	10,0	17
XVM NW 06 HL 10	L	PN 315	8	M 10 x 1	M 14 x 1.5	14	8	24,5	9,5	17
XVM NW 06 HL 14	L	PN 315	8	M 14 x 1.5	M 14 x 1.5	19	12	29,0	10,0	19
XVM NW 06 HL 16	L	PN 315	8	M 16 x 1.5	M 14 x 1.5	21	12	29,0	10,0	22
XVM NW 06 HL 18	L	PN 315	8	M 18 x 1.5	M 14 x 1.5	23	12	29,5	10,5	24
XVM NW 06 HL 22	L	PN 315	8	M 22 x 1.5	M 14 x 1.5	27	14	32,0	11,0	27
XVM NW 08 HL	L	PN 315	10	M 14 x 1.5	M 16 x 1.5	19	12	30,0	11,0	19
XVM NW 08 HL 12	L	PN 315	10	M 12 x 1.5	M 16 x 1.5	17	12	30,0	11,0	17
XVM NW 08 HL 16	L	PN 315	10	M 16 x 1.5	M 16 x 1.5	21	12	30,0	11,0	22
XVM NW 08 HL 18	L	PN 315	10	M 18 x 1.5	M 16 x 1.5	23	12	30,5	11,5	24
XVM NW 08 HL 22	L	PN 315	10	M 22 x 1.5	M 16 x 1.5	27	14	33,0	12,0	27
XVM NW 10 HL	L	PN 315	12	M 16 x 1.5	M 18 x 1.5	21	12	31,5	12,5	22

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Screw-in fitting

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	Ø d3 mm	i mm	L1 mm	L2 mm	SW mm
XVM NW 10 HL 12	L	PN 315	12	M 12 x 1.5	M 18 x 1.5	17	12	31,5	12,5	19
XVM NW 10 HL 14	L	PN 315	12	M 14 x 1.5	M 18 x 1.5	19	12	31,5	12,5	22
XVM NW 10 HL 18	L	PN 315	12	M 18 x 1.5	M 18 x 1.5	23	12	32,0	13,0	24
XVM NW 10 HL 22	L	PN 315	12	M 22 x 1.5	M 18 x 1.5	27	14	34,5	13,5	27
XVM NW 10 HL 24	L	PN 315	12	M 24 x 1.5	M 18 x 1.5	29	14	34,5	13,5	32
XVM NW 10 HL 26	L	PN 315	12	M 26 x 1.5	M 18 x 1.5	31	16	36,5	13,5	32
XVM NW 13 HL	L	PN 315	15	M 18 x 1.5	M 22 x 1.5	23	12	32,5	13,5	24
XVM NW 13 HL 14	L	PN 315	15	M 14 x 1.5	M 22 x 1.5	19	12	32,0	13,0	24
XVM NW 13 HL 16	L	PN 315	15	M 16 x 1.5	M 22 x 1.5	21	12	32,0	13,0	24
XVM NW 13 HL 20	L	PN 250	15	M 20 x 1.5	M 22 x 1.5	25	14	34,5	13,5	27
XVM NW 13 HL 22	L	PN 315	15	M 22 x 1.5	M 22 x 1.5	27	14	35,0	14,0	27
XVM NW 13 HL 26	L	PN 315	15	M 26 x 1.5	M 22 x 1.5	31	16	37,0	14,0	32
XVM NW 13 HL 30	L	PN 315	15	M 30 x 2	M 22 x 1.5	36	16	37,0	14,0	41
XVM NW 16 HL	L	PN 315	18	M 22 x 1.5	M 26 x 1.5	27	14	36,0	14,5	27
XVM NW 16 HL 18	L	PN 315	18	M 18 x 1.5	M 26 x 1.5	23	12	33,5	14,0	27
XVM NW 16 HL 26	L	PN 315	18	M 26 x 1.5	M 26 x 1.5	31	16	38,0	14,5	32
XVM NW 16 HL 27	L	PN 315	18	M 27 x 2	M 26 x 1.5	32	16	38,0	14,5	32
XVM NW 16 HL 30-1.5	L	PN 315	18	M 30 x 1.5	M 26 x 1.5	36	16	38,0	14,5	41
XVM NW 20 HL	L	PN 160	22	M 26 x 1.5	M 30 x 2	31	16	40,0	16,5	32
XVM NW 20 HL 18	L	PN 160	22	M 18 x 1.5	M 30 x 2	23	12	35,5	16,0	32
XVM NW 20 HL 22	L	PN 160	22	M 22 x 1.5	M 30 x 2	27	14	38,0	16,5	32
XVM NW 20 HL 22-LS 20	L	PN 160	22	M 22 x 1.5	M 30 x 2	27	14	44,0	22,5	32
XVM NW 20 HL 30-1.5	L	PN 160	22	M 30 x 1.5	M 30 x 2	36	16	40,0	16,5	41
XVM NW 20 HL 33-LS 20	L	PN 160	22	M 33 x 2	M 30 x 2	39	18	55,0	23,5	41
XVM NW 25 HL	L	PN 160	28	M 33 x 2	M 36 x 2	39	18	43,0	17,5	41
XVM NW 25 HL-LS 20	L	PN 160	28	M 33 x 2	M 36 x 2	39	18	49,0	23,5	41
XVM NW 25 HL 22	L	PN 160	28	M 22 x 1.5	M 36 x 2	27	14	39,0	17,5	41
XVM NW 25 HL 26	L	PN 160	28	M 26 x 1.5	M 36 x 2	31	16	41,0	17,5	41
XVM NW 25 HL 27	L	PN 160	28	M 27 x 2	M 36 x 2	32	16	41,0	17,5	41
XVM NW 25 HL 42	L	PN 160	28	M 42 x 2	M 36 x 2	49	22	45,0	17,5	50
XVM NW 32 HL	L	PN 160	35	M 42 x 2	M 45 x 2	49	20	48,0	17,5	50
XVM NW 40 HL	L	PN 160	42	M 48 x 2	M 52 x 2	55	22	52,0	19,0	55
XVM NW 03 HS	S	PN 400	6	M 12 x 1.5	M 14 x 1.5	17	12	32,0	13,0	17
XVM NW 03 HS 16	S	PN 400	6	M 16 x 1.5	M 14 x 1.5	21	12	32,0	13,0	22
XVM NW 03 HS 18	S	PN 400	6	M 18 x 1.5	M 14 x 1.5	23	12	32,5	13,5	24
XVM NW 03 HS 22	S	PN 400	6	M 22 x 1.5	M 14 x 1.5	27	14	35,0	14,0	27
XVM NW 04 HS	S	PN 400	8	M 14 x 1.5	M 16 x 1.5	19	12	34,0	15,0	19
XVM NW 06 HS	S	PN 400	10	M 16 x 1.5	M 18 x 1.5	21	12	34,5	15,0	22
XVM NW 06 HS 18	S	PN 400	10	M 18 x 1.5	M 18 x 1.5	23	12	35,0	15,5	24
XVM NW 06 HS 22	S	PN 400	10	M 22 x 1.5	M 18 x 1.5	27	14	37,5	16,0	27
XVM NW 08 HS	S	PN 400	12	M 18 x 1.5	M 20 x 1.5	23	12	36,5	17,0	24
XVM NW 08 HS 14	S	PN 400	12	M 14 x 1.5	M 20 x 1.5	19	12	36,0	16,5	22
XVM NW 08 HS 16	S	PN 400	12	M 16 x 1.5	M 20 x 1.5	21	12	36,0	16,5	22
XVM NW 08 HS 22	S	PN 400	12	M 22 x 1.5	M 20 x 1.5	27	14	39,0	17,5	27
XVM NW 10 HS	S	PN 400	14	M 20 x 1.5	M 22 x 1.5	25	14	41,0	19,0	27

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

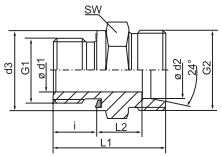
XVM (Continuation) Screw-in fitting

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	Ø d3 mm	i mm	L1 mm	L2 mm	SW mm
XVM NW 10 HS 16	S	PN 400	14	M 16 x 1.5	M 22 x 1.5	21	12	38,5	18,5	24
XVM NW 10 HS 18	S	PN 400	14	M 18 x 1.5	M 22 x 1.5	23	12	39,0	19,0	24
XVM NW 10 HS 22	S	PN 400	14	M 22 x 1.5	M 22 x 1.5	27	14	41,5	19,5	27
XVM NW 13 HS	S	PN 400	16	M 22 x 1.5	M 24 x 1.5	27	14	41,0	18,5	27
XVM NW 13 HS 16	S	PN 400	16	M 16 x 1.5	M 24 x 1.5	21	12	38,0	17,5	27
XVM NW 13 HS 18	S	PN 400	16	M 18 x 1.5	M 24 x 1.5	23	12	38,5	18,0	27
XVM NW 13 HS 26	S	PN 400	16	M 26 x 1.5	M 24 x 1.5	31	16	43,0	18,5	32
XVM NW 16 HS	S	PN 400	20	M 27 x 2	M 30 x 2	32	16	47,0	20,5	32
XVM NW 16 HS 22	S	PN 400	20	M 22 x 1.5	M 30 x 2	27	14	45,0	20,5	32
XVM NW 16 HS 26	S	PN 400	20	M 26 x 1.5	M 30 x 1.5	32	16	47,0	20,5	32
XVM NW 16 HS 30-1.5	S	PN 400	20	M 30 x 1.5	M 30 x 2	36	16	47,0	20,5	36
XVM NW 20 HS	S	PN 250	25	M 33 x 2	M 36 x 2	39	18	53,0	23,0	41
XVM NW 20 HS 26	S	PN 250	25	M 26 x 1.5	M 36 x 2	32	16	44,0	16,0	30
XVM NW 20 HS 27	S	PN 250	25	M 27 x 2	M 36 x 2	32	16	51,0	23,0	41
XVM NW 20 HS 30-1.5	S	PN 250	25	M 30 x 1.5	M 36 x 2	36	16	51,0	23,0	41
XVM NW 25 HS	S	PN 160	30	M 42 x 2	M 42 x 2	49	20	57,0	23,5	50
XVM NW 25 HS 30-1.5	S	PN 160	30	M 30 x 1.5	M 42 x 2	36	16	53,0	23,5	50
XVM NW 25 HS 38-1.5	S	PN 160	30	M 38 x 1.5	M 42 x 2	49	20	43,5	23,5	50
XVM NW 32 HS	S	PN 160	38	M 48 x 2	M 52 x 2	55	22	64,0	26,0	55
XVM NW 32 HS 38-1.5	S	PN 160	38	M 38 x 1.5	M 52 x 2	49	20	62,0	26,0	50
XVM NW 32 HS 45-1.5	S	PN 160	38	M 45 x 1.5	M 52 x 2	55	22	64,0	26,0	55

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XVM ED — Screw-in fitting



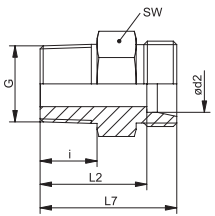
Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Screw-in fitting
Standard: DIN 2353
Material: Steel
Product versions: XVM ED VA, Screw-in fitting, Stainless steel
VM ED, Screw-in fitting, Steel
Spare parts: WD, Soft seal for ED fittings

Sealing form 1: Shape E
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	Ø d3 mm	i mm	L1 mm	L2 mm	SW mm
XVM NW 04 HL ED	L	PN 315	6	M 10 x 1	M 12 x 1.5	13,9	8	23,5	8,5	14
XVM NW 04 HL 12 ED	L	PN 315	6	M 12 x 1.5	M 12 x 1.5	16,9	12	28,0	9,0	17
XVM NW 06 HL ED	L	PN 315	8	M 12 x 1.5	M 14 x 1.5	16,9	12	29,0	10,0	17
XVM NW 06 HL 16 ED	L	PN 315	8	M 16 x 1.5	M 14 x 1.5	21,9	12	30,5	11,5	22
XVM NW 06 HL 18 ED	L	PN 315	8	M 18 x 1.5	M 14 x 1.5	23,9	12	30,5	11,5	24
XVM NW 08 HL ED	L	PN 315	10	M 14 x 1.5	M 16 x 1.5	18,9	12	30,0	11,0	19
XVM NW 08 HL 12 ED	L	PN 315	10	M 12 x 1.5	M 16 x 1.5	16,9	12	30,0	11,0	19
XVM NW 08 HL 16 ED	L	PN 315	10	M 16 x 1.5	M 16 x 1.5	21,9	12	31,5	12,5	22
XVM NW 08 HL 18 ED	L	PN 315	10	M 18 x 1.5	M 16 x 1.5	23,9	12	31,5	12,5	24
XVM NW 08 HL 22 ED	L	PN 315	10	M 22 x 1.5	M 16 x 1.5	26,9	14	35,0	14,0	27
XVM NW 10 HL ED	L	PN 315	12	M 16 x 1.5	M 18 x 1.5	21,9	12	31,5	12,5	22
XVM NW 10 HL 14 ED	L	PN 315	12	M 14 x 1.5	M 18 x 1.5	18,9	12	31,5	12,5	22
XVM NW 10 HL 18 ED	L	PN 315	12	M 18 x 1.5	M 18 x 1.5	23,9	12	32,0	13,0	24
XVM NW 10 HL 22 ED	L	PN 315	12	M 22 x 1.5	M 18 x 1.5	26,9	14	35,0	14,0	27
XVM NW 13 HL ED	L	PN 315	15	M 18 x 1.5	M 22 x 1.5	23,9	12	32,5	13,5	24
XVM NW 13 HL 16 ED	L	PN 315	15	M 16 x 1.5	M 22 x 1.5	21,9	12	32,0	13,0	24
XVM NW 13 HL 22 ED	L	PN 315	15	M 22 x 1.5	M 22 x 1.5	26,9	14	35,0	14,0	27
XVM NW 16 HL ED	L	PN 315	18	M 22 x 1.5	M 26 x 1.5	26,9	14	36,0	14,5	27
XVM NW 16 HL 18 ED	L	PN 315	18	M 18 x 1.5	M 26 x 1.5	23,9	12	33,5	14,0	27
XVM NW 20 HL ED	L	PN 160	22	M 26 x 1.5	M 30 x 2	31,9	16	40,0	16,5	32
XVM NW 20 HL 22 ED	L	PN 160	22	M 22 x 1.5	M 30 x 2	26,9	14	38,0	16,5	32
XVM NW 25 HL ED	L	PN 160	28	M 33 x 2	M 36 x 2	39,9	18	43,0	17,5	41
XVM NW 32 HL ED	L	PN 160	35	M 42 x 2	M 45 x 2	49,9	20	48,0	17,5	50
XVM NW 40 HL ED	L	PN 160	42	M 48 x 2	M 52 x 2	54,9	22	52,0	19,0	55
XVM NW 03 HS ED	S	PN 630	6	M 12 x 1.5	M 14 x 1.5	16,9	12	32,0	13,0	17
XVM NW 04 HS ED	S	PN 630	8	M 14 x 1.5	M 16 x 1.5	18,9	12	34,0	15,0	19
XVM NW 06 HS ED	S	PN 630	10	M 16 x 1.5	M 18 x 1.5	21,9	12	34,5	15,0	22
XVM NW 08 HS ED	S	PN 630	12	M 18 x 1.5	M 20 x 1.5	23,9	12	36,5	17,0	24
XVM NW 08 HS 22 ED	S	PN 400	12	M 22 x 1.5	M 20 x 1.5	26,9	14	39,0	17,5	27
XVM NW 10 HS ED	S	PN 630	14	M 20 x 1.5	M 22 x 1.5	25,9	14	41,0	19,0	27
XVM NW 13 HS 18 ED	S	PN 400	16	M 18 x 1.5	M 24 x 1.5	23,9	12	38,5	18,0	27
XVM NW 13 HS ED	S	PN 400	16	M 22 x 1.5	M 24 x 1.5	26,9	14	41,0	18,5	27
XVM NW 16 HS ED	S	PN 400	20	M 27 x 2	M 30 x 2	31,9	16	47,0	20,5	32
XVM NW 20 HS ED	S	PN 400	25	M 33 x 2	M 36 x 2	39,9	18	53,0	23,0	41
XVM NW 25 HS ED	S	PN 400	30	M 42 x 2	M 42 x 2	49,9	20	57,0	23,5	50
XVM NW 32 HS ED	S	PN 315	38	M 48 x 2	M 52 x 2	54,9	22	64,0	26,0	55

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XVMK Screw-in fitting



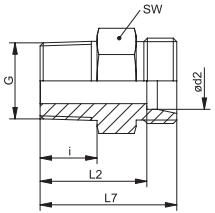
Connection 1: metric conical outer thread
Connection 2: metric cylindrical outer thread
Design: Screw-in fitting
Standard: DIN 2353
Material: Steel
Product versions: XVMK VA, Screw-in fitting, Stainless steel
VMK, Screw-in fitting, Steel

Sealing form 1: thread seal
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G	i mm	L2 mm	L7 mm	SW mm
XVM 04 LL 6	LL	PN 100	4	M 6 x 1 K	8	16,0	20	9
XVM 04 LL	LL	PN 100	4	M 8 x 1 K	8	16,0	20	9
XVM 04 LL 10	LL	PN 100	4	M 10 x 1 K	8	16,0	20	11
XVM 05 LL	LL	PN 100	5	M 8 x 1 K	8	14,5	20	11
XVM 06 LL 6	LL	PN 100	6	M 6 x 1 K	8	14,5	20	11
XVM 06 LL 8	LL	PN 100	6	M 8 x 1 K	8	14,5	20	11
XVM 06 LL	LL	PN 100	6	M 10 x 1 K	8	14,5	20	11
XVM 08 LL	LL	PN 100	8	M 10 x 1 K	8	16,5	22	12
XVM 12 LL	LL	PN 100	12	M 16 x 1.5 K	12	21,0	27	19
XVMK NW 04 HL	L	PN 315	6	M 10 x 1 K	8	15,0	22	12
XVMK NW 06 HL	L	PN 315	8	M 12 x 1.5 K	12	20,0	27	14
XVMK NW 08 HL	L	PN 315	10	M 14 x 1.5 K	12	21,0	28	17
XVMK NW 10 HL	L	PN 315	12	M 16 x 1.5 K	12	22,0	29	19
XVMK NW 13 HL	L	PN 315	15	M 18 x 1.5 K	12	23,0	30	24
XVMK NW 16 HL	L	PN 315	18	M 22 x 1.5 K	14	25,5	33	27
XVMK NW 20 HL	L	PN 160	22	M 26 x 1.5 k	18	31,5	39	32
XVMK NW 25 HL	L	PN 160	28	M 33 x 2 K	20	34,5	42	41
XVMK NW 32 HL	L	PN 160	35	M 42 x 2 K	21	35,5	46	46
XVMK NW 40 HL	L	PN 160	42	M 48 x 2 K	22	38,0	49	55
XVMK NW 03 HS	S	PN 630	6	M 12 x 1.5 K	12	24,0	31	14

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XVN Screw-in fitting



Connection 1: NPT external threads
Connection 2: metric cylindrical outer thread
Design: Screw-in fitting
Standard: DIN 2353
Material: Steel
Product versions: XVN VA, Screw-in fitting, Stainless steel
VN, Screw-in fitting, Steel

Sealing form 1: thread seal
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G	i mm	L2 mm	L7 mm	SW mm
XVN 04 LL	LL	PN 100	4	1/8" -27 NPT	10,0	18,0	22,0	11
XVN 05 LL	LL	PN 100	5	1/8" -27 NPT	10,0	16,5	22,0	11
XVN 06 LL	LL	PN 100	6	1/8" -27 NPT	10,0	16,5	22,0	11
XVN 08 LL	LL	PN 100	8	1/8" -27 NPT	10,0	18,5	24,0	12
XVN NW 04 HL	L	PN 315	6	1/8" -27 NPT	10,0	17,0	24,0	12
XVN NW 04 HL 1/4	L	PN 315	6	1/4" -18 NPT	15,0	23,0	30,0	17
XVN NW 04 HL 3/8	L	PN 315	6	3/8" -18 NPT	15,3	24,0	31,0	19
XVN NW 04 HL 1/2	L	PN 315	6	1/2" -14 NPT	20,0	29,0	36,0	24
XVN NW 06 HL 1/8	L	PN 315	8	1/8" -27 NPT	10,0	18,0	25,0	17
XVN NW 06 HL	L	PN 315	8	1/4" -18 NPT	15,0	23,0	30,0	17
XVN NW 06 HL 3/8	L	PN 315	8	3/8" -18 NPT	15,3	24,0	31,0	19
XVN NW 06 HL 1/2	L	PN 315	8	1/2" -14 NPT	20,0	29,0	36,0	24
XVN NW 08 HL 1/8	L	PN 315	10	1/8" -27 NPT	10,0	19,0	26,0	17
XVN NW 08 HL	L	PN 315	10	1/4" -18 NPT	15,0	24,0	31,0	17
XVN NW 08 HL 3/8	L	PN 315	10	3/8" -18 NPT	15,3	25,0	32,0	19
XVN NW 08 HL 1/2	L	PN 315	10	1/2" -14 NPT	20,0	30,0	37,0	24
XVN NW 10 HL 1/8	L	PN 315	12	1/8" -27 NPT	10,0	19,5	26,5	19
XVN NW 10 HL 1/4	L	PN 315	12	1/4" -18 NPT	15,0	25,0	32,0	19
XVN NW 10 HL	L	PN 315	12	3/8" -18 NPT	15,3	25,0	32,0	19
XVN NW 10 HL 1/2	L	PN 315	12	1/2" -14 NPT	20,0	30,0	37,0	24
XVN NW 10 HL 3/4	L	PN 315	12	3/4" -14 NPT	20,2	31,0	38,0	27
XVN NW 13 HL 1/4	L	PN 315	15	1/4" -18 NPT	15,0	26,0	33,0	24
XVN NW 13 HL 3/8	L	PN 315	15	3/8" -18 NPT	15,3	26,5	33,5	24
XVN NW 13 HL	L	PN 315	15	1/2" -14 NPT	20,0	31,0	38,0	24
XVN NW 13 HL 3/4	L	PN 315	15	3/4" -14 NPT	20,2	32,0	39,0	27
XVN NW 16 HL 1/4	L	PN 315	18	1/4" -18 NPT	15,0	26,5	34,0	27
XVN NW 16 HL	L	PN 315	18	1/2" -14 NPT	20,0	31,5	39,0	27
XVN NW 16 HL 3/4	L	PN 315	18	3/4" -14 NPT	20,2	31,5	39,0	27
XVN NW 20 HL 1/2	L	PN 160	22	1/2" -14 NPT	20,0	33,5	41,0	32
XVN NW 20 HL	L	PN 160	22	3/4" -14 NPT	20,2	33,5	41,0	32
XVN NW 25 HL	L	PN 160	28	1" -11.5 NPT	25,0	39,5	47,0	41
XVN NW 32 HL 1	L	PN 160	35	1" -11.5 NPT	25,0	40,0	50,5	46
XVN NW 32 HL	L	PN 160	35	1.1/4" -11.5 NPT	25,6	40,5	51,0	46
XVN NW 40 HL	L	PN 160	42	1.1/2" -11.5 NPT	26,0	42,0	53,0	55
XVN NW 03 HS	S	PN 630	6	1/4" -18 NPT	15,0	28,0	35,0	17
XVN NW 03 HS 1/2	S	PN 630	6	1/2" -14 NPT	20,0	35,0	42,0	24
XVN NW 04 HS	S	PN 630	8	1/4" -18 NPT	15,0	28,0	35,0	17
XVN NW 04 HS 3/8	S	PN 630	8	3/8" -18 NPT	15,3	28,0	35,0	19

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

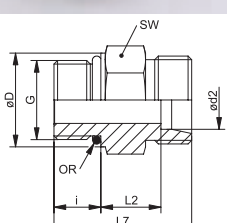
XVN (Continuation) Screw-in fitting

Identification	Series	Working pressure bar	Ø d2 mm	G	i mm	L2 mm	L7 mm	SW mm
XVN NW 06 HS 1/4	S	PN 630	10	1/4" -18 NPT	15,0	27,5	35,0	19
XVN NW 06 HS	S	PN 630	10	3/8" -18 NPT	15,3	27,5	35,0	19
XVN NW 06 HS 1/2	S	PN 400	10	1/2" -14 NPT	20,0	34,5	42,0	24
XVN NW 08 HS 1/4	S	PN 630	12	1/4" -18 NPT	15,0	29,0	36,5	22
XVN NW 08 HS	S	PN 630	12	3/8" -18 NPT	15,3	29,5	37,0	22
XVN NW 08 HS 1/2	S	PN 630	12	1/2" -14 NPT	20,0	34,5	42,0	24
XVN NW 10 HS 3/8	S	PN 630	14	3/8" -18 NPT	15,3	31,5	39,5	24
XVN NW 10 HS	S	PN 630	14	1/2" -14 NPT	20,0	36,0	44,0	24
XVN NW 13 HS	S	PN 400	16	1/2" -14 NPT	20,0	35,5	44,0	27
XVN NW 13 HS 3/4	S	PN 400	16	3/4" -14 NPT	20,2	37,5	46,0	32
XVN NW 16 HS 1/2	S	PN 400	20	1/2" -14 NPT	20,0	37,5	48,0	32
XVN NW 16 HS	S	PN 400	20	3/4" -14 NPT	20,2	37,5	48,0	32
XVN NW 16 HS 1	S	PN 400	20	1" -11.5 NPT	25,0	44,5	55,0	41
XVN NW 20 HS 3/4	S	PN 400	25	3/4" -14 NPT	20,2	40,0	52,0	41
XVN NW 20 HS	S	PN 400	25	1" -11.5 NPT	25,0	45,0	57,0	41
XVN NW 20 HS 1 1/4	S	PN 400	25	1.1/4" -11.5 NPT	25,6	46,0	58,0	46
XVN NW 25 HS 1	S	PN 400	30	1" -11.5 NPT	25,0	46,0	59,5	46
XVN NW 25 HS	S	PN 400	30	1.1/4" -11.5 NPT	25,6	46,5	60,0	46
XVN NW 32 HS	S	PN 315	38	1.1/2" -11.5 NPT	26,0	49,0	65,0	55

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XVU Screw-in fitting



Connection 1: UN/UNF external threads
Connection 2: metric cylindrical outer thread
Design: Screw-in fitting
Standard: DIN 2353
Material: Steel
Product versions: **XVU VA,** Screw-in fitting, Stainless steel
VU, Screw-in fitting, Steel

Sealing form 1: Shape F
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G	Ø D mm	i mm	L2 mm	L7 mm	SW mm	OR
XVU NW 04 HL 7/16	L	PN 315	6	7/16"-20 UNF	14,4	9,1	9,9	26,0	17	9.17 x 1.83
XVU NW 04 HL 1/2	L	PN 315	6	1/2"-20 UNF	16,8	9,1	9,9	26,0	17	10.52 x 1.83
XVU NW 04 HL 9/16	L	PN 315	6	9/16"-18 UNF	17,6	10,0	11,0	28,0	19	11.89 x 1.98
XVU NW 06 HL 7/16	L	PN 315	8	7/16"-20 UNF	14,4	9,1	12,9	29,0	17	9.17 x 1.83
XVU NW 06 HL 1/2	L	PN 315	8	1/2"-20 UNF	16,8	9,1	12,9	29,0	17	10.52 x 1.83
XVU NW 06 HL 9/16	L	PN 315	8	9/16"-18 UNF	17,6	10,0	13,0	30,0	19	11.89 x 1.98
XVU NW 08 HL 7/16	L	PN 315	10	7/16"-20 UNF	14,4	9,1	13,9	30,0	17	9.17 x 1.83
XVU NW 08 HL 9/16	L	PN 315	10	9/16"-18 UNF	17,6	10,0	14,0	31,0	19	11.89 x 1.98
XVU NW 08 HL 3/4	L	PN 315	10	3/4"-16 UNF	22,3	11,1	14,9	33,0	24	16.36 x 2.20
XVU NW 10 HL 9/16	L	PN 315	12	9/16"-18 UNF	17,6	10,0	12,0	29,0	19	11.89 x 1.98
XVU NW 10 HL 3/4	L	PN 315	12	3/4"-16 UNF	22,3	11,1	12,9	31,0	24	16.36 x 2.20
XVU NW 10 HL 7/8	L	PN 315	12	7/8"-14 UNF	25,5	12,7	14,3	34,0	27	19.18 x 2.46

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

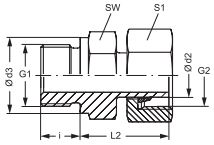
Screw-in fitting

Identification	Series	Working pressure bar	Ø d2 mm	G	Ø D mm	i mm	L2 mm	L7 mm	SW mm	OR
XVU NW 13 HL 9/16	L	PN 315	15	9/16"-18 UNF	17,6	10,0	14,0	31,0	24	11.89 x 1.98
XVU NW 13 HL 3/4	L	PN 315	15	3/4"-16 UNF	22,3	11,1	13,9	32,0	24	16.36 x 2.20
XVU NW 13 HL 7/8	L	PN 315	15	7/8"-14 UNF	25,5	12,7	15,8	35,5	27	19.18 x 2.46
XVU NW 16 HL 3/4	L	PN 315	18	3/4"-16 UNF	22,3	11,1	14,4	33,0	27	16.36 x 2.20
XVU NW 16 HL 7/8	L	PN 315	18	7/8"-14 UNF	25,5	12,7	14,5	34,7	27	19.18 x 2.46
XVU NW 16 HL 1 1/16	L	PN 315	18	1.1/16" -12 UN	31,9	15,1	14,4	37,0	32	23.47 x 2.95
XVU NW 20 HL 7/8	L	PN 160	22	7/8"-14 UNF	25,5	12,7	16,8	37,0	32	19.18 x 2.46
XVU NW 20 HL 1 1/16	L	PN 160	22	1.1/16" -12 UN	31,9	15,1	16,4	39,0	32	23.47 x 2.95
XVU NW 20 HL 1 5/16	L	PN 160	22	1.5/16" -12 UN	38,2	15,1	17,4	40,0	41	29.74 x 2.95
XVU NW 25 HL 7/8	L	PN 160	28	7/8"-14 UNF	25,5	12,7	19,8	40,0	41	19.18 x 2.46
XVU NW 25 HL 1 1/16	L	PN 160	28	1.1/16" -12 UN	31,9	15,1	17,4	40,0	41	23.47 x 2.95
XVU NW 25 HL 1 5/16	L	PN 160	28	1.5/16" -12 UN	38,2	15,1	17,4	40,0	41	29.74 x 2.95
XVU NW 32 HL 1 5/16	L	PN 160	35	1.5/16" -12 UN	38,2	15,1	17,4	43,0	46	29.74 x 2.95
XVU NW 32 HL 1 5/8	L	PN 160	35	1.5/8" -12 UN	47,7	15,1	17,4	43,0	50	37.47 x 3.00
XVU NW 40 HL 1 5/8	L	PN 160	42	1.5/8" -12 UN	47,7	15,1	18,9	45,0	55	37.47 x 3.00
XVU NW 40 HL 1 7/8	L	PN 160	42	1.7/8" -12 UN	53,8	15,1	18,9	45,0	60	43.69 x 3.00
XVU NW 03 HS 7/16	S	PN 630	6	7/16"-20 UNF	14,4	9,1	14,9	31,0	17	9.17 x 1.83
XVU NW 04 HS 7/16	S	PN 630	8	7/16"-20 UNF	14,4	9,1	14,9	31,0	17	9.17 x 1.83
XVU NW 04 HS 1/2	S	PN 630	8	1/2"-20 UNF	16,8	9,1	14,9	31,0	19	10.52 x 1.83
XVU NW 04 HS 9/16	S	PN 630	8	9/16"-18 UNF	17,6	10,0	15,0	32,0	19	11.89 x 1.98
XVU NW 06 HS 9/16	S	PN 630	10	9/16"-18 UNF	17,6	10,0	14,5	32,0	19	10.89 x 1.98
XVU NW 06 HS 3/4	S	PN 630	10	3/4"-16 UNF	22,3	11,1	14,4	33,0	24	16.36 x 2.20
XVU NW 08 HS 9/16	S	PN 630	12	9/16"-18 UNF	17,6	10,0	14,5	32,0	22	11.89 x 1.98
XVU NW 08 HS 3/4	S	PN 630	12	3/4"-16 UNF	22,3	11,1	17,4	36,0	24	16.36 x 2.20
XVU NW 08 HS 7/8	S	PN 630	12	7/8"-14 UNF	25,5	12,7	17,8	38,0	27	19.18 x 2.46
XVU NW 10 HS 3/4	S	PN 630	14	3/4"-16 UNF	22,3	11,1	15,9	35,0	24	16.36 x 2.20
XVU NW 13 HS 3/4	S	PN 400	16	3/4"-16 UNF	22,3	11,1	15,4	35,0	24	16.36 x 2.20
XVU NW 13 HS 7/8	S	PN 400	16	7/8"-14 UNF	25,5	12,7	18,8	40,0	27	19.18 x 2.46
XVU NW 13 HS 1 1/16	S	PN 400	16	1.1/16" -12 UN	31,9	15,1	20,4	44,0	32	23.47 x 2.95
XVU NW 16 HS 3/4	S	PN 400	20	3/4"-16 UNF	22,3	11,1	20,4	42,0	32	16.36 x 2.20
XVU NW 16 HS 7/8	S	PN 400	20	7/8"-14 UNF	25,5	12,7	20,8	44,0	32	19.18 x 2.46
XVU NW 16 HS 1 1/16	S	PN 400	20	1.1/16" -12 UN	31,9	15,1	20,4	46,0	32	23.47 x 2.95
XVU NW 20 HS 1 1/16	S	PN 400	25	1.1/16" -12 UN	31,9	15,1	22,9	50,0	41	23.47 x 2.95
XVU NW 20 HS 1 5/16	S	PN 400	25	1.5/16" -12 UN	38,2	15,1	22,9	50,0	41	29.74 x 2.95
XVU NW 25 HS 1 5/16	S	PN 400	30	1.5/16" -12 UN	38,2	15,1	23,4	52,0	46	29.74 x 2.95
XVU NW 25 HS 1 5/8	S	PN 400	30	1.5/8" -12 UN	47,7	15,1	23,4	52,0	50	37.47 x 3.00
XVU NW 32 HS 1 5/8	S	PN 315	38	1.5/8" -12 UN	47,7	15,1	25,9	57,0	55	37.47 x 3.00
XVU NW 32 HS 1 7/8	S	PN 315	38	1.7/8" -12 UN	53,8	15,1	25,9	57,0	60	43.69 x 3.00

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

AVR Screw-in fitting



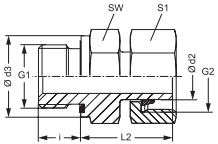
Connection 1: BSP external thread, cylindrical
Connection 2: metric nut thread
Design: Screw-in fitting
Standard: DIN 2353
Material: Steel
Product versions: AVR VA, Screw-in fitting, Stainless steel

Sealing form 1: Shape B
Sealing form 2: Pipe socket with cutting ring
Construction: straight
Included in scope of supply: Socket with union nut and cutting ring
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	Ø d3 mm	i mm	L2 mm	SW mm	S1
AVR NW 04 L	L	PN 315	6	G 1/8" -28	M 12 x 1.5	14	8	24,5	14	14
AVR NW 06 L	L	PN 315	8	G 1/4" -19	M 14 x 1.5	18	12	27,0	19	17
AVR NW 08 L	L	PN 315	10	G 1/4" -19	M 16 x 1.5	18	12	27,5	19	19
AVR NW 10 L 1/4	L	PN 315	12	G 1/4" -19	M 18 x 1.5	18	12	28,5	19	22
AVR NW 10 L	L	PN 315	12	G 3/8" -19	M 18 x 1.5	22	12	30,0	22	22
AVR NW 10 L 1/2	L	PN 315	12	G 1/2" -14	M 18 x 1.5	26	14	30,5	27	22
AVR NW 13 L 3/8	L	PN 315	15	G 3/8" -19	M 22 x 1.5	22	12	30,0	22	27
AVR NW 13 L	L	PN 315	15	G 1/2" -14	M 22 x 1.5	26	14	30,5	27	27
AVR NW 16 L	L	PN 315	18	G 1/2" -14	M 26 x 1.5	26	14	31,5	27	32
AVR NW 20 L	L	PN 160	22	G 3/4" -14	M 30 x 2	32	16	32,5	32	36
AVR NW 25 L 3/4	L	PN 160	28	G 3/4" -14	M 36 x 2	32	16	34,0	32	41
AVR NW 25 L	L	PN 160	28	G 1" -11	M 36 x 2	39	18	35,0	41	41
AVR NW 32 L	L	PN 160	35	G 1.1/4" -11	M 45 x 2	49	20	42,5	50	50
AVR NW 40 L	L	PN 160	42	G 1.1/2" -11	M 52 x 2	55	22	47,0	55	60
AVR NW 03 S	S	PN 630	6	G 1/4" -19	M 14 x 1.5	18	12	27,0	19	17
AVR NW 04 S	S	PN 630	8	G 1/4" -19	M 16 x 1.5	18	12	27,0	19	19
AVR NW 06 S	S	PN 630	10	G 3/8" -19	M 18 x 1.5	22	12	32,0	22	22
AVR NW 08 S	S	PN 630	12	G 3/8" -19	M 20 x 1.5	22	12	32,0	22	24
AVR NW 08 S 1/2	S	PN 630	12	G 1/2" -14	M 20 x 1.5	26	14	35,0	27	24
AVR NW 10 S	S	PN 630	14	G 1/2" -14	M 22 x 1.5	26	14	36,5	27	27
AVR NW 13 S 3/8	S	PN 400	16	G 3/8" -19	M 24 x 1.5	22	12	34,0	22	30
AVR NW 13 S	S	PN 400	16	G 1/2" -14	M 24 x 1.5	26	14	37,0	27	30
AVR NW 13 S 3/4	S	PN 400	16	G 3/4" -14	M 24 x 1.5	32	16	38,5	32	30
AVR NW 16 S	S	PN 400	20	G 3/4" -14	M 30 x 2	32	16	43,0	32	36
AVR NW 20 S	S	PN 400	25	G 1" -11	M 36 x 2	39	18	48,0	41	46
AVR NW 25 S	S	PN 250	30	G 1.1/4" -11	M 42 x 2	49	20	51,0	50	50
AVR NW 32 S	S	PN 250	38	G 1.1/2" -11	M 52 x 2	55	22	60,0	55	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

AVR ED — Screw-in fitting



Connection 1: BSP external thread, cylindrical
Connection 2: metric nut thread
Design: Screw-in fitting
Standard: DIN 2353
Material: Steel
Product versions: AVR ED MG, Screw-in fitting, Brass
AVR ED VA, Screw-in fitting, Stainless steel
Spare parts: WD, Soft seal for ED fittings

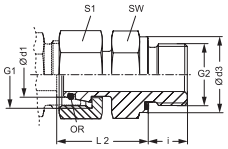
Sealing form 1: Shape E
Sealing form 2: Pipe socket with cutting ring
Construction: straight
Included in scope of supply: Pipe socket with union nut and pre-assembled cutting ring
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	Ø d3 mm	i mm	L2 mm	SW mm	S1
AVR NW 04 L ED	L	PN 315	6	G 1/8" -28	M 12 x 1.5	13,9	8	24,5	14	14
AVR NW 06 L ED	L	PN 315	8	G 1/4" -19	M 14 x 1.5	18,9	12	27,0	19	17
AVR NW 08 L ED	L	PN 315	10	G 1/4" -19	M 16 x 1.5	18,9	12	27,5	19	19
AVR NW 10 L 1/4 ED	L	PN 315	12	G 1/4" -19	M 18 x 1.5	18,9	12	28,5	19	22
AVR NW 10 L ED	L	PN 315	12	G 3/8" -19	M 18 x 1.5	21,9	12	30,0	22	22
AVR NW 10 L 1/2 ED	L	PN 315	12	G 1/2" -14	M 18 x 1.5	26,9	14	30,5	27	22
AVR NW 13 L 3/8 ED	L	PN 315	15	G 3/8" -19	M 22 x 1.5	21,9	12	30,0	22	27
AVR NW 13 L ED	L	PN 315	15	G 1/2" -14	M 22 x 1.5	26,9	14	30,5	27	27
AVR NW 16 L ED	L	PN 315	18	G 1/2" -14	M 26 x 1.5	26,9	14	31,5	27	32
AVR NW 20 L ED	L	PN 160	22	G 3/4" -14	M 30 x 2	31,9	16	32,5	32	36
AVR NW 25 L ED	L	PN 160	28	G 1" -11	M 36 x 2	39,9	18	35,0	41	41
AVR NW 32 L ED	L	PN 160	35	G 1.1/4" -11	M 45 x 2	49,9	20	42,5	50	50
AVR NW 40 L ED	L	PN 160	42	G 1.1/2" -11	M 52 x 2	54,9	22	47,0	55	60
AVR NW 03 S ED	S	PN 630	6	G 1/4" -19	M 14 x 1.5	18,9	12	27,0	19	17
AVR NW 04 S ED	S	PN 630	8	G 1/4" -19	M 16 x 1.5	18,9	12	27,0	19	19
AVR NW 06 S ED	S	PN 630	10	G 3/8" -19	M 18 x 1.5	21,9	12	32,0	22	22
AVR NW 08 S ED	S	PN 630	12	G 3/8" -19	M 20 x 1.5	21,9	12	32,0	22	24
AVR NW 08 S 1/2 ED	S	PN 630	12	G 1/2" -14	M 20 x 1.5	26,9	14	35,0	27	24
AVR NW 10 S ED	S	PN 630	14	G 1/2" -14	M 22 x 1.5	26,9	14	36,5	27	27
AVR NW 13 S ED	S	PN 400	16	G 1/2" -14	M 24 x 1.5	26,9	14	37,0	27	30
AVR NW 16 S ED	S	PN 400	20	G 3/4" -14	M 30 x 2	31,9	16	43,0	32	36
AVR NW 20 S ED	S	PN 400	25	G 1" -11	M 36 x 2	39,9	18	48,0	41	46
AVR NW 25 S ED	S	PN 400	30	G 1.1/4" -11	M 42 x 2	49,9	20	51,0	50	50
AVR NW 32 S ED	S	PN 315	38	G 1.1/2" -11	M 52 x 2	54,9	22	60,0	55	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

AOVR ED

Screw-in fitting



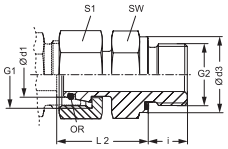
Connection 1: metric nut thread
Connection 2: BSP cylindrical external threads
Design: Screw-in fitting
Standard: DIN 2353
Surface protection: electro galvanised
Product versions: AOVR ED VA, Screw-in fitting, Stainless steel
Spare parts: WD, Soft seal for ED fittings

Sealing form 1: 24° outer cone with O-ring
Sealing form 2: Shape E
Construction: straight
Material: Steel

Identification	Series	Working pressure bar	Ø d1 mm	G1	G2	Ø d3 mm	i mm	L2 mm	SW mm	S1	OR
AOVR NW 04 L ED	L	PN 315	6	M 12 x 1.5	G 1/8" -28	13,9	8	24,5	14	14	4.0 x 1.5
AOVR NW 06 L ED	L	PN 315	8	M 14 x 1.5	G 1/4" -19	18,9	12	29,5	19	17	6.0 x 1.5
AOVR NW 08 L ED	L	PN 315	10	M 16 x 1.5	G 1/4" -19	18,9	12	27,5	19	19	7.5 x 1.5
AOVR NW 10 L 1/4 ED	L	PN 315	12	M 18 x 1.5	G 1/4" -19	18,9	12	30,0	19	22	9.0 x 1.5
AOVR NW 10 L 1/2 ED	L	PN 315	12	M 18 x 1.5	G 1/2" -14	26,9	14	34,0	27	22	9.0 x 1.5
AOVR NW 10 L ED	L	PN 315	12	M 18 x 1.5	G 3/8" -19	21,9	12	34,0	22	22	9.0 x 1.5
AOVR NW 13 L ED	L	PN 315	15	M 22 x 1.5	G 1/2" -14	26,9	14	32,0	27	27	12.0 x 2.0
AOVR NW 16 L ED	L	PN 315	18	M 26 x 1.5	G 1/2" -14	26,9	14	31,5	27	32	15.0 x 2.0
AOVR NW 20 L ED	L	PN 160	22	M 30 x 2	G 3/4" -14	31,9	16	32,5	32	36	20.0 x 2.0
AOVR NW 25 L ED	L	PN 160	28	M 36 x 2	G 1" -11	39,9	18	35,0	41	41	26.0 x 2.0
AOVR NW 32 L ED	L	PN 160	35	M 45 x 2	G 1.1/4" -11	49,9	20	42,5	50	50	32.0 x 2.5
AOVR NW 40 L ED	L	PN 160	42	M 52 x 2	G 1.1/2" -11	54,9	22	46,5	55	60	38.0 x 2.5
AOVR NW 03 S ED	S	PN 630	6	M 14 x 1.5	G 1/4" -19	18,9	12	27,0	19	17	4.0 x 1.5
AOVR NW 04 S ED	S	PN 630	8	M 16 x 1.5	G 1/4" -19	18,9	12	29,5	19	19	6.0 x 1.5
AOVR NW 06 S ED	S	PN 630	10	M 18 x 1.5	G 3/8" -19	21,9	12	32,0	22	22	7.5 x 1.5
AOVR NW 08 S 1/2 ED	S	PN 630	12	M 20 x 1.5	G 1/2" -14	26,9	14	35,0	27	24	9.0 x 1.5
AOVR NW 08 S ED	S	PN 630	12	M 20 x 1.5	G 3/8" -19	21,9	12	34,0	22	24	9.0 x 1.5
AOVR NW 10 S ED	S	PN 630	14	M 22 x 1.5	G 1/2" -14	26,9	14	36,5	27	27	10.0 x 2.0
AOVR NW 13 S ED	S	PN 400	16	M 24 x 1.5	G 1/2" -14	26,9	14	37,0	27	30	12.0 x 2.0
AOVR NW 16 S ED	S	PN 400	20	M 30 x 2	G 3/4" -14	31,9	16	43,0	32	36	16.3 x 2.4
AOVR NW 20 S ED	S	PN 400	25	M 36 x 2	G 1" -11	39,9	18	48,0	41	46	20.3 x 2.4
AOVR NW 25 S ED	S	PN 400	30	M 42 x 2	G 1.1/4" -11	49,9	20	51,0	50	50	25.3 x 2.4
AOVR NW 32 S ED	S	PN 315	38	M 52 x 2	G 1.1/2" -11	54,9	22	60,0	55	60	33.3 x 2.4

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

AOVM ED Screw-in fitting



Connection 1: metric cylindrical outer thread
Connection 2: metric nut thread
Design: Screw-in fitting
Standard: DIN 2353
Surface protection: electro galvanised
Product versions: AOVM ED VA, Screw-in fitting, Stainless steel
Spare parts: WD, Soft seal for ED fittings

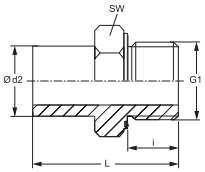
Sealing form 1: 24° outer cone with O-ring
Sealing form 2: Shape E
Construction: straight
Material: Steel

Identification	Series	Working pressure bar	Ø d1 mm	G1	G2	Ø d3 mm	i mm	L2 mm	SW mm	S1	OR
AOVM NW 04 L ED	L	PN 315	6	M 12 x 1.5	M 10 x 1	13,9	8	24,5	14	14	4.0 x 1.5
AOVM NW 06 L ED	L	PN 315	8	M 14 x 1.5	M 12 x 1.5	16,9	12	26,5	17	17	6.0 x 1.5
AOVM NW 08 L ED	L	PN 315	10	M 16 x 1.5	M 14 x 1.5	18,9	12	27,5	19	19	7.5 x 1.5
AOVM NW 10 L ED	L	PN 315	12	M 18 x 1.5	M 16 x 1.5	21,9	12	30,5	22	22	9.0 x 1.5
AOVM NW 13 L ED	L	PN 315	15	M 22 x 1.5	M 18 x 1.5	23,9	12	31,5	24	27	12.0 x 2.0
AOVM NW 16 L ED	L	PN 315	18	M 26 x 1.5	M 22 x 1.5	26,9	14	31,5	27	32	15.0 x 2.0
AOVM NW 20 L ED	L	PN 160	22	M 30 x 2	M 26 x 1.5	31,9	16	32,5	32	36	20.0 x 2.0
AOVM NW 25 L ED	L	PN 160	28	M 36 x 2	M 33 x 2	39,9	18	35,0	41	41	26.0 x 2.0
AOVM NW 32 L ED	L	PN 160	35	M 45 x 2	M 42 x 2	49,9	20	42,5	50	50	32.0 x 2.5
AOVM NW 40 L ED	L	PN 160	42	M 52 x 2	M 48 x 2	54,9	22	46,5	55	60	38.0 x 2.5
AOVM NW 03 S ED	S	PN 630	6	M 14 x 1.5	M 12 x 1.5	16,9	12	27,0	17	17	4.0 x 1.5
AOVM NW 04 S ED	S	PN 630	8	M 16 x 1.5	M 14 x 1.5	18,9	12	29,5	19	19	6.0 x 1.5
AOVM NW 06 S ED	S	PN 630	10	M 18 x 1.5	M 16 x 1.5	21,9	12	32,0	22	22	7.5 x 1.5
AOVM NW 08 S ED	S	PN 630	12	M 20 x 1.5	M 18 x 1.5	23,9	12	34,0	24	24	9.0 x 1.5
AOVM NW 10 S ED	S	PN 630	14	M 22 x 1.5	M 20 x 1.5	25,9	14	36,5	27	27	10.0 x 2.0
AOVM NW 13 S ED	S	PN 400	16	M 24 x 1.5	M 22 x 1.5	26,9	14	37,0	27	30	12.0 x 2.0
AOVM NW 16 S ED	S	PN 400	20	M 30 x 2	M 27 x 2	31,9	16	43,0	32	36	16.3 x 2.4
AOVM NW 20 S ED	S	PN 400	25	M 36 x 2	M 33 x 2	39,9	18	48,0	41	46	20.3 x 2.4
AOVM NW 25 S ED	S	PN 400	30	M 42 x 2	M 42 x 2	49,9	20	51,0	50	50	25.3 x 2.4
AOVM NW 32 S ED	S	PN 315	38	M 52 x 2	M 48 x 2	54,9	22	60,0	55	60	33.3 x 2.4

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

NVM ED

Screw-in sockets



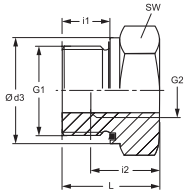
Connection 1: metric cylindrical outer thread
Connection 2: Pipe socket not pre-assembled
Design: Screw-in sockets
Standard: DIN 2353
Material: Steel
Product versions: NVM ED VA, Screw-in sockets, Stainless steel
Spare parts: WD, Soft seal for ED fittings
Spare parts: VOM, Pre-assembly sockets

Sealing form 1: Shape E
Sealing form 2: Cutting ring connection
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	i mm	L mm	SW mm
NVM NW 04 L ED	L	PN 315	6	M 10 x 1	8	32,5	14
NVM NW 06 L ED	L	PN 315	8	M 12 x 1.5	12	38,5	17
NVM NW 08 L ED	L	PN 315	10	M 16 x 1.5	12	39,5	19
NVM NW 10 L ED	L	PN 315	12	M 16 x 1.5	12	42,5	22
NVM NW 13 L ED	L	PN 315	15	M 18 x 1.5	12	43,5	24
NVM NW 16 L ED	L	PN 315	18	M 22 x 1.5	14	45,5	27
NVM NW 20 L ED	L	PN 160	22	M 26 x 1.5	16	48,5	32
NVM NW 25 L ED	L	PN 160	28	M 33 x 2	18	53,0	41
NVM NW 32 L ED	L	PN 160	35	M 42 x 2	20	62,5	50
NVM NW 40 L ED	L	PN 160	42	M 48 x 2	22	68,5	55
NVM NW 03 S ED	S	PN 630	6	M 12 x 1.5	12	39,0	17
NVM NW 04 S ED	S	PN 630	8	M 14 x 1.5	12	41,5	19
NVM NW 06 S ED	S	PN 630	10	M 16 x 1.5	12	44,0	22
NVM NW 08 S ED	S	PN 630	12	M 18 x 1.5	12	46,0	24
NVM NW 10 S ED	S	PN 630	14	M 20 x 1.5	14	50,5	27
NVM NW 13 S ED	S	PN 400	16	M 22 x 1.5	14	51,0	27
NVM NW 16 S ED	S	PN 400	20	M 27 x 2	16	59,0	32
NVM NW 20 S ED	S	PN 400	25	M 33 x 2	18	66,0	41
NVM NW 25 S ED	S	PN 400	30	M 42 x 2	20	71,0	50
NVM NW 32 S ED	S	PN 315	38	M 48 x 2	22	82,0	55

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

RIK ED — Reducing adapter, short



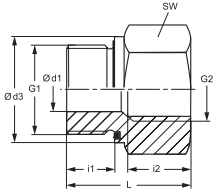
Connection 1: BSP external thread, cylindrical
Connection 2: BSP cylindrical internal threads
Construction: short
Material: Steel
Product versions: RIK ED VA, Reducing adapter, short, Stainless steel
Spare parts: WD, Soft seal for ED fittings

Sealing form 1: Shape E
Design: Reducing adapters
Standard: DIN 2353
Surface protection: electro galvanised

Identification	Working pressure bar	G1	G2	Ø d3 mm	i1 mm	i2 mm	L mm	SW mm
RIK NW 10 03 ED	PN 400	G 3/8" -19	G 1/8" -28	21,9	12	9	22,5	22
RIK NW 13 03 ED	PN 400	G 1/2" -14	G 1/8" -28	26,9	14	9	24,0	27
RIK NW 13 06 ED	PN 400	G 1/2" -14	G 1/4" -19	26,9	14	14	24,0	27
RIK NW 20 06 ED	PN 315	G 3/4" -14	G 1/4" -19	31,9	16	14	26,0	32
RIK NW 20 10 ED	PN 315	G 3/4" -14	G 3/8" -19	31,9	16	14	26,0	32
RIK NW 25 06 ED	PN 315	G 1" -11	G 1/4" -19	39,9	18	14	29,0	41
RIK NW 25 10 ED	PN 315	G 1" -11	G 3/8" -19	39,9	18	14	29,0	41
RIK NW 25 13 ED	PN 315	G 1" -11	G 1/2" -14	39,9	18	16	29,0	41
RIK NW 32 13 ED	PN 315	G 1.1/4" -11	G 1/2" -14	49,9	20	16	32,0	50
RIK NW 32 20 ED	PN 315	G 1.1/4" -11	G 3/4" -14	49,9	20	18	32,0	50
RIK NW 40 13 ED	PN 250	G 1.1/2" -11	G 1/2" -14	54,9	22	16	36,0	55
RIK NW 40 20 ED	PN 250	G 1.1/2" -11	G 3/4" -14	54,9	22	18	36,0	55
RIK NW 40 25 ED	PN 250	G 1.1/2" -11	G 1" -11	54,9	22	20	36,0	55

PN = Nominal pressure PB = Max. operating pressure
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

RIL ED — Reducing adapter, long



Connection 1: BSP external thread, cylindrical
Connection 2: BSP cylindrical internal threads
Construction: Long
Material: Steel
Product versions: RIL ED VA, Reducing adapter, long, Stainless steel
Spare parts: WD, Soft seal for ED fittings

Sealing form 1: Shape E
Design: Reducing adapters
Standard: DIN 2353
Surface protection: electro galvanised

Identification	Working pressure bar	Ø d1 mm	G1	G2	Ø d3 mm	i1 mm	i2 mm	L mm	SW mm
RIL NW 03 06 ED	PN 400	4	G 1/8" -28	G 1/4" -19	13,9	8	17,0	31,0	19
RIL NW 03 10 ED	PN 400	4	G 1/8" -28	G 3/8" -19	13,9	8	17,0	32,0	24
RIL NW 06 03 ED	PN 400	5	G 1/4" -19	G 1/8" -28	18,9	12	12,0	28,0	19
RIL NW 06 10 ED	PN 400	5	G 1/4" -19	G 3/8" -19	18,9	12	17,0	36,0	24
RIL NW 06 13 ED	PN 400	5	G 1/4" -19	G 1/2" -14	18,9	12	20,0	40,0	27
RIL NW 06 20 ED	PN 400	5	G 1/4" -19	G 3/4" -14	18,9	12	22,0	43,0	36
RIL NW 10 06 ED	PN 400	8	G 3/8" -19	G 1/4" -19	21,9	12	17,0	36,0	22
RIL NW 10 13 ED	PN 400	8	G 3/8" -19	G 1/2" -14	21,9	12	20,0	41,0	27
RIL NW 10 20 ED	PN 315	8	G 3/8" -19	G 3/4" -14	21,9	12	22,0	44,0	36
RIL NW 13 10 ED	PN 400	12	G 1/2" -14	G 3/8" -19	26,9	14	17,0	36,0	27
RIL NW 13 20 ED	PN 315	12	G 1/2" -14	G 3/4" -14	26,9	14	22,0	46,0	36
RIL NW 13 25 ED	PN 315	12	G 1/2" -14	G 1" -11	26,9	14	24,5	49,0	41
RIL NW 13 32 ED	PN 315	10	G 1/2" -14	G 1.1/4" -11	26,9	14	26,5	53,0	55

PN = Nominal pressure PB = Max. operating pressure

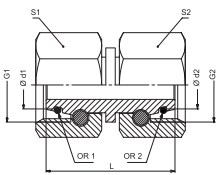
RIL ED (Continuation) Reducing adapter, long

Identification	Working pressure bar	Ø d1 mm	G1	G2	Ø d3 mm	i1 mm	i2 mm	L mm	SW mm
RIL NW 20 13 ED	PN 315	16	G 3/4" -14	G 1/2" -14	31,9	16	20,0	41,0	32
RIL NW 20 25 ED	PN 315	16	G 3/4" -14	G 1" -11	31,9	16	24,5	51,0	41
RIL NW 20 32 ED	PN 315	16	G 3/4" -14	G 1.1/4" -11	31,9	16	26,5	55,0	55
RIL NW 20 40 ED	PN 250	16	G 3/4" -14	G 1.1/2" -11	31,9	16	28,5	57,0	60
RIL NW 25 20 ED	PN 315	20	G 1" -11	G 3/4" -14	39,9	18	22,0	47,0	41
RIL NW 25 32 ED	PN 315	20	G 1" -11	G 1.1/4" -11	39,9	18	26,5	57,0	55
RIL NW 25 40 ED	PN 250	20	G 1" -11	G 1.1/2" -11	39,9	18	28,5	59,0	60
RIL NW 32 25 ED	PN 315	25	G 1.1/4" -11	G 1" -11	49,9	20	24,5	52,0	50
RIL NW 32 40 ED	PN 250	25	G 1.1/4" -11	G 1.1/2" -11	49,9	20	28,5	60,0	60
RIL NW 40 32 ED	PN 250	32	G 1.1/2" -11	G 1.1/4" -11	54,9	22	26,5	58,0	55
RIL NW 50 40 ED	PN 160	40	G 2" -11	G 1.1/2" -11	69,9	24	28,5	65,5	70

PN = Nominal pressure PB = Max. operating pressure

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

DMO Fitting, double nut



Connection 1: metric nut thread
Connection 2: metric nut thread
Design: Fitting, double nuts
Standard: DIN 2353
Surface protection: electro galvanised
Product versions: DMO VA, Fitting, double nut, Stainless steel

Sealing form 1: 24° outer cone with O-ring
Sealing form 2: 24° outer cone with O-ring
Construction: straight
Material: Steel

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	G1	G2	L mm	S1	S2	OR1	OR2
DMO NW 04 L	L	PN 315	6	6	M 12 x 1.5	M 12 x 1.5	32,0	14	14	4.0 x 1.5	4.0 x 1.5
DMO NW 04 L 06	L	PN 315	6	8	M 12 x 1.5	M 14 x 1.5	32,0	14	17	4.0 x 1.5	6.0 x 1.5
DMO NW 04 L 08	L	PN 315	6	10	M 12 x 1.5	M 16 x 1.5	33,0	14	19	4.0 x 1.5	7.5 x 1.5
DMO NW 04 L 10	L	PN 315	6	12	M 12 x 1.5	M 18 x 1.5	33,0	14	22	4.0 x 1.5	9.0 x 1.5
DMO NW 06 L	L	PN 315	8	8	M 14 x 1.5	M 14 x 1.5	32,0	17	17	6.0 x 1.5	6.0 x 1.5
DMO NW 06 L 08	L	PN 315	8	10	M 14 x 1.5	M 16 x 1.5	33,0	17	19	6.0 x 1.5	7.5 x 1.5
DMO NW 06 L 10	L	PN 315	8	12	M 14 x 1.5	M 18 x 1.5	33,0	17	22	6.0 x 1.5	9.0 x 1.5
DMO NW 06 L 13	L	PN 315	8	15	M 14 x 1.5	M 22 x 1.5	34,5	17	27	6.0 x 1.5	12.0 x 2.0
DMO NW 06 L 16	L	PN 315	8	18	M 14 x 1.5	M 26 x 1.5	36,0	17	32	6.0 x 1.5	15.0 x 2.0
DMO NW 08 L	L	PN 315	10	10	M 16 x 1.5	M 16 x 1.5	34,0	19	19	7.5 x 1.5	7.5 x 1.5
DMO NW 08 L 10	L	PN 315	10	12	M 16 x 1.5	M 18 x 1.5	33,0	19	22	7.5 x 1.5	9.0 x 1.5
DMO NW 08 L 13	L	PN 315	10	15	M 16 x 1.5	M 22 x 1.5	38,0	19	27	7.5 x 1.5	12.0 x 2.0
DMO NW 08 L 16	L	PN 315	10	18	M 16 x 1.5	M 26 x 1.5	36,0	19	32	7.5 x 1.5	15.0 x 2.0
DMO NW 10 L	L	PN 315	12	12	M 18 x 1.5	M 18 x 1.5	34,5	22	22	9.0 x 1.5	9.0 x 1.5
DMO NW 10 L 13	L	PN 315	12	15	M 18 x 1.5	M 22 x 1.5	38,0	22	27	9.0 x 1.5	12.0 x 2.0
DMO NW 10 L 16	L	PN 315	12	18	M 18 x 1.5	M 26 x 1.5	36,0	22	32	9.0 x 1.5	15.0 x 2.0
DMO NW 10 L 20	L	PN 160	12	22	M 18 x 1.5	M 30 x 2	40,0	22	36	9.0 x 1.5	20.0 x 2.0
DMO NW 13 L	L	PN 315	15	15	M 22 x 1.5	M 22 x 1.5	37,0	27	27	12.0 x 2.0	12.0 x 2.0
DMO NW 13 L 16	L	PN 315	15	18	M 22 x 1.5	M 26 x 1.5	36,0	27	32	12.0 x 2.0	15.0 x 2.0
DMO NW 13 L 20	L	PN 160	15	22	M 22 x 1.5	M 30 x 2	42,0	27	36	12.0 x 2.0	20.0 x 2.0
DMO NW 13 L 25	L	PN 160	15	28	M 22 x 1.5	M 36 x 2	46,0	27	41	12.0 x 2.0	26.0 x 2.0

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter

Fitting, double nut

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	G1	G2	L mm	S1	S2	OR1	OR2
DMO NW 16 L	L	PN 315	18	18	M 26 x 1.5	M 26 x 1.5	38,5	32	32	15.0 x 2.0	15.0 x 2.0
DMO NW 16 L 20	L	PN 160	18	22	M 26 x 1.5	M 30 x 2	42,0	32	36	15.0 x 2.0	20.0 x 2.0
DMO NW 16 L 25	L	PN 160	18	28	M 26 x 1.5	M 36 x 2	46,0	32	41	15.0 x 2.0	26.0 x 2.0
DMO NW 16 L 32	L	PN 160	18	35	M 26 x 1.5	M 45 x 2	45,0	32	50	15.0 x 2.0	32.0 x 2.5
DMO NW 20 L	L	PN 160	22	22	M 30 x 2	M 30 x 2	42,5	36	36	20.0 x 2.0	20.0 x 2.0
DMO NW 20 L 25	L	PN 160	22	28	M 30 x 2	M 36 x 2	46,0	36	41	20.0 x 2.0	26.0 x 2.0
DMO NW 20 L 32	L	PN 160	22	35	M 30 x 2	M 45 x 2	48,0	36	50	20.0 x 2.0	32.0 x 2.5
DMO NW 20 L 40	L	PN 160	22	42	M 30 x 2	M 52 x 2	47,5	36	60	20.0 x 2.0	38.0 x 2.5
DMO NW 25 L	L	PN 160	28	28	M 36 x 2	M 36 x 2	44,5	41	41	26.0 x 2.0	26.0 x 2.0
DMO NW 25 L 32	L	PN 160	28	35	M 36 x 2	M 45 x 2	48,0	41	50	26.0 x 2.0	32.0 x 2.5
DMO NW 25 L 40	L	PN 160	28	42	M 36 x 2	M 52 x 2	52,0	41	60	26.0 x 2.0	38.0 x 2.5
DMO NW 32 L	L	PN 160	35	35	M 45 x 2	M 45 x 2	51,0	50	50	32.0 x 2.5	32.0 x 2.5
DMO NW 32 L 40	L	PN 160	35	42	M 45 x 2	M 52 x 2	51,5	50	60	32.0 x 2.5	38.0 x 2.5
DMO NW 40 L	L	PN 160	42	42	M 52 x 2	M 52 x 2	52,0	60	60	38.0 x 2.5	38.0 x 2.5
DMO NW 04 L 03 S	L/S	PN 315	6	6	M 12 x 1.5	M 14 x 1.5	33,5	14	17	4.0 x 1.5	4.0 x 1.5
DMO NW 04 L 04 S	L/S	PN 315	6	8	M 12 x 1.5	M 16 x 1.5	33,0	14	19	4.0 x 1.5	6.0 x 1.5
DMO NW 04 L 06 S	L/S	PN 315	6	10	M 12 x 1.5	M 18 x 1.5	35,5	14	22	4.0 x 1.5	7.5 x 1.5
DMO NW 04 L 08 S	L/S	PN 315	6	12	M 12 x 1.5	M 20 x 1.5	38,0	14	24	4.0 x 1.5	9.0 x 1.5
DMO NW 06 L 03 S	L/S	PN 315	8	6	M 14 x 1.5	M 14 x 1.5	32,0	17	17	6.0 x 1.5	4.0 x 1.5
DMO NW 06 L 04 S	L/S	PN 315	8	8	M 14 x 1.5	M 16 x 1.5	33,0	17	19	6.0 x 1.5	6.0 x 1.5
DMO NW 06 L 06 S	L/S	PN 315	8	10	M 14 x 1.5	M 18 x 1.5	33,0	17	22	6.0 x 1.5	7.5 x 1.5
DMO NW 06 L 08 S	L/S	PN 315	8	12	M 14 x 1.5	M 20 x 1.5	36,0	17	24	6.0 x 1.5	9.0 x 1.5
DMO NW 06 L 13 S	L/S	PN 315	8	16	M 14 x 1.5	M 24 x 1.5	39,0	17	30	6.0 x 1.5	12.0 x 2.0
DMO NW 08 L 03 S	L/S	PN 315	10	6	M 16 x 1.5	M 14 x 1.5	33,0	19	17	7.5 x 1.5	4.0 x 1.5
DMO NW 08 L 04 S	L/S	PN 315	10	8	M 16 x 1.5	M 16 x 1.5	33,0	19	19	7.5 x 1.5	6.0 x 1.5
DMO NW 08 L 06 S	L/S	PN 315	10	10	M 16 x 1.5	M 18 x 1.5	33,0	19	22	7.5 x 1.5	7.5 x 1.5
DMO NW 08 L 08 S	L/S	PN 315	10	12	M 16 x 1.5	M 20 x 1.5	36,0	19	24	7.5 x 1.5	9.0 x 1.5
DMO NW 08 L 10 S	L/S	PN 315	10	14	M 16 x 1.5	M 22 x 1.5	39,0	19	27	7.5 x 1.5	10.0 x 2.0
DMO NW 08 L 13 S	L/S	PN 315	10	16	M 16 x 1.5	M 24 x 1.5	39,0	19	30	7.5 x 1.5	12.0 x 2.0
DMO NW 10 L 06 S	L/S	PN 315	12	10	M 18 x 1.5	M 18 x 1.5	33,0	22	22	9.0 x 1.5	7.5 x 1.5
DMO NW 10 L 08 S	L/S	PN 315	12	12	M 18 x 1.5	M 20 x 1.5	36,0	22	24	9.0 x 1.5	9.0 x 1.5
DMO NW 10 L 10 S	L/S	PN 315	12	14	M 18 x 1.5	M 22 x 1.5	39,0	22	27	9.0 x 1.5	10.0 x 2.0
DMO NW 10 L 13 S	L/S	PN 315	12	16	M 18 x 1.5	M 24 x 1.5	39,0	22	30	9.0 x 1.5	12.0 x 2.0
DMO NW 10 L 16 S	L/S	PN 315	12	20	M 18 x 1.5	M 30 x 2	36,0	22	36	9.0 x 1.5	16.3 x 2.4
DMO NW 13 L 06 S	L/S	PN 315	15	10	M 22 x 1.5	M 18 x 1.5	38,0	27	22	12.0 x 2.0	7.5 x 1.5
DMO NW 13 L 08 S	L/S	PN 315	15	12	M 22 x 1.5	M 20 x 1.5	38,0	27	24	12.0 x 2.0	9.0 x 1.5
DMO NW 13 L 10 S	L/S	PN 315	15	14	M 22 x 1.5	M 22 x 1.5	38,0	27	27	12.0 x 2.0	10.0 x 2.0
DMO NW 13 L 13 S	L/S	PN 315	15	16	M 22 x 1.5	M 24 x 1.5	39,0	27	30	12.0 x 2.0	12.0 x 2.0
DMO NW 13 L 16 S	L/S	PN 315	15	20	M 22 x 1.5	M 30 x 2	44,0	27	36	12.0 x 2.0	16.3 x 2.4
DMO NW 13 L 20 S	L/S	PN 315	15	25	M 22 x 1.5	M 36 x 2	47,5	27	46	12.0 x 2.0	20.3 x 2.4
DMO NW 16 L 08 S	L/S	PN 315	18	12	M 26 x 1.5	M 20 x 1.5	38,0	32	24	15.0 x 2.0	9.0 x 1.5
DMO NW 16 L 10 S	L/S	PN 315	18	14	M 26 x 1.5	M 22 x 1.5	41,0	32	27	15.0 x 2.0	10.0 x 2.0
DMO NW 16 L 13 S	L/S	PN 315	18	16	M 26 x 1.5	M 24 x 1.5	39,0	32	30	15.0 x 2.0	12.0 x 2.0
DMO NW 16 L 16 S	L/S	PN 315	18	20	M 26 x 1.5	M 30 x 2	44,0	32	36	15.0 x 2.0	16.3 x 2.4
DMO NW 16 L 20 S	L/S	PN 315	18	25	M 26 x 1.5	M 36 x 2	48,0	32	46	15.0 x 2.0	20.3 x 2.4

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

Fitting, double nut

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	G1	G2	L mm	S1	S2	OR1	OR2
DMO NW 16 L 25 S	L/S	PN 315	18	30	M 26 x 1.5	M 42 x 2	50,0	32	50	15.0 x 2.0	25.3 x 2.4
DMO NW 20 L 13 S	L/S	PN 160	22	16	M 30 x 2	M 24 x 1.5	42,0	36	30	20.0 x 2.0	12.0 x 2.0
DMO NW 20 L 16 S	L/S	PN 160	22	20	M 30 x 2	M 30 x 2	44,0	36	36	20.0 x 2.0	16.3 x 2.4
DMO NW 20 L 20 S	L/S	PN 160	22	25	M 30 x 2	M 36 x 2	46,0	36	46	20.0 x 2.0	20.3 x 2.4
DMO NW 20 L 25 S	L/S	PN 160	22	30	M 30 x 2	M 42 x 2	52,0	36	50	20.0 x 2.0	25.3 x 2.4
DMO NW 20 L 32 S	L/S	PN 160	22	38	M 30 x 2	M 52 x 2	52,0	36	60	20.0 x 2.0	33.3 x 2.4
DMO NW 25 L 13 S	L/S	PN 160	28	16	M 36 x 2	M 24 x 1.5	46,0	41	30	26.0 x 2.0	12.0 x 2.0
DMO NW 25 L 16 S	L/S	PN 160	28	20	M 36 x 2	M 30 x 2	46,0	41	36	26.0 x 2.0	16.3 x 2.4
DMO NW 25 L 20 S	L/S	PN 160	28	25	M 36 x 2	M 36 x 2	46,0	41	46	26.0 x 2.0	20.3 x 2.4
DMO NW 25 L 25 S	L/S	PN 160	28	30	M 36 x 2	M 42 x 2	52,0	41	50	26.0 x 2.0	25.3 x 2.4
DMO NW 25 L 32 S	L/S	PN 160	28	38	M 36 x 2	M 52 x 2	51,0	41	60	26.0 x 2.0	33.3 x 2.4
DMO NW 32 L 16 S	L/S	PN 160	35	20	M 45 x 2	M 30 x 2	48,0	50	36	32.0 x 2.5	16.3 x 2.4
DMO NW 32 L 20 S	L/S	PN 160	35	25	M 45 x 2	M 36 x 2	48,0	50	46	32.0 x 2.5	20.3 x 2.4
DMO NW 32 L 25 S	L/S	PN 160	35	30	M 45 x 2	M 42 x 2	52,0	50	50	32.0 x 2.5	25.3 x 2.4
DMO NW 32 L 32 S	L/S	PN 160	35	38	M 45 x 2	M 52 x 2	52,0	50	60	32.0 x 2.5	33.3 x 2.4
DMO NW 40 L 25 S	L/S	PN 160	42	30	M 52 x 2	M 42 x 2	52,0	60	50	38.0 x 2.5	25.3 x 2.4
DMO NW 40 L 32 S	L/S	PN 160	42	38	M 52 x 2	M 52 x 2	52,0	60	60	38.0 x 2.5	33.3 x 2.4
DMO NW 03 S	S	PN 630	6	6	M 14 x 1.5	M 14 x 1.5	35,0	17	17	4.0 x 1.5	4.0 x 1.5
DMO NW 03 S 04	S	PN 630	6	8	M 14 x 1.5	M 16 x 1.5	33,0	17	19	4.0 x 1.5	6.0 x 1.5
DMO NW 03 S 06	S	PN 630	6	10	M 14 x 1.5	M 18 x 1.5	32,0	17	22	4.0 x 1.5	7.5 x 1.5
DMO NW 03 S 08	S	PN 630	6	12	M 14 x 1.5	M 20 x 1.5	37,5	17	24	4.0 x 1.5	9.0 x 1.5
DMO NW 04 S	S	PN 630	8	8	M 16 x 1.5	M 16 x 1.5	35,0	19	19	6.0 x 1.5	6.0 x 1.5
DMO NW 04 S 06	S	PN 630	8	10	M 16 x 1.5	M 18 x 1.5	33,0	19	22	6.0 x 1.5	7.5 x 1.5
DMO NW 04 S 08	S	PN 630	8	12	M 16 x 1.5	M 20 x 1.5	36,0	19	24	6.0 x 1.5	9.0 x 1.5
DMO NW 06 S	S	PN 630	10	10	M 18 x 1.5	M 18 x 1.5	39,0	22	22	7.5 x 1.5	7.5 x 1.5
DMO NW 06 S 08	S	PN 630	10	12	M 18 x 1.5	M 20 x 1.5	36,0	22	24	7.5 x 1.5	9.0 x 1.5
DMO NW 06 S 10	S	PN 630	10	14	M 18 x 1.5	M 22 x 1.5	39,0	22	27	7.5 x 1.5	10.0 x 2.0
DMO NW 06 S 13	S	PN 400	10	16	M 18 x 1.5	M 24 x 1.5	39,0	22	30	7.5 x 1.5	12.0 x 2.0
DMO NW 08 S	S	PN 630	12	12	M 20 x 1.5	M 20 x 1.5	40,0	24	24	9.0 x 1.5	9.0 x 1.5
DMO NW 08 S 10	S	PN 630	12	14	M 20 x 1.5	M 22 x 1.5	39,0	24	27	9.0 x 1.5	10.0 x 2.0
DMO NW 08 S 13	S	PN 400	12	16	M 20 x 1.5	M 24 x 1.5	39,0	24	30	9.0 x 1.5	12.0 x 2.0
DMO NW 08 S 16	S	PN 400	12	20	M 20 x 1.5	M 30 x 2	39,0	24	36	9.0 x 1.5	16.3 x 2.4
DMO NW 10 S	S	PN 630	14	14	M 22 x 1.5	M 22 x 1.5	43,0	27	27	10.0 x 2.0	10.0 x 2.0
DMO NW 10 S 13	S	PN 400	14	16	M 22 x 1.5	M 24 x 1.5	39,0	27	30	10.0 x 2.0	12.0 x 2.0
DMO NW 10 S 16	S	PN 400	14	20	M 22 x 1.5	M 30 x 2	44,0	27	36	10.0 x 2.0	16.3 x 2.4
DMO NW 13 S	S	PN 400	16	16	M 24 x 1.5	M 24 x 1.5	44,0	30	30	12.0 x 2.0	12.0 x 2.0
DMO NW 13 S 16	S	PN 400	16	20	M 24 x 1.5	M 30 x 2	44,0	30	36	12.0 x 2.0	16.3 x 2.4
DMO NW 13 S 20	S	PN 400	16	25	M 24 x 1.5	M 36 x 2	46,0	30	46	12.0 x 2.0	20.3 x 2.4
DMO NW 13 S 25	S	PN 400	16	30	M 24 x 1.5	M 42 x 2	52,0	30	50	12.0 x 2.0	25.3 x 2.4
DMO NW 16 S	S	PN 400	20	20	M 30 x 2	M 30 x 2	53,5	36	36	16.3 x 2.4	16.3 x 2.4
DMO NW 16 S 20	S	PN 400	20	25	M 30 x 2	M 36 x 2	46,0	36	46	16.3 x 2.4	20.3 x 2.4
DMO NW 16 S 25	S	PN 400	20	30	M 30 x 2	M 42 x 2	52,0	36	50	16.3 x 2.4	25.3 x 2.4
DMO NW 16 S 32	S	PN 315	20	38	M 30 x 2	M 52 x 2	52,0	36	60	16.3 x 2.4	33.3 x 2.4
DMO NW 20 S	S	PN 400	25	25	M 36 x 2	M 36 x 2	57,5	46	46	20.3 x 2.4	20.3 x 2.4
DMO NW 20 S 25	S	PN 400	25	30	M 36 x 2	M 42 x 2	52,0	46	50	20.3 x 2.4	25.3 x 2.4

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

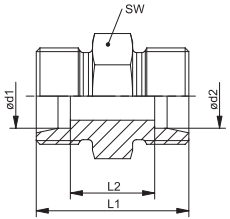
DMO (Continuation) Fitting, double nut

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	G1	G2	L mm	S1	S2	OR1	OR2
DMO NW 20 S 32	S	PN 315	25	38	M 36 x 2	M 52 x 2	52,0	46	60	20.3 x 2.4	33.3 x 2.4
DMO NW 25 S	S	PN 400	30	30	M 42 x 2	M 42 x 2	60,5	50	50	25.3 x 2.4	25.3 x 2.4
DMO NW 25 S 32	S	PN 315	30	38	M 42 x 2	M 52 x 2	52,0	50	60	25.3 x 2.4	33.3 x 2.4
DMO NW 32 S	S	PN 315	38	38	M 52 x 2	M 52 x 2	65,5	60	60	33.3 x 2.4	33.3 x 2.4

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XV Fitting



Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Fitting
Standard: ISO 8434-1
Material: Steel
Product versions: **XV VA,** Fitting, Stainless steel
V-LL / V-HL / V-HS, Fitting, Steel

Sealing form 1: 24° inner cone
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	L1 mm	L2 mm	SW mm
XV 04 LL	LL	PN 100	4	4	20	12,0	9
XV 05 LL	LL	PN 100	5	5	20	9,0	11
XV 06 LL 04	LL	PN 100	6	4	20	10,5	11
XV 06 LL	LL	PN 100	6	6	20	9,0	11
XV 08 LL 04	LL	PN 100	8	4	22	12,5	12
XV 08 LL 06	LL	PN 100	8	6	22	11,0	12
XV 08 LL	LL	PN 100	8	8	23	12,0	12
XV 10 LL	LL	PN 100	10	10	23	12,0	14
XV 12 LL	LL	PN 100	12	12	23	11,0	17
XV NW 04 HL	L	PN 315	6	6	24	10,0	12
XV NW 06 HL 04	L	PN 315	8	6	25	11,0	14
XV NW 06 HL	L	PN 315	8	8	25	11,0	14
XV NW 08 HL 04	L	PN 315	10	6	26	12,0	17
XV NW 08 HL 06	L	PN 315	10	8	26	12,0	17
XV NW 08 HL	L	PN 315	10	10	27	13,0	17
XV NW 10 HL 04	L	PN 315	12	6	27	13,0	19
XV NW 10 HL 06	L	PN 315	12	8	27	13,0	19
XV NW 10 HL 08	L	PN 315	12	10	28	14,0	19
XV NW 10 HL	L	PN 315	12	12	28	14,0	19
XV NW 13 HL 04	L	PN 315	15	6	28	14,0	24
XV NW 13 HL 06	L	PN 315	15	8	28	14,0	24
XV NW 13 HL 08	L	PN 315	15	10	29	15,0	24
XV NW 13 HL 10	L	PN 315	15	12	29	15,0	24
XV NW 13 HL	L	PN 315	15	15	30	16,0	24
XV NW 16 HL 04	L	PN 315	18	6	29	14,5	27
XV NW 16 HL 06	L	PN 315	18	8	29	14,5	27
XV NW 16 HL 08	L	PN 315	18	10	30	15,5	27

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter

Fitting

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	L1 mm	L2 mm	SW mm
XV NW 16 HL 10	L	PN 315	18	12	30	15,5	27
XV NW 16 HL 10 27	L	PN 315	18	12	32	17,5	27
XV NW 16 HL 13	L	PN 315	18	15	31	16,5	27
XV NW 16 HL	L	PN 315	18	18	31	16,0	27
XV NW 16 HL 27	L	PN 315	18	18	35	20,0	27
XV NW 20 HL 06	L	PN 160	22	8	31	16,5	32
XV NW 20 HL 08	L	PN 160	22	10	32	17,5	32
XV NW 20 HL 10	L	PN 160	22	12	32	17,5	32
XV NW 20 HL 13	L	PN 160	22	15	33	18,5	32
XV NW 20 HL 16	L	PN 160	22	18	33	18,0	32
XV NW 20 HL 16 27	L	PN 160	22	18	35	20,0	32
XV NW 20 HL	L	PN 160	22	22	35	20,0	32
XV NW 25 HL 06	L	PN 160	28	8	33	18,5	41
XV NW 25 HL 08	L	PN 160	28	10	34	19,5	41
XV NW 25 HL 10	L	PN 160	28	12	34	19,5	41
XV NW 25 HL 13	L	PN 160	28	15	35	20,5	41
XV NW 25 HL 16	L	PN 160	28	18	35	20,0	41
XV NW 25 HL 16 27	L	PN 160	28	18	37	22,0	41
XV NW 25 HL 20	L	PN 160	28	22	37	22,0	41
XV NW 25 HL	L	PN 160	28	28	36	21,0	41
XV NW 32 HL 20	L	PN 160	35	22	39	21,0	46
XV NW 32 HL 25	L	PN 160	35	28	39	21,0	46
XV NW 32 HL	L	PN 160	35	35	41	20,0	46
XV NW 40 HL 25	L	PN 160	42	28	41	22,5	55
XV NW 40 HL 32	L	PN 160	42	35	43	21,5	55
XV NW 40 HL	L	PN 160	42	42	66	21,0	55
XV NW 16 HL 13 HS	L/S	PN 315	18	16	33	17,0	27
XV NW 03 HS	S	PN 630	6	6	30	16,0	14
XV NW 04 HS 03	S	PN 630	8	6	32	18,0	17
XV NW 04 HS	S	PN 630	8	8	32	18,0	17
XV NW 06 HS 03	S	PN 630	10	6	32	17,5	19
XV NW 06 HS 04	S	PN 630	10	8	32	17,5	19
XV NW 06 HS	S	PN 630	10	10	32	17,0	19
XV NW 08 HS 03	S	PN 630	12	6	34	19,5	22
XV NW 08 HS 04	S	PN 630	12	8	34	19,5	22
XV NW 08 HS 06	S	PN 630	12	10	34	19,0	22
XV NW 08 HS	S	PN 630	12	12	34	19,0	22
XV NW 10 HS 03	S	PN 630	14	6	36	21,0	24
XV NW 10 HS 04	S	PN 630	14	8	36	21,0	24
XV NW 10 HS 06	S	PN 630	14	10	36	20,5	24
XV NW 10 HS 08	S	PN 630	14	12	36	20,5	24
XV NW 10 HS	S	PN 630	14	14	38	22,0	24
XV NW 13 HS 03	S	PN 400	16	6	36	20,5	27
XV NW 13 HS 04	S	PN 400	16	8	36	20,5	27
XV NW 13 HS 06	S	PN 400	16	10	36	20,0	27

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

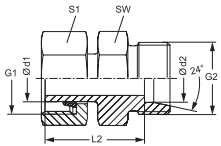
Fitting

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	L1 mm	L2 mm	SW mm
XV NW 13 HS 08	S	PN 400	16	12	36	20,0	27
XV NW 13 HS 10	S	PN 400	16	14	38	21,5	27
XV NW 13 HS	S	PN 400	16	16	38	21,0	27
XV NW 16 HS 06	S	PN 400	20	10	40	22,0	32
XV NW 16 HS 08	S	PN 400	20	12	40	22,0	32
XV NW 16 HS 10	S	PN 400	20	14	42	23,5	32
XV NW 16 HS 13	S	PN 400	20	16	42	23,0	32
XV NW 16 HS	S	PN 400	20	20	44	23,0	32
XV NW 20 HS 13	S	PN 400	25	16	46	25,5	41
XV NW 20 HS 16	S	PN 400	25	20	48	25,5	41
XV NW 20 HS	S	PN 400	25	25	50	26,0	41
XV NW 25 HS 13	S	PN 400	30	16	48	26,0	46
XV NW 25 HS 16	S	PN 400	30	20	50	26,0	46
XV NW 25 HS 20	S	PN 400	30	25	52	26,5	46
XV NW 25 HS	S	PN 400	30	30	54	27,0	46
XV NW 32 HS 13	S	PN 315	38	16	53	28,5	55
XV NW 32 HS 20	S	PN 315	38	25	57	29,0	55
XV NW 32 HS 25	S	PN 315	38	30	59	29,5	55
XV NW 32 HS	S	PN 315	38	38	61	29,0	55
XV NW 13 HS 13 HL	S/L	PN 400	16	15	36	20,5	27
XV NW 16 HS 13 HL	S/L	PN 400	20	15	40	22,5	32
XV NW 16 HS 16 HL	S/L	PN 400	20	18	40	22,0	32
XV NW 20 HS 20 HL	S/L	PN 400	25	22	46	26,5	41

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XAH Reducing fitting



Connection 1: metric nut thread
Connection 2: metric cylindrical outer thread
Design: Reducing fitting
Standard: ISO 8434-1
Material: Steel
Product versions: **XAH VA,** Reducing fitting, Socket (without union nut and cutting ring)
AH, Reducing fitting, Socket with union nut and cutting ring

Sealing form 1: Pipe socket with cutting ring
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	G1	G2	L2 mm	SW mm	S1
XAH 06 LL 04	LL	PN 100	6	4	M 10 x 1	M 8 x 1	24,5	12	12
XAH 08 LL 04	LL	PN 100	8	4	M 12 x 1	M 8 x 1	24,5	14	14
XAH 08 LL 06	LL	PN 100	8	6	M 12 x 1	M 10 x 1	17,5	14	14
XAH NW 04 LL 04	L/LL	PN 100	6	4	M 12 x 1.5	M 8 x 1	24,5	11	14
XAH NW 06 LL 04	L/LL	PN 100	8	4	M 14 x 1.5	M 8 x 1	24,5	12	17
XAH NW 08 LL 04	L/LL	PN 100	10	4	M 16 x 1.5	M 8 x 1	24,5	11	19
XAH NW 10 LL 04	L/LL	PN 100	12	4	M 18 x 1.5	M 8 x 1	24,5	12	22
XAH NW 06 L 04	L	PN 315	8	6	M 14 x 1.5	M 12 x 1.5	26,5	12	17
XAH NW 08 L 04	L	PN 315	10	6	M 16 x 1.5	M 12 x 1.5	27,0	12	19
XAH NW 08 L 06	L	PN 315	10	8	M 16 x 1.5	M 14 x 1.5	27,5	14	19
XAH NW 10 L 04	L	PN 315	12	6	M 18 x 1.5	M 12 x 1.5	28,0	14	22
XAH NW 10 L 06	L	PN 315	12	8	M 18 x 1.5	M 14 x 1.5	29,0	14	22
XAH NW 10 L 08	L	PN 315	12	10	M 18 x 1.5	M 16 x 1.5	30,0	17	22
XAH NW 10 L	L	PN 315	12	12	M 18 x 1.5	M 18 x 1.5	31,0	22	22
XAH NW 10 L 13	L	PN 315	12	15	M 18 x 1.5	M 22 x 1.5	32,0	17	22
XAH NW 13 L 04	L	PN 315	15	6	M 22 x 1.5	M 12 x 1.5	29,0	17	27
XAH NW 13 L 06	L	PN 315	15	8	M 22 x 1.5	M 14 x 1.5	29,0	17	27
XAH NW 13 L 08	L	PN 315	15	10	M 22 x 1.5	M 16 x 1.5	30,0	17	27
XAH NW 13 L 10	L	PN 315	15	12	M 22 x 1.5	M 18 x 1.5	31,0	19	27
XAH NW 13 L	L	PN 315	15	15	M 22 x 1.5	M 22 x 1.5	32,0	27	27
XAH NW 16 L 04	L	PN 315	18	6	M 26 x 1.5	M 12 x 1.5	30,0	19	32
XAH NW 16 L 06	L	PN 315	18	8	M 26 x 1.5	M 14 x 1.5	31,0	19	32
XAH NW 16 L 08	L	PN 315	18	10	M 26 x 1.5	M 16 x 1.5	32,0	19	32
XAH NW 16 L 10	L	PN 315	18	12	M 26 x 1.5	M 18 x 1.5	33,0	19	32
XAH NW 16 L 13	L	PN 315	18	15	M 26 x 1.5	M 22 x 1.5	32,5	24	32
XAH NW 20 L 04	L	PN 160	22	6	M 30 x 2	M 12 x 1.5	32,0	24	36
XAH NW 20 L 06	L	PN 160	22	8	M 30 x 2	M 14 x 1.5	33,0	24	36
XAH NW 20 L 08	L	PN 160	22	10	M 30 x 2	M 16 x 1.5	35,0	24	36
XAH NW 20 L 10	L	PN 160	22	12	M 30 x 2	M 18 x 1.5	35,0	24	36
XAH NW 20 L 13	L	PN 160	22	15	M 30 x 2	M 22 x 1.5	36,0	24	36
XAH NW 20 L 16	L	PN 160	22	18	M 30 x 2	M 26 x 1.5	36,5	27	36
XAH NW 25 L 04	L	PN 160	28	6	M 36 x 2	M 12 x 1.5	34,0	30	41
XAH NW 25 L 06	L	PN 160	28	8	M 36 x 2	M 14 x 1.5	34,0	30	41
XAH NW 25 L 08	L	PN 160	28	10	M 36 x 2	M 16 x 1.5	35,0	30	41
XAH NW 25 L 10	L	PN 160	28	12	M 36 x 2	M 18 x 1.5	36,0	30	41
XAH NW 25 L 13	L	PN 160	28	15	M 36 x 2	M 22 x 1.5	37,0	30	41
XAH NW 25 L 16	L	PN 160	28	18	M 36 x 2	M 26 x 1.5	37,5	30	41
XAH NW 25 L 20	L	PN 160	28	22	M 36 x 2	M 30 x 2	39,5	32	41

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter

Reducing fitting

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	G1	G2	L2 mm	SW mm	S1
XAH NW 32 L 04	L	PN 160	35	6	M 45 x 2	M 12 x 1.5	40,0	36	50
XAH NW 32 L 06	L	PN 160	35	8	M 45 x 2	M 14 x 1.5	40,0	36	50
XAH NW 32 L 08	L	PN 160	35	10	M 45 x 2	M 16 x 1.5	41,0	36	50
XAH NW 32 L 10	L	PN 160	35	12	M 45 x 2	M 18 x 1.5	42,0	36	50
XAH NW 32 L 13	L	PN 160	35	15	M 45 x 2	M 22 x 1.5	43,0	36	50
XAH NW 32 L 16	L	PN 160	35	18	M 45 x 2	M 26 x 1.5	42,0	36	50
XAH NW 32 L 20	L	PN 160	35	22	M 45 x 2	M 30 x 2	45,5	36	50
XAH NW 32 L 25	L	PN 160	35	28	M 45 x 2	M 36 x 2	46,5	41	50
XAH NW 40 L 04	L	PN 160	42	6	M 52 x 2	M 12 x 1.5	42,5	46	60
XAH NW 40 L 06	L	PN 160	42	8	M 52 x 2	M 14 x 1.5	42,5	46	60
XAH NW 40 L 08	L	PN 160	42	10	M 52 x 2	M 16 x 1.5	42,0	46	60
XAH NW 40 L 10	L	PN 160	42	12	M 52 x 2	M 18 x 1.5	43,0	46	60
XAH NW 40 L 13	L	PN 160	42	15	M 52 x 2	M 22 x 1.5	45,0	46	60
XAH NW 40 L 16	L	PN 160	42	18	M 52 x 2	M 26 x 1.5	44,0	46	60
XAH NW 40 L 20	L	PN 160	42	22	M 52 x 2	M 30 x 2	46,0	46	60
XAH NW 40 L 25	L	PN 160	42	28	M 52 x 2	M 36 x 2	47,5	46	60
XAH NW 40 L 32	L	PN 160	42	35	M 52 x 2	M 45 x 2	47,5	46	60
XAH NW 13 L 10 S	L/S	PN 315	15	14	M 22 x 1.5	M 22 x 1.5	31,0	22	27
XAH NW 16 L 13 S	L/S	PN 315	18	16	M 26 x 1.5	M 24 x 1.5	31,5	32	32
XAH NW 20 L 13 S	L/S	PN 315	22	16	M 30 x 2	M 24 x 1.5	34,5	32	36
XAH NW 20 L 16 S	L/S	PN 315	22	20	M 30 x 2	M 30 x 2	34,5	41	36
XAH NW 25 L 13 S	L/S	PN 250	28	16	M 36 x 2	M 24 x 1.5	36,5	32	41
XAH NW 25 L 20 S	L/S	PN 250	28	25	M 36 x 2	M 36 x 2	38,5	41	41
XAH NW 04 S 03	S	PN 630	8	6	M 16 x 1.5	M 14 x 1.5	30,0	14	19
XAH NW 06 S 03	S	PN 630	10	6	M 18 x 1.5	M 14 x 1.5	32,0	14	22
XAH NW 06 S 04	S	PN 630	10	8	M 18 x 1.5	M 16 x 1.5	34,0	17	22
XAH NW 08 S 03	S	PN 630	12	6	M 20 x 1.5	M 14 x 1.5	32,0	14	24
XAH NW 08 S 04	S	PN 630	12	8	M 20 x 1.5	M 16 x 1.5	34,0	17	24
XAH NW 08 S 06	S	PN 630	12	10	M 20 x 1.5	M 18 x 1.5	33,5	19	24
XAH NW 10 S 03	S	PN 630	14	6	M 22 x 1.5	M 14 x 1.5	35,0	17	27
XAH NW 10 S 04	S	PN 630	14	8	M 22 x 1.5	M 16 x 1.5	37,0	17	27
XAH NW 10 S 06	S	PN 630	14	10	M 22 x 1.5	M 18 x 1.5	36,5	19	27
XAH NW 10 S 08	S	PN 630	14	12	M 22 x 1.5	M 20 x 1.5	38,5	22	27
XAH NW 13 S 03	S	PN 400	16	6	M 24 x 1.5	M 14 x 1.5	35,0	17	30
XAH NW 13 S 04	S	PN 400	16	8	M 24 x 1.5	M 16 x 1.5	37,0	17	30
XAH NW 13 S 06	S	PN 400	16	10	M 24 x 1.5	M 18 x 1.5	36,5	19	30
XAH NW 13 S 08	S	PN 400	16	12	M 24 x 1.5	M 20 x 1.5	38,5	22	30
XAH NW 13 S 10	S	PN 400	16	14	M 24 x 1.5	M 22 x 1.5	40,0	24	30
XAH NW 16 S 03	S	PN 400	20	6	M 30 x 2	M 14 x 1.5	42,0	22	36
XAH NW 16 S 04	S	PN 400	20	8	M 30 x 2	M 16 x 1.5	42,0	22	36
XAH NW 16 S 06	S	PN 400	20	10	M 30 x 2	M 18 x 1.5	42,5	22	36
XAH NW 16 S 08	S	PN 400	20	12	M 30 x 2	M 20 x 1.5	43,5	22	36
XAH NW 16 S 10	S	PN 400	20	14	M 30 x 2	M 22 x 1.5	45,0	24	36
XAH NW 16 S 13	S	PN 400	20	16	M 30 x 2	M 24 x 1.5	44,5	27	36
XAH NW 20 S 03	S	PN 400	25	6	M 36 x 2	M 14 x 1.5	44,0	27	46

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

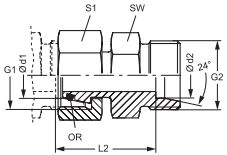
Reducing fitting

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	G1	G2	L2 mm	SW mm	S1
XAH NW 20 S 04	S	PN 400	25	8	M 36 x 2	M 16 x 1.5	44,0	27	46
XAH NW 20 S 06	S	PN 400	25	10	M 36 x 2	M 18 x 1.5	43,5	27	46
XAH NW 20 S 08	S	PN 400	25	12	M 36 x 2	M 20 x 1.5	45,5	27	46
XAH NW 20 S 10	S	PN 400	25	14	M 36 x 2	M 22 x 1.5	47,0	27	46
XAH NW 20 S 13	S	PN 400	25	16	M 36 x 2	M 24 x 1.5	47,5	27	46
XAH NW 20 S 16	S	PN 400	25	20	M 36 x 2	M 30 x 2	48,5	32	46
XAH NW 25 S 03	S	PN 400	30	6	M 42 x 2	M 14 x 1.5	52,0	32	50
XAH NW 25 S 04	S	PN 400	30	8	M 42 x 2	M 16 x 1.5	52,0	32	50
XAH NW 25 S 06	S	PN 400	30	10	M 42 x 2	M 18 x 1.5	51,5	32	50
XAH NW 25 S 08	S	PN 400	30	12	M 42 x 2	M 20 x 1.5	51,5	32	50
XAH NW 25 S 10	S	PN 400	30	14	M 42 x 2	M 22 x 1.5	50,0	32	50
XAH NW 25 S 13	S	PN 400	30	16	M 42 x 2	M 24 x 1.5	52,5	32	50
XAH NW 25 S 16	S	PN 400	30	20	M 42 x 2	M 30 x 2	49,5	32	50
XAH NW 25 S 20	S	PN 400	30	25	M 42 x 2	M 36 x 2	57,0	41	50
XAH NW 32 S 03	S	PN 315	38	6	M 52 x 2	M 14 x 1.5	55,0	41	60
XAH NW 32 S 04	S	PN 315	38	8	M 52 x 2	M 16 x 1.5	55,0	41	60
XAH NW 32 S 06	S	PN 315	38	10	M 52 x 2	M 18 x 1.5	54,5	41	60
XAH NW 32 S 08	S	PN 315	38	12	M 52 x 2	M 20 x 1.5	54,5	41	60
XAH NW 32 S 10	S	PN 315	38	14	M 52 x 2	M 22 x 1.5	57,0	41	60
XAH NW 32 S 13	S	PN 315	38	16	M 52 x 2	M 24 x 1.5	55,5	41	60
XAH NW 32 S 16	S	PN 315	38	20	M 52 x 2	M 30 x 2	56,5	41	60
XAH NW 32 S 20	S	PN 315	38	25	M 52 x 2	M 36 x 2	60,0	41	60
XAH NW 32 S 25	S	PN 315	38	30	M 52 x 2	M 42 x 2	60,5	46	60
XAH NW 13 S 13 L	S/L	PN 315	16	15	M 24 x 1.5	M 22 x 1.5	37,0	24	30
XAH NW 13 S 16 L	S/L	PN 315	16	18	M 24 x 1.5	M 26 x 1.5	39,5	26	30
XAH NW 16 S 13 L	S/L	PN 315	20	15	M 30 x 2	M 22 x 1.5	43,0	24	36
XAH NW 16 S 16 L	S/L	PN 315	20	18	M 30 x 2	M 26 x 1.5	42,5	27	36
XAH NW 20 S 16 L	S/L	PN 315	25	18	M 36 x 2	M 26 x 1.5	48,0	27	46
XAH NW 20 S 20 L	S/L	PN 160	25	22	M 36 x 2	M 30 x 2	48,5	32	46
XAH NW 25 S 25 L	S/L	PN 160	30	28	M 42 x 2	M 36 x 2	50,5	41	50

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XAOH Reducing fitting



Connection 1: metric nut thread
Connection 2: metric cylindrical outer thread
Design: Reducing fitting
Standard: DIN 2353
Material: Steel
Product versions: XAOH VA, Reducing fitting, Socket (without union nut and cutting ring)
AOH, Reducing fitting, Socket with union nut and cutting ring

Sealing form 1: 24° outer cone with O-ring
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	G1	G2	L2 mm	SW mm	S1	OR
XAOH NW 04 LL 04	L/LL	PN 100	6	4	M 12 x 1.5	M 8 x 1	24,5	9	14	4.0 x 1.5
XAOH NW 04 L	L	PN 315	6	6	M 12 x 1.5	M 12 x 1.5	27,5	14	14	4.0 x 1.5
XAOH NW 04 L 06	L	PN 315	6	8	M 12 x 1.5	M 14 x 1.5	24,5	14	14	4.0 x 1.5
XAOH NW 04 L 08	L	PN 315	6	10	M 12 x 1.5	M 16 x 1.5	25,5	17	14	4.0 x 1.5
XAOH NW 04 L 10	L	PN 315	6	12	M 12 x 1.5	M 18 x 1.5	25,5	19	14	4.0 x 1.5
XAOH NW 04 L 13	L	PN 315	6	15	M 12 x 1.5	M 22 x 1.5	27,5	24	14	4.0 x 1.5
XAOH NW 06 L 04	L	PN 315	8	6	M 14 x 1.5	M 12 x 1.5	24,5	12	17	6.0 x 1.5
XAOH NW 06 L	L	PN 315	8	8	M 14 x 1.5	M 14 x 1.5	37,0	14	17	6.0 x 1.5
XAOH NW 06 L 08	L	PN 315	8	10	M 14 x 1.5	M 16 x 1.5	26,0	17	17	6.0 x 1.5
XAOH NW 06 L 10	L	PN 315	8	12	M 14 x 1.5	M 18 x 1.5	27,0	19	17	6.0 x 1.5
XAOH NW 06 L 13	L	PN 315	8	15	M 14 x 1.5	M 22 x 1.5	28,0	24	17	4.0 x 1.5
XAOH NW 08 L 04	L	PN 315	10	6	M 16 x 1.5	M 12 x 1.5	25,0	14	19	7.5 x 1.5
XAOH NW 08 L 06	L	PN 315	10	8	M 16 x 1.5	M 14 x 1.5	25,0	14	19	7.5 x 1.5
XAOH NW 08 L	L	PN 315	10	10	M 16 x 1.5	M 16 x 1.5	37,0	17	19	7.5 x 1.5
XAOH NW 08 L 10	L	PN 315	10	12	M 16 x 1.5	M 18 x 1.5	28,0	19	19	7.5 x 1.5
XAOH NW 08 L 13	L	PN 315	10	15	M 16 x 1.5	M 22 x 1.5	29,0	24	19	7.5 x 1.5
XAOH NW 08 L 16	L	PN 315	10	18	M 16 x 1.5	M 26 x 1.5	33,0	27	19	7.5 x 1.5
XAOH NW 10 L 04	L	PN 315	12	6	M 18 x 1.5	M 12 x 1.5	26,5	17	22	9.0 x 1.5
XAOH NW 10 L 06	L	PN 315	12	8	M 18 x 1.5	M 14 x 1.5	26,5	17	22	9.0 x 1.5
XAOH NW 10 L 08	L	PN 315	12	10	M 18 x 1.5	M 16 x 1.5	27,5	17	22	9.0 x 1.5
XAOH NW 10 L	L	PN 315	12	12	M 18 x 1.5	M 18 x 1.5	37,0	19	22	9.0 x 1.5
XAOH NW 10 L 13	L	PN 315	12	15	M 18 x 1.5	M 22 x 1.5	29,0	24	22	9.0 x 1.5
XAOH NW 10 L 16	L	PN 315	12	18	M 18 x 1.5	M 26 x 1.5	29,5	27	22	9.0 x 1.5
XAOH NW 13 L 04	L	PN 315	15	6	M 22 x 1.5	M 12 x 1.5	28,5	19	27	12.0 x 2.0
XAOH NW 13 L 06	L	PN 315	15	8	M 22 x 1.5	M 14 x 1.5	28,5	19	27	12.0 x 2.0
XAOH NW 13 L 08	L	PN 315	15	10	M 22 x 1.5	M 16 x 1.5	29,5	19	27	12.0 x 2.0
XAOH NW 13 L 10	L	PN 315	15	12	M 22 x 1.5	M 18 x 1.5	29,5	19	27	12.0 x 2.0
XAOH NW 13 L	L	PN 315	15	15	M 22 x 1.5	M 22 x 1.5	37,0	24	27	12.0 x 2.0
XAOH NW 13 L 16	L	PN 315	15	18	M 22 x 1.5	M 26 x 1.5	31,5	27	27	12.0 x 2.0
XAOH NW 13 L 20	L	PN 160	15	22	M 22 x 1.5	M 30 x 2	33,5	32	27	12.0 x 2.0
XAOH NW 16 L 04	L	PN 315	18	6	M 26 x 1.5	M 12 x 1.5	29,5	24	32	15.0 x 2.0
XAOH NW 16 L 06	L	PN 315	18	8	M 26 x 1.5	M 14 x 1.5	29,5	24	32	15.0 x 2.0
XAOH NW 16 L 08	L	PN 315	18	10	M 26 x 1.5	M 16 x 1.5	30,5	24	32	15.0 x 2.0
XAOH NW 16 L 10	L	PN 315	18	12	M 26 x 1.5	M 18 x 1.5	30,5	24	32	15.0 x 2.0
XAOH NW 16 L 13	L	PN 315	18	15	M 26 x 1.5	M 22 x 1.5	31,5	24	32	15.0 x 2.0
XAOH NW 16 L	L	PN 315	18	18	M 26 x 1.5	M 26 x 1.5	36,0	27	32	15.0 x 2.0
XAOH NW 16 L 20	L	PN 160	18	22	M 26 x 1.5	M 30 x 2	33,0	32	32	15.0 x 2.0
XAOH NW 16 L 25	L	PN 160	18	28	M 26 x 1.5	M 36 x 2	34,0	41	32	15.0 x 2.0

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter

Reducing fitting

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	G1	G2	L2 mm	SW mm	S1	OR
XAOH NW 20 L 04	L	PN 160	22	6	M 30 x 2	M 12 x 1.5	32,0	27	36	20.0 x 2.0
XAOH NW 20 L 06	L	PN 160	22	8	M 30 x 2	M 14 x 1.5	32,0	27	36	20.0 x 2.0
XAOH NW 20 L 08	L	PN 160	22	10	M 30 x 2	M 16 x 1.5	33,0	27	36	20.0 x 2.0
XAOH NW 20 L 10	L	PN 160	22	12	M 30 x 2	M 18 x 1.5	33,0	27	36	20.0 x 2.0
XAOH NW 20 L 13	L	PN 160	22	15	M 30 x 2	M 22 x 1.5	34,0	27	36	20.0 x 2.0
XAOH NW 20 L 16	L	PN 160	22	18	M 30 x 2	M 26 x 1.5	33,5	27	36	20.0 x 2.0
XAOH NW 20 L	L	PN 160	22	22	M 30 x 2	M 30 x 2	42,5	32	36	20.0 x 2.0
XAOH NW 20 L 25	L	PN 160	22	28	M 30 x 2	M 36 x 2	38,0	41	36	20.0 x 2.0
XAOH NW 20 L 32	L	PN 160	22	35	M 30 x 2	M 45 x 2	39,0	46	36	20.0 x 2.0
XAOH NW 25 L 04	L	PN 160	28	6	M 36 x 2	M 12 x 1.5	34,0	32	41	26.0 x 2.0
XAOH NW 25 L 06	L	PN 160	28	8	M 36 x 2	M 14 x 1.5	34,0	32	41	26.0 x 2.0
XAOH NW 25 L 08	L	PN 160	28	10	M 36 x 2	M 16 x 1.5	35,0	32	41	26.0 x 2.0
XAOH NW 25 L 10	L	PN 160	28	12	M 36 x 2	M 18 x 1.5	35,0	32	41	26.0 x 2.0
XAOH NW 25 L 13	L	PN 160	28	15	M 36 x 2	M 22 x 1.5	36,0	32	41	26.0 x 2.0
XAOH NW 25 L 16	L	PN 160	28	18	M 36 x 2	M 26 x 1.5	35,5	32	41	26.0 x 2.0
XAOH NW 25 L 20	L	PN 160	28	22	M 36 x 2	M 30 x 2	37,5	32	41	26.0 x 2.0
XAOH NW 25 L	L	PN 160	28	28	M 36 x 2	M 36 x 2	41,5	41	41	26.0 x 2.0
XAOH NW 25 L 32	L	PN 160	28	35	M 36 x 2	M 45 x 2	39,5	46	41	26.0 x 2.0
XAOH NW 25 L 40	L	PN 160	28	42	M 36 x 2	M 52 x 2	41,0	55	41	26.0 x 2.0
XAOH NW 32 L 04	L	PN 160	35	6	M 45 x 2	M 12 x 1.5	37,0	41	50	32.0 x 2.5
XAOH NW 32 L 06	L	PN 160	35	8	M 45 x 2	M 14 x 1.5	37,0	41	50	32.0 x 2.5
XAOH NW 32 L 08	L	PN 160	35	10	M 45 x 2	M 16 x 1.5	38,0	41	50	32.0 x 2.5
XAOH NW 32 L 10	L	PN 160	35	12	M 45 x 2	M 18 x 1.5	38,0	41	50	32.0 x 2.5
XAOH NW 32 L 13	L	PN 160	35	15	M 45 x 2	M 22 x 1.5	39,5	41	50	32.0 x 2.5
XAOH NW 32 L 16	L	PN 160	35	18	M 45 x 2	M 26 x 1.5	39,5	41	50	32.0 x 2.5
XAOH NW 32 L 20	L	PN 160	35	22	M 45 x 2	M 30 x 2	41,5	41	50	32.0 x 2.5
XAOH NW 32 L 25	L	PN 160	35	28	M 45 x 2	M 36 x 2	41,5	41	50	32.0 x 2.5
XAOH NW 32 L	L	PN 160	35	35	M 45 x 2	M 45 x 2	50,0	46	50	32.0 x 2.5
XAOH NW 32 L 40	L	PN 160	35	42	M 45 x 2	M 52 x 2	42,0	55	50	32.0 x 2.5
XAOH NW 40 L 04	L	PN 160	42	6	M 52 x 2	M 12 x 1.5	40,5	50	60	38.0 x 2.5
XAOH NW 40 L 06	L	PN 160	42	8	M 52 x 2	M 14 x 1.5	40,5	50	60	38.0 x 2.5
XAOH NW 40 L 08	L	PN 160	42	10	M 52 x 2	M 16 x 1.5	41,5	50	60	38.0 x 2.5
XAOH NW 40 L 10	L	PN 160	42	12	M 52 x 2	M 18 x 1.5	41,5	50	60	38.0 x 2.5
XAOH NW 40 L 13	L	PN 160	42	15	M 52 x 2	M 22 x 1.5	42,5	50	60	38.0 x 2.5
XAOH NW 40 L 16	L	PN 160	42	18	M 52 x 2	M 26 x 1.5	42,0	50	60	38.0 x 2.5
XAOH NW 40 L 20	L	PN 160	42	22	M 52 x 2	M 30 x 2	44,0	50	60	38.0 x 2.5
XAOH NW 40 L 25	L	PN 160	42	28	M 52 x 2	M 36 x 2	44,0	50	60	38.0 x 2.5
XAOH NW 40 L 32	L	PN 160	42	35	M 52 x 2	M 45 x 2	43,0	50	60	38.0 x 2.5
XAOH NW 40 L	L	PN 160	42	42	M 52 x 2	M 52 x 2	42,0	55	60	38.0 x 2.5
XAOH NW 04 L 03 S	L/S	PN 315	6	6	M 12 x 1.5	M 14 x 1.5	29,5	17	14	4.0 x 1.5
XAOH NW 04 L 04 S	L/S	PN 315	6	8	M 12 x 1.5	M 16 x 1.5	29,5	17	14	4.0 x 1.5
XAOH NW 04 L 06 S	L/S	PN 315	6	10	M 12 x 1.5	M 18 x 1.5	29,0	19	14	4.0 x 1.5
XAOH NW 04 L 08 S	L/S	PN 315	6	12	M 12 x 1.5	M 20 x 1.5	31,0	22	14	4.0 x 1.5
XAOH NW 06 L 04 S	L/S	PN 315	8	8	M 14 x 1.5	M 16 x 1.5	30,0	17	17	6.0 x 1.5
XAOH NW 06 L 06 S	L/S	PN 315	8	10	M 14 x 1.5	M 18 x 1.5	29,5	19	17	6.0 x 1.5

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XAOH (Continuation) Reducing fitting

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	G1	G2	L2 mm	SW mm	S1	OR
XAOH NW 06 L 08 S	L/S	PN 315	8	12	M 14 x 1.5	M 20 x 1.5	31,5	22	17	6.0 x 1.5
XAOH NW 08 L 06 S	L/S	PN 315	10	10	M 16 x 1.5	M 18 x 1.5	32,5	19	19	7.5 x 1.5
XAOH NW 08 L 08 S	L/S	PN 315	10	12	M 16 x 1.5	M 20 x 1.5	32,5	22	19	7.5 x 1.5
XAOH NW 08 L 10 S	L/S	PN 315	10	14	M 16 x 1.5	M 22 x 1.5	34,0	24	19	7.5 x 1.5
XAOH NW 08 L 13 S	L/S	PN 315	10	16	M 16 x 1.5	M 24 x 1.5	33,5	27	19	7.5 x 1.5
XAOH NW 10 L 04 S	L/S	PN 315	12	8	M 18 x 1.5	M 16 x 1.5	31,0	19	22	9.0 x 1.5
XAOH NW 10 L 06 S	L/S	PN 315	12	10	M 18 x 1.5	M 18 x 1.5	30,5	19	22	9.0 x 1.5
XAOH NW 10 L 08 S	L/S	PN 315	12	12	M 18 x 1.5	M 20 x 1.5	33,0	22	22	9.0 x 1.5
XAOH NW 10 L 10 S	L/S	PN 315	12	14	M 18 x 1.5	M 22 x 1.5	35,5	24	22	9.0 x 1.5
XAOH NW 10 L 13 S	L/S	PN 315	12	16	M 18 x 1.5	M 24 x 1.5	33,5	27	22	9.0 x 1.5
XAOH NW 10 L 16 S	L/S	PN 315	12	20	M 18 x 1.5	M 30 x 2	29,5	32	22	9.0 x 1.5
XAOH NW 13 L 13 S	L/S	PN 315	15	16	M 22 x 1.5	M 24 x 1.5	35,5	27	27	12.0 x 2.0
XAOH NW 13 L 16 S	L/S	PN 315	15	20	M 22 x 1.5	M 30 x 2	32,5	32	27	12.0 x 2.0
XAOH NW 16 L 13 S	L/S	PN 315	18	16	M 26 x 1.5	M 24 x 1.5	31,5	27	32	16.0 x 2.0
XAOH NW 16 L 16 S	L/S	PN 315	18	20	M 26 x 1.5	M 30 x 2	37,0	32	32	16.0 x 2.0
XAOH NW 16 L 20 S	L/S	PN 315	18	25	M 26 x 1.5	M 36 x 2	33,5	41	32	16.0 x 2.0
XAOH NW 20 L 13 S	L/S	PN 160	22	16	M 30 x 2	M 24 x 1.5	34,0	27	36	20.0 x 2.0
XAOH NW 20 L 16 S	L/S	PN 160	22	20	M 30 x 2	M 30 x 2	41,0	32	36	20.0 x 2.0
XAOH NW 20 L 20 S	L/S	PN 160	22	25	M 30 x 2	M 36 x 2	43,5	41	36	20.0 x 2.0
XAOH NW 20 L 25 S	L/S	PN 160	22	30	M 30 x 2	M 42 x 2	43,5	46	36	20.0 x 2.0
XAOH NW 25 L 13 S	L/S	PN 160	28	16	M 36 x 2	M 24 x 2	36,5	32	41	26.0 x 2.0
XAOH NW 25 L 20 S	L/S	PN 160	28	25	M 36 x 2	M 36 x 2	44,0	41	41	26.0 x 2.0
XAOH NW 25 L 25 S	L/S	PN 160	28	30	M 36 x 2	M 42 x 2	43,5	46	41	26.0 x 2.0
XAOH NW 25 L 32 S	L/S	PN 160	28	38	M 26 x 2	M 52 x 2	47,0	55	41	26.0 x 2.0
XAOH NW 32 L 20 S	L/S	PN 160	35	25	M 45 x 2	M 36 x 2	40,0	41	50	32.0 x 2.5
XAOH NW 32 L 25 S	L/S	PN 160	35	30	M 45 x 2	M 42 x 2	40,5	46	50	32.0 x 2.5
XAOH NW 32 L 32 S	L/S	PN 160	35	38	M 45 x 2	M 52 x 2	50,0	55	50	32.0 x 2.5
XAOH NW 40 L 25 S	L/S	PN 160	42	30	M 52 x 2	M 42 x 2	42,5	50	60	38.0 x 2.5
XAOH NW 40 L 32 S	L/S	PN 160	42	38	M 52 x 2	M 52 x 2	45,5	55	60	38.0 x 2.5
XAOH NW 03 S	S	PN 630	6	6	M 14 x 1.5	M 14 x 1.5	36,0	14	17	4.0 x 1.5
XAOH NW 03 S 04	S	PN 630	6	8	M 14 x 1.5	M 16 x 1.5	30,0	17	17	4.0 x 1.5
XAOH NW 03 S 06	S	PN 630	6	10	M 14 x 1.5	M 18 x 1.5	29,5	19	17	4.0 x 1.5
XAOH NW 04 S 03	S	PN 630	8	6	M 16 x 1.5	M 14 x 1.5	28,0	14	19	6.0 x 1.5
XAOH NW 04 S	S	PN 630	8	8	M 16 x 1.5	M 16 x 1.5	37,5	17	19	6.0 x 1.5
XAOH NW 04 S 06	S	PN 630	8	10	M 16 x 1.5	M 18 x 1.5	30,0	19	19	6.0 x 1.5
XAOH NW 04 S 08	S	PN 630	8	12	M 16 x 1.5	M 20 x 1.5	32,0	22	19	6.0 x 1.5
XAOH NW 04 S 13	S	PN 400	8	16	M 16 x 1.5	M 24 x 1.5	31,5	27	19	6.0 x 1.5
XAOH NW 06 S 03	S	PN 630	10	6	M 18 x 1.5	M 14 x 1.5	29,5	17	22	7.5 x 1.5
XAOH NW 06 S 04	S	PN 630	10	8	M 18 x 1.5	M 16 x 1.5	29,5	17	22	7.5 x 1.5
XAOH NW 06 S	S	PN 630	10	10	M 18 x 1.5	M 18 x 1.5	36,5	19	22	7.5 x 1.5
XAOH NW 06 S 08	S	PN 630	10	12	M 18 x 1.5	M 20 x 1.5	32,5	22	22	7.5 x 1.5
XAOH NW 06 S 10	S	PN 630	10	14	M 18 x 1.5	M 22 x 1.5	34,0	24	22	7.5 x 1.5
XAOH NW 06 S 13	S	PN 400	10	16	M 18 x 1.5	M 24 x 1.5	33,5	27	22	7.5 x 1.5
XAOH NW 08 S 03	S	PN 630	12	6	M 20 x 1.5	M 14 x 1.5	30,0	17	24	9.0 x 1.5
XAOH NW 08 S 04	S	PN 630	12	8	M 20 x 1.5	M 16 x 1.5	30,0	17	24	9.0 x 1.5

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XAOH (Continuation) Reducing fitting

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	G1	G2	L2 mm	SW mm	S1	OR
XAOH NW 08 S 06	S	PN 630	12	10	M 20 x 1.5	M 18 x 1.5	30,5	19	24	9.0 x 1.5
XAOH NW 08 S	S	PN 630	12	12	M 20 x 1.5	M 20 x 1.5	32,5	22	24	9.0 x 1.5
XAOH NW 08 S 10	S	PN 630	12	14	M 20 x 1.5	M 22 x 1.5	34,0	24	24	9.0 x 1.5
XAOH NW 08 S 13	S	PN 400	12	16	M 20 x 1.5	M 24 x 1.5	33,5	27	24	9.0 x 1.5
XAOH NW 08 S 16	S	PN 400	12	20	M 20 x 1.5	M 30 x 2	37,0	32	24	9.0 x 1.5
XAOH NW 10 S 03	S	PN 630	14	6	M 22 x 1.5	M 14 x 1.5	33,0	19	27	10.0 x 2.0
XAOH NW 10 S 04	S	PN 630	14	8	M 22 x 1.5	M 16 x 1.5	33,0	19	27	10.0 x 2.0
XAOH NW 10 S 06	S	PN 630	14	10	M 22 x 1.5	M 18 x 1.5	32,5	19	27	10.0 x 2.0
XAOH NW 10 S 08	S	PN 630	14	12	M 22 x 1.5	M 20 x 1.5	32,5	22	27	10.0 x 2.0
XAOH NW 10 S	S	PN 630	14	14	M 22 x 1.5	M 22 x 1.5	40,0	24	27	10.0 x 2.0
XAOH NW 10 S 13	S	PN 400	14	16	M 22 x 1.5	M 24 x 1.5	36,0	27	27	10.0 x 2.0
XAOH NW 10 S 16	S	PN 400	14	20	M 22 x 1.5	M 30 x 2	38,0	32	27	10.0 x 2.0
XAOH NW 13 S 03	S	PN 400	16	6	M 24 x 1.5	M 14 x 1.5	34,0	22	30	12.0 x 2.0
XAOH NW 13 S 04	S	PN 400	16	8	M 24 x 1.5	M 16 x 1.5	34,0	22	30	12.0 x 2.0
XAOH NW 13 S 06	S	PN 400	16	10	M 24 x 1.5	M 18 x 1.5	33,5	22	30	12.0 x 2.0
XAOH NW 13 S 08	S	PN 400	16	12	M 24 x 1.5	M 20 x 1.5	33,5	22	30	12.0 x 2.0
XAOH NW 13 S 10	S	PN 400	16	14	M 24 x 1.5	M 22 x 1.5	35,5	24	30	12.0 x 2.0
XAOH NW 13 S	S	PN 400	16	16	M 24 x 1.5	M 24 x 1.5	40,0	27	30	12.0 x 2.0
XAOH NW 13 S 16	S	PN 400	16	20	M 24 x 1.5	M 30 x 2	39,0	32	30	12.0 x 2.0
XAOH NW 13 S 20	S	PN 400	16	25	M 24 x 1.5	M 30 x 2	41,5	41	30	12.0 x 2.0
XAOH NW 16 S 03	S	PN 400	20	6	M 30 x 2	M 14 x 1.5	39,0	27	36	16.3 x 2.4
XAOH NW 16 S 04	S	PN 400	20	8	M 30 x 2	M 16 x 1.5	39,0	27	36	16.3 x 2.4
XAOH NW 16 S 06	S	PN 400	20	10	M 30 x 2	M 18 x 1.5	38,5	27	36	16.3 x 2.4
XAOH NW 16 S 08	S	PN 400	20	12	M 30 x 2	M 20 x 1.5	38,5	27	36	16.3 x 2.4
XAOH NW 16 S 10	S	PN 400	20	14	M 30 x 2	M 22 x 1.5	40,0	27	36	16.3 x 2.4
XAOH NW 16 S 13	S	PN 400	20	16	M 30 x 2	M 24 x 1.5	39,5	27	36	16.3 x 2.4
XAOH NW 16 S	S	PN 400	20	20	M 30 x 2	M 30 x 2	46,0	32	36	16.3 x 2.4
XAOH NW 16 S 20	S	PN 400	20	25	M 30 x 2	M 36 x 2	44,5	41	36	16.3 x 2.4
XAOH NW 16 S 25	S	PN 400	20	30	M 30 x 2	M 42 x 2	45,0	46	36	16.3 x 2.4
XAOH NW 16 S 32	S	PN 315	20	38	M 30 x 2	M 52 x 2	41,5	55	36	16.3 x 2.4
XAOH NW 20 S 03	S	PN 400	25	6	M 36 x 2	M 14 x 1.5	41,5	32	46	20.3 x 2.4
XAOH NW 20 S 04	S	PN 400	25	8	M 36 x 2	M 16 x 1.5	41,5	32	46	20.3 x 2.4
XAOH NW 20 S 06	S	PN 400	25	10	M 36 x 2	M 18 x 1.5	41,0	32	46	20.3 x 2.4
XAOH NW 20 S 08	S	PN 400	25	12	M 36 x 2	M 20 x 1.5	41,0	32	46	20.3 x 2.4
XAOH NW 20 S 10	S	PN 400	25	14	M 36 x 2	M 22 x 1.5	42,5	32	46	20.3 x 2.4
XAOH NW 20 S 13	S	PN 400	25	16	M 36 x 2	M 24 x 1.5	42,0	32	46	20.3 x 2.4
XAOH NW 20 S 16	S	PN 400	25	20	M 36 x 2	M 30 x 2	42,0	32	46	20.3 x 2.4
XAOH NW 20 S	S	PN 400	25	25	M 36 x 2	M 36 x 2	50,0	41	46	20.3 x 2.4
XAOH NW 20 S 25	S	PN 400	25	30	M 42 x 2	M 35 x 2	48,0	46	46	20.3 x 2.4
XAOH NW 20 S 32	S	PN 315	25	38	M 36 x 2	M 52 x 2	50,5	55	46	20.3 x 2.4
XAOH NW 25 S 03	S	PN 400	30	6	M 42 x 2	M 14 x 1.5	44,0	41	50	25.3 x 2.4
XAOH NW 25 S 04	S	PN 400	30	8	M 42 x 2	M 16 x 1.5	46,0	41	50	25.3 x 2.4
XAOH NW 25 S 06	S	PN 400	30	10	M 42 x 2	M 18 x 2	45,5	41	50	25.3 x 2.4
XAOH NW 25 S 08	S	PN 400	30	12	M 42 x 2	M 20 x 2	45,5	41	50	25.3 x 2.4
XAOH NW 25 S 10	S	PN 400	30	14	M 42 x 2	M 22 x 1.5	45,0	41	50	25.3 x 2.4

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XAOH (Continuation) Reducing fitting

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	G1	G2	L2 mm	SW mm	S1	OR
XAOH NW 25 S 13	S	PN 400	30	16	M 42 x 2	M 24 x 1.5	46,5	41	50	25.3 x 2.4
XAOH NW 25 S 16	S	PN 400	30	20	M 42 x 2	M 30 x 2	46,5	41	50	25.3 x 2.4
XAOH NW 25 S 20	S	PN 400	30	25	M 42 x 2	M 36 x 2	47,0	41	50	25.3 x 2.4
XAOH NW 25 S	S	PN 400	30	30	M 42 x 2	M 42 x 2	53,5	46	50	25.3 x 2.4
XAOH NW 25 S 32	S	PN 315	30	38	M 42 x 2	M 52 x 2	56,5	55	50	25.3 x 2.4
XAOH NW 32 S 03	S	PN 315	38	6	M 52 x 2	M 14 x 1.5	47,5	50	60	33.3 x 2.4
XAOH NW 32 S 04	S	PN 315	38	8	M 52 x 2	M 16 x 1.5	47,5	50	60	33.3 x 2.4
XAOH NW 32 S 06	S	PN 315	38	10	M 52 x 2	M 18 x 1.5	47,0	50	60	33.3 x 2.4
XAOH NW 32 S 08	S	PN 315	38	12	M 52 x 2	M 20 x 1.5	50,0	50	60	33.3 x 2.4
XAOH NW 32 S 10	S	PN 315	38	14	M 52 x 2	M 22 x 1.5	48,5	50	60	33.3 x 2.4
XAOH NW 32 S 13	S	PN 315	38	16	M 52 x 2	M 24 x 1.5	51,0	50	60	33.3 x 2.4
XAOH NW 32 S 16	S	PN 315	38	20	M 52 x 2	M 30 x 2	51,0	50	60	33.3 x 2.4
XAOH NW 32 S 20	S	PN 315	38	25	M 52 x 2	M 36 x 2	51,5	50	60	33.3 x 2.4
XAOH NW 32 S 25	S	PN 315	38	30	M 52 x 2	M 42 x 2	52,0	50	60	33.3 x 2.4
XAOH NW 32 S	S	PN 315	38	38	M 52 x 2	M 52 x 2	57,0	55	60	33.3 x 2.4
XAOH NW 03 S 04 L	S/L	PN 315	6	6	M 14 x 1.5	M 12 x 1.5	24,5	12	17	4.0 x 1.5
XAOH NW 03 S 06 L	S/L	PN 315	6	8	M 14 x 1.5	M 14 x 1.5	23,5	14	17	4.0 x 1.5
XAOH NW 04 S 04 L	S/L	PN 315	8	6	M 16 x 1.5	M 12 x 1.5	24,0	12	19	6.0 x 1.5
XAOH NW 04 S 06 L	S/L	PN 315	8	8	M 16 x 1.5	M 14 x 1.5	24,5	14	19	6.0 x 1.5
XAOH NW 04 S 08 L	S/L	PN 315	8	10	M 16 x 1.5	M 16 x 1.5	36,0	17	19	6.0 x 1.5
XAOH NW 04 S 10 L	S/L	PN 315	8	12	M 16 x 1.5	M 18 x 1.5	27,5	19	19	6.0 x 1.5
XAOH NW 06 S 06 L	S/L	PN 315	10	8	M 18 x 1.5	M 14 x 1.5	26,0	17	22	7.5 x 1.5
XAOH NW 06 S 08 L	S/L	PN 315	10	10	M 18 x 1.5	M 16 x 1.5	27,0	17	22	7.5 x 1.5
XAOH NW 06 S 10 L	S/L	PN 315	10	12	M 18 x 1.5	M 18 x 1.5	27,5	19	22	7.5 x 1.5
XAOH NW 06 S 13 L	S/L	PN 315	10	15	M 18 x 1.5	M 22 x 1.5	29,0	24	22	7.5 x 1.5
XAOH NW 08 S 06 L	S/L	PN 315	12	8	M 20 x 1.5	M 14 x 1.5	27,0	17	24	9.0 x 1.5
XAOH NW 08 S 08 L	S/L	PN 315	12	10	M 20 x 1.5	M 16 x 1.5	29,5	17	24	9.0 x 1.5
XAOH NW 08 S 10 L	S/L	PN 315	12	12	M 20 x 1.5	M 18 x 1.5	29,5	19	24	9.0 x 1.5
XAOH NW 08 S 13 L	S/L	PN 315	12	15	M 20 x 1.5	M 22 x 1.5	30,5	24	24	9.0 x 1.5
XAOH NW 08 S 16 L	S/L	PN 315	12	18	M 20 x 1.5	M 26 x 1.5	34,0	27	24	9.0 x 1.5
XAOH NW 10 S 10 L	S/L	PN 315	14	12	M 22 x 1.5	M 18 x 1.5	30,5	19	27	10.0 x 2.0
XAOH NW 10 S 13 L	S/L	PN 315	14	15	M 22 x 1.5	M 22 x 1.5	42,5	24	27	10.0 x 2.0
XAOH NW 10 S 16 L	S/L	PN 315	14	18	M 22 x 1.5	M 26 x 1.5	35,0	27	27	10.0 x 2.0
XAOH NW 13 S 13 L	S/L	PN 315	16	15	M 24 x 1.5	M 22 x 1.5	32,5	24	30	12.0 x 2.0
XAOH NW 13 S 16 L	S/L	PN 315	16	18	M 24 x 1.5	M 26 x 1.5	33,0	27	30	12.0 x 2.0
XAOH NW 13 S 20 L	S/L	PN 160	16	22	M 24 x 1.5	M 30 x 2	35,0	32	30	12.0 x 2.0
XAOH NW 16 S 13 L	S/L	PN 315	20	15	M 30 x 2	M 22 x 1.5	38,0	27	36	16.3 x 2.4
XAOH NW 16 S 16 L	S/L	PN 315	20	18	M 30 x 2	M 26 x 1.5	35,5	27	36	16.3 x 2.4
XAOH NW 16 S 20 L	S/L	PN 160	20	22	M 30 x 2	M 30 x 2	38,0	32	36	16.3 x 2.4
XAOH NW 16 S 25 L	S/L	PN 160	20	28	M 30 x 2	M 36 x 2	39,0	41	36	16.3 x 2.4
XAOH NW 20 S 13 L	S/L	PN 315	25	15	M 36 x 2	M 22 x 1.5	40,5	32	46	20.3 x 2.4
XAOH NW 20 S 16 L	S/L	PN 315	25	18	M 36 x 2	M 26 x 1.5	38,0	32	46	20.3 x 2.4
XAOH NW 20 S 20 L	S/L	PN 160	25	22	M 36 x 2	M 30 x 2	42,0	32	46	20.3 x 2.4
XAOH NW 20 S 25 L	S/L	PN 160	25	28	M 36 x 2	M 36 x 2	42,0	41	46	20.3 x 2.4
XAOH NW 20 S 32 L	S/L	PN 160	25	35	M 36 x 2	M 45 x 2	42,0	46	46	20.3 x 2.4

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XAOH (Continuation) Reducing fitting

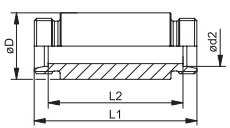
Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	G1	G2	L2 mm	SW mm	S1	OR
XAOH NW 25 S 20 L	S/L	PN 160	30	22	M 42 x 2	M 30 x 2	45,0	41	50	25.3 x 2.4
XAOH NW 25 S 25 L	S/L	PN 160	30	28	M 42 x 2	M 36 x 2	45,5	41	50	25.3 x 2.4
XAOH NW 25 S 32 L	S/L	PN 160	30	35	M 42 x 2	M 45 x 2	45,5	46	50	25.3 x 2.4
XAOH NW 25 S 40 L	S/L	PN 160	30	42	M 42 x 2	M 52 x 2	47,0	55	50	25.3 x 2.4
XAOH NW 32 S 25 L	S/L	PN 160	38	28	M 52 x 2	M 36 x 2	50,0	50	60	33.3 x 2.4
XAOH NW 32 S 32 L	S/L	PN 160	38	35	M 52 x 2	M 45 x 2	48,0	50	60	33.3 x 2.4
XAOH NW 32 S 40 L	S/L	PN 160	38	42	M 52 x 2	M 52 x 2	50,5	55	60	33.3 x 2.4

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XSE Bulkhead socket weld fitting

Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Bulkhead socket weld fitting
Standard: DIN 2353
Material: Steel
Product versions: XSE VA, Bulkhead socket weld fitting, Stainless steel
SE, Bulkhead socket weld fitting, Steel

Sealing form 1: 24° inner cone
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: phosphate treated and oiled (Znphr5f)

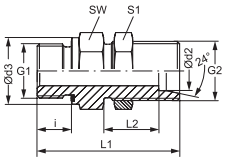


Identification	Series	Working pressure bar	Ø d2 mm	Ø D mm	L1 mm	L2 mm
XSE NW 04 HL	L	PN 315	6	18,0	70	56
XSE NW 06 HL	L	PN 315	8	20,0	70	56
XSE NW 08 HL	L	PN 315	10	22,0	72	58
XSE NW 10 HL	L	PN 315	12	25,0	72	58
XSE NW 13 HL	L	PN 315	15	28,0	84	70
XSE NW 16 HL	L	PN 315	18	32,0	84	69
XSE NW 20 HL	L	PN 160	22	36,0	88	73
XSE NW 25 HL	L	PN 160	28	40,0	88	73
XSE NW 32 HL	L	PN 160	35	50,0	92	71
XSE NW 40 HL	L	PN 160	42	60,0	92	70
XSE NW 03 HS	S	PN 630	6	20,0	74	60
XSE NW 04 HS	S	PN 630	8	22,0	74	60
XSE NW 06 HS	S	PN 630	10	25,0	74	59
XSE NW 08 HS	S	PN 630	12	28,0	74	59
XSE NW 10 HS	S	PN 630	14	30,0	88	72
XSE NW 13 HS	S	PN 400	16	35,0	88	71
XSE NW 16 HS	S	PN 400	20	38,0	92	71
XSE NW 20 HS	S	PN 400	25	45,0	96	72
XSE NW 25 HS	S	PN 400	30	50,0	100	73
XSE NW 32 HS	S	PN 315	38	60,0	104	72

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XSVR ED

Bulkhead screw-in fitting



Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Bulkhead screw-in fitting
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised
Spare parts: WD, Soft seal for ED fittings

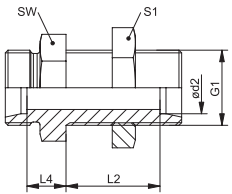
Sealing form 1: Shape E
Sealing form 2: 24° inner cone
Construction: straight
Material: Steel

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	Ø d3 mm	i mm	L1 mm	L2 mm	SW mm	S1
XSVR NW 06 HL ED	L	PN 315	8	G 1/4" -19	M 14 x 1.5	18,9	12	53,0	27,0	19	19
XSVR NW 06 HL 3/8 ED	L	PN 315	8	G 3/8" -19	M 14 x 1.5	21,9	12	54,5	27,0	22	19
XSVR NW 06 HL 1/2 ED	L	PN 315	8	G 1/2" -14	M 14 x 1.5	26,9	14	58,0	27,0	27	19
XSVR NW 08 HL ED	L	PN 315	10	G 1/4" -19	M 16 x 1.5	18,9	12	55,0	28,0	22	22
XSVR NW 08 HL 1/2 ED	L	PN 315	10	G 1/2" -14	M 16 x 1.5	26,9	14	59,0	27,0	27	22
XSVR NW 10 HL ED	L	PN 315	12	G 3/8" -19	M 18 x 1.5	21,9	12	56,5	29,0	24	24
XSVR NW 10 HL 1/2 ED	L	PN 315	12	G 1/2" -14	M 18 x 1.5	26,9	14	60,0	29,0	27	24
XSVR NW 13 HL ED	L	PN 250	15	G 1/2" -14	M 22 x 1.5	26,9	14	62,0	31,0	27	30
XSVR NW 13 HL 3/4 ED	L	PN 250	15	G 3/4" -14	M 22 x 1.5	31,9	16	66,0	31,0	32	30
XSVR NW 16 HL ED	L	PN 250	18	G 1/2" -14	M 26 x 1.5	26,9	14	66,0	33,5	32	36
XSVR NW 16 HL 3/4 ED	L	PN 250	18	G 3/4" -14	M 26 x 1.5	31,9	16	68,0	33,5	32	36
XSVR NW 16 HL 1 ED	L	PN 250	18	G 1" -11	M 26 x 1.5	39,9	18	73,0	33,5	41	36
XSVR NW 20 HL ED	L	PN 250	22	G 3/4" -14	M 30 x 2	31,9	16	71,0	34,5	36	41
XSVR NW 40 HL ED	L	PN 250	42	G 1.1/2" -11	M 52 x 2	54,9	22	86,0	36,0	60	65
XSVR NW 08 HS 1/2 ED	S	PN 400	12	G 1/2" -14	M 20 x 1.5	26,9	14	65,0	30,5	27	27
XSVR NW 13 HS ED	S	PN 400	16	G 1/2" -14	M 24 x 1.5	26,9	14	68,0	31,5	32	32
XSVR NW 13 HS 3/4 ED	S	PN 400	16	G 3/4" -14	M 24 x 1.5	31,9	16	70,0	31,5	32	32
XSVR NW 16 HS ED	S	PN 400	20	G 3/4" -14	M 30 x 2	31,9	16	75,0	33,5	41	41
XSVR NW 20 HS 3/4 ED	S	PN 250	25	G 3/4" -14	M 36 x 2	31,9	16	80,0	35,0	46	46
XSVR NW 20 HS ED	S	PN 250	25	G 1" -11	M 36 x 2	39,9	18	82,0	35,0	46	46
XSVR NW 25 HS ED	S	PN 160	30	G 1.1/4" -11	M 42 x 2	49,9	20	89,0	37,5	50	50

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XSV Bulkhead fitting



Connection 1 + 2: metric cylindrical outer thread
Design: Bulkhead fitting
Standard: DIN 2353
Material: Steel
Product versions: XSV VA, Bulkhead fitting, Stainless steel
SV, Bulkhead fitting, Steel

Sealing form 1 + 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	L2 mm	L4 mm	SW mm	S1
XSV NW 04 HL	L	PN 315	6	M 12 x 1.5	27,0	7,0	17	17
XSV NW 06 HL	L	PN 315	8	M 14 x 1.5	27,0	8,0	19	19
XSV NW 08 HL	L	PN 315	10	M 16 x 1.5	28,0	10,0	22	22
XSV NW 10 HL	L	PN 315	12	M 18 x 1.5	29,0	10,0	24	24
XSV NW 13 HL	L	PN 315	15	M 22 x 1.5	31,0	12,0	27	30
XSV NW 16 HL	L	PN 315	18	M 26 x 1.5	32,5	13,5	32	36
XSV NW 20 HL	L	PN 160	22	M 30 x 2	34,5	16,5	36	41
XSV NW 25 HL	L	PN 160	28	M 36 x 2	35,5	18,5	41	46
XSV NW 32 HL	L	PN 160	35	M 45 x 2	36,5	18,5	50	55
XSV NW 40 HL	L	PN 160	42	M 52 x 2	36,0	19,0	60	65
XSV NW 03 HS	S	PN 630	6	M 14 x 1.5	29,0	12,0	19	19
XSV NW 04 HS	S	PN 630	8	M 16 x 1.5	29,0	13,0	22	22
XSV NW 06 HS	S	PN 630	10	M 18 x 1.5	29,5	14,5	24	24
XSV NW 08 HS	S	PN 630	12	M 20 x 1.5	30,5	14,5	27	27
XSV NW 10 HS	S	PN 630	14	M 22 x 1.5	32,0	17,0	30	30
XSV NW 13 HS	S	PN 400	16	M 24 x 1.5	31,5	16,5	32	32
XSV NW 16 HS	S	PN 400	20	M 30 x 2	33,5	17,5	41	41
XSV NW 20 HS	S	PN 400	25	M 36 x 2	35,0	20,0	46	46
XSV NW 25 HS	S	PN 400	30	M 42 x 2	37,5	21,5	50	50
XSV NW 32 HS	S	PN 315	38	M 52 x 2	37,0	22,0	65	65

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

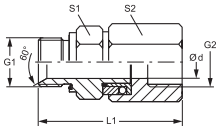
DG HB IR — Rotary fitting, ball bearing

Connection 1: BSP external thread, cylindrical
Connection 2: BSP cylindrical internal threads
Design: Rotary fitting
Construction: straight
Temperature max.: 95 °C
Material: Steel

Sealing form 1: 60° inner cone + shape E
Sealing form 2: Shape A
Supplementary design information: Ball guided
Temperature min.: -30 °C
Media: Oil
Surface protection: electro galvanised

Identification	Working pressure bar	Ø d mm	G1 + G2	L1 mm	S1	S2
DG HB 10 IR	PN 300	8	G 3/8" -19	89,5	24	24
DG HB 13 IR	PN 300	10	G 1/2" -14	89,5	27	32

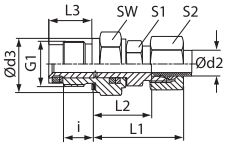
For technical reasons, a minimum working pressure of 10 bar is required.



GVR — Rotary fitting, friction bearing

Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Rotary fitting (screw-in connector)
Construction: straight
Material: Steel

Sealing form 1: Shape E
Sealing form 2: 24° inner cone
Supplementary design information: Friction bearing
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised



Identification	Series	Working pressure bar	Ø d2 mm	G1	i mm	Ø d3 mm	L1 mm	L2 mm	L3 mm	SW mm	S1	S2
GVR NW 04 HL 1/4	L	PN 40	6	G 1/4" -19	12	19	40	21,0	18,0	19	12	14
GVR NW 06 HL	L	PN 40	8	G 1/4" -19	12	19	40	21,0	18,0	19	14	17
GVR NW 08 HL 3/8	L	PN 40	10	G 3/8" -19	12	22	40	25,0	18,0	24	17	19
GVR NW 10 HL 1/2	L	PN 40	12	G 1/2" -14	14	27	42	27,0	21,0	27	19	22
GVR NW 13 HL 3/4	L	PN 40	15	G 3/4" -14	16	32	47	32,0	24,0	32	24	27
GVR NW 16 HL 1	L	PN 40	18	G 1" -11	18	40	51	35,0	27,5	41	27	22
GVR NW 20 HL 1	L	PN 40	22	G 1" -11	18	40	55	39,5	27,5	41	32	36
GVR NW 25 HL 11/4	L	PN 40	28	G 1.1/4" -11	20	40	57	40,5	31,0	50	41	41
GVR NW 32 HL 11/2	L	PN 40	35	G 1.1/2" -11	22	55	66	44,5	35,0	55	46	50
GVR NW 03 HS	S	PN 100	6	G 1/4" -19	12	19	38	23,0	18,0	19	14	17
GVR NW 04 HS	S	PN 100	8	G 1/4" -19	12	19	39	24,0	18,0	19	17	19
GVR NW 06 HS	S	PN 100	10	G 3/8" -19	12	22	43	26,5	18,0	24	19	22
GVR NW 08 HS 1/2	S	PN 100	12	G 1/2" -14	14	27	45	28,5	21,0	27	22	24
GVR NW 13 HS 3/4	S	PN 100	16	G 3/4" -14	16	32	52	33,5	24,0	32	27	30
GVR NW 16 HS 1	S	PN 100	20	G 1" -11	18	40	60	38,0	27,5	41	32	36
GVR NW 20 HS	S	PN 100	25	G 1" -11	18	40	65	40,5	27,5	41	41	46

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

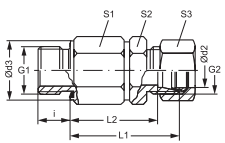
GVR (Continuation) Rotary fitting, friction bearing

Identification	Series	Working pressure bar	Ø d2 mm	G1	i mm	Ø d3 mm	L1 mm	L2 mm	L3 mm	SW mm	S1	S2
GVR NW 25 HS 11/4	S	PN 100	30	G 1.1/4" -11	20	50	68	41,5	31,0	50	46	50
GVR NW 32 HS 11/2	S	PN 100	38	G 1.1/2" -11	22	55	78	47,0	35,0	55	55	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

DGR Rotary fitting, ball bearing



Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Rotary fitting (screw-in connector)
Construction: straight
Material: Steel

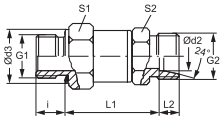
Sealing form 1: Shape E
Sealing form 2: 24° inner cone
Supplementary design information: Ball bearing
Included in scope of supply: Socket with union nut and cutting ring
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	i mm	Ø d3 mm	L1 mm	L2 mm	S1	S2	S3
DGR NW 03 HS	S	PN 250	6	G 1/4" -19	M 14 x 1.5	12	19	49	42,0	22	17	17
DGR NW 04 HS	S	PN 250	8	G 1/4" -19	M 16 x 1.5	12	19	49	42,0	22	17	19
DGR NW 08 HS	S	PN 250	12	G 3/8" -19	M 20 x 1.5	12	22	60	52,5	30	24	24
DGR NW 13 HS	S	PN 250	16	G 1/2" -14	M 24 x 1.5	14	27	60	54,5	30	27	30
DGR NW 16 HS	S	PN 250	20	G 3/4" -14	M 30 x 2	16	32	76	65,5	41	36	36
DGR NW 20 HS	S	PN 250	25	G 1" -11	M 36 x 2	18	40	78	66,0	41	41	46
DGR NW 25 HS	S	PN 250	30	G 1.1/4" -11	M 42 x 2	20	50	89	75,5	60	46	50
DGR NW 32 HS	S	PN 250	38	G 1.1/2" -11	M 52 x 2	22	55	92	76,0	60	55	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

DGR H — Rotary fitting, ball bearing



Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Rotary fitting (screw-in connector)
Construction: straight
Material: Steel

Sealing form 1: Shape E
Sealing form 2: 24° inner cone
Supplementary design information: Ball bearing
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

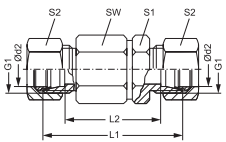
Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	i mm	Ø d3 mm	L1 mm	L2 mm	S1	S2
DGR NW 04 HL	L	PN 315	6	G 1/8" -28	M 12 x 1.5	8	14	40,5	7,0	22	19
DGR NW 04 HL 1/4	L	PN 315	6	G 1/4" -19	M 12 x 1.5	12	19	40,0	7,0	22	19
DGR NW 06 HL	L	PN 315	8	G 1/4" -19	M 14 x 1.5	12	19	40,0	7,0	22	19
DGR NW 08 HL	L	PN 315	10	G 1/4" -19	M 16 x 1.5	12	19	41,0	7,0	22	19
DGR NW 08 HL 3/8	L	PN 315	10	G 3/8" -19	M 16 x 1.5	12	22	50,0	7,0	30	24
DGR NW 10 HL 1/2	L	PN 315	12	G 1/2" -14	M 18 x 1.5	14	27	50,0	7,0	30	24
DGR NW 13 HL	L	PN 315	15	G 1/2" -14	M 22 x 1.5	14	27	51,0	7,0	30	24
DGR NW 13 HL 3/4	L	*1	15	G 3/4" -14	M 22 x 1.5	*1	*1	*1	*1	*1	*1
DGR NW 16 HL	L	PN 315	18	G 1/2" -14	M 26 x 1.5	14	27	51,5	7,5	30	30
DGR NW 16 HL 3/4	L	*1	18	G 3/4" -14	M 26 x 1.5	*1	*1	*1	*1	*1	*1
DGR NW 20 HL 1/2	L	*1	22	G 1/2" -14	M 30 x 2	*1	*1	*1	*1	*1	*1
DGR NW 20 HL	L	PN 160	22	G 3/4" -14	M 30 x 2	16	32	66,0	7,5	41	36
DGR NW 20 HL 1	L	*1	22	G 1" -11	M 30 x 2	*1	*1	*1	*1	*1	*1
DGR NW 03 HS H	S	PN 500	6	G 1/4" -19	M 14 x 1.5	12	19	42,0	7,0	22	19
DGR NW 04 HS H	S	PN 500	8	G 1/4" -19	M 16 x 1.5	12	19	42,0	7,0	22	19
DGR NW 06 HS H	S	PN 500	10	G 3/8" -19	M 18 x 1.5	12	22	42,0	7,5	22	19
DGR NW 08 HS H	S	PN 500	12	G 3/8" -19	M 20 x 1.5	12	22	52,5	7,5	30	24
DGR NW 08 HS 1/2 H	S	PN 500	12	G 1/2" -14	M 20 x 1.5	12	27	53,0	7,5	22	32
DGR NW 10 HS H	S	PN 500	14	G 1/2" -14	M 22 x 1.5	14	27	52,0	8,0	30	24
DGR NW 13 HS H	S	PN 400	16	G 1/2" -14	M 24 x 1.5	14	27	51,5	8,5	30	24
DGR NW 16 HS H	S	PN 400	20	G 3/4" -14	M 30 x 2	16	32	65,5	10,5	41	36
DGR NW 16 HS 1 H	S	PN 400	20	G 1" -11	M 30 x 2	18	40	65,0	10,5	41	36
DGR NW 20 HS 3/4 H	S	PN 400	25	G 3/4" -14	M 36 x 2	16	32	65,0	12,0	41	36
DGR NW 20 HS H	S	PN 400	25	G 1" -11	M 36 x 2	18	40	66,0	12,0	41	36

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

*1) upon request

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

DG — Rotary fitting, ball bearing



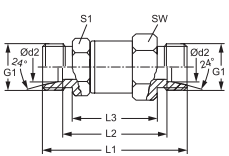
Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Rotary fitting
Construction: straight
Material: Steel

Sealing form 1: 24° inner cone
Sealing form 2: 24° inner cone
Supplementary design information: Ball bearing
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	L1 mm	L2 mm	SW mm	S1	S2
DG NW 03 HS	S	PN 250	6	M 14 x 1.5	61	47	22	17	17
DG NW 04 HS	S	PN 250	8	M 16 x 1.5	61	47	22	17	19
DG NW 08 HS	S	PN 250	12	M 20 x 1.5	72	57	30	24	24
DG NW 13 HS	S	PN 250	16	M 24 x 1.5	74	57	30	27	30
DG NW 16 HS	S	PN 250	20	M 30 x 2	92	71	41	36	36
DG NW 20 HS	S	PN 250	25	M 36 x 2	96	72	41	41	46
DG NW 25 HS	S	PN 250	30	M 42 x 2	109	82	60	46	50
DG NW 32 HS	S	PN 250	38	M 52 x 2	114	82	60	55	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

DG H — Rotary fitting, ball bearing



Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Rotary fitting
Construction: straight
Material: Steel

Sealing form 1: 24° inner cone
Sealing form 2: 24° inner cone
Supplementary design information: Ball bearing
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	L1 mm	L2 mm	L3 mm	SW mm	S1
DG NW 04 HL	L	PN 315	6	M 12 x 1.5	57,0	43,0	37,0	22	19
DG NW 06 HL	L	PN 315	8	M 14 x 1.5	57,0	43,0	37,0	22	19
DG NW 08 HL	L	PN 315	10	M 16 x 1.5	68,0	54,0	46,0	30	24
DG NW 10 HL	L	PN 315	12	M 18 x 1.5	68,0	54,0	46,0	30	24
DG NW 13 HL	L	PN 315	15	M 22 x 1.5	70,0	56,0	46,0	30	24
DG NW 16 HL	L	PN 315	18	M 26 x 1.5	80,5	65,5	56,5	41	36
DG NW 20 HL	L	PN 160	22	M 30 x 2	84,5	69,5	56,5	41	36
DG NW 25 HL	L	PN 160	28	M 36 x 2	96,5	81,5	68,5	60	55
DG NW 32 HL	L	PN 160	35	M 45 x 2	100,5	79,5	68,5	60	55
DG NW 03 HS H	S	PN 500	6	M 14 x 1.5	61,0	47,0	37,0	22	19
DG NW 04 HS H	S	PN 500	8	M 16 x 1.5	61,0	47,0	37,0	22	19
DG NW 06 HS H	S	PN 500	10	M 18 x 1.5	61,0	55,0	37,0	30	24
DG NW 08 HS H	S	PN 500	12	M 20 x 1.5	72,0	57,0	48,0	30	24
DG NW 10 HS H	S	PN 500	14	M 22 x 1.5	73,0	57,0	45,0	30	24
DG NW 13 HS H	S	PN 400	16	M 24 x 1.5	74,0	57,0	46,0	30	24
DG NW 16 HS H	S	PN 400	20	M 30 x 2	92,0	71,0	60,0	41	36

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

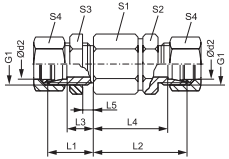
DG H (Continuation) Rotary fitting, ball bearing

Identification	Series	Working pressure bar	Ø d2 mm	G1	L1 mm	L2 mm	L3 mm	SW mm	S1
DG NW 20 HS H	S	PN 400	25	M 36 x 2	98,0	72,0	62,0	41	36
DG NW 25 HS H	S	PN 400	30	M 42 x 2	109,0	82,0	69,0	60	55
DG NW 32 HS H	S	PN 315	38	M 52 x 2	114,0	82,0	70,0	60	55

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

DGS Rotary fitting, ball bearing



Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Rotary fitting (bulkhead connector)
Construction: straight
Material: Steel

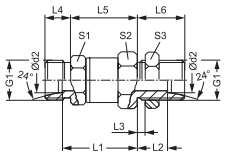
Sealing form 1: 24° inner cone
Sealing form 2: 24° inner cone
Supplementary design information: Ball bearing
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	L1 mm	L2 mm	L3 mm	L4 mm	L5 mm	S1	S2	S3	S4
DGS NW 03 HS	S	PN 250	6	M 14 x 1.5	23	49	16,0	42,0	5,0	22	17	19	17
DGS NW 04 HS	S	PN 250	8	M 16 x 1.5	23	49	16,0	42,0	5,0	22	17	22	19
DGS NW 08 HS	S	PN 250	12	M 20 x 1.5	23	60	15,5	52,5	5,0	30	24	27	24
DGS NW 13 HS	S	PN 250	16	M 24 x 1.5	26	60	17,5	51,5	5,0	30	27	32	30
DGS NW 16 HS	S	PN 250	20	M 30 x 2	39	76	28,5	65,5	15,0	41	36	41	36
DGS NW 20 HS	S	PN 250	25	M 36 x 2	42	78	30,0	66,0	15,0	41	41	46	46
DGS NW 25 HS	S	PN 250	30	M 42 x 2	44	89	30,5	75,5	15,0	60	46	50	50
DGS NW 32 HS	S	PN 250	38	M 52 x 2	47	92	31,0	76,0	15,0	60	55	65	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

DGS H — Rotary fitting, ball bearing



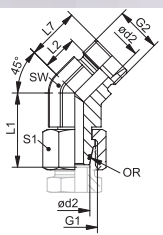
Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Rotary fitting (bulkhead connector)
Construction: straight
Material: Steel

Sealing form 1: 24° inner cone
Sealing form 2: 24° inner cone
Supplementary design information: Ball bearing
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	L1 mm	L2 mm	L3 mm	L4 mm	L5 mm	L6 mm	S1	S2	S3
DGS NW 06 HL	L	PN 315	8	M 14 x 1.5	40,0	16,0	5	10	37,0	23,0	19	22	17
DGS NW 08 HL	L	PN 315	10	M 16 x 1.5	50,0	16,0	5	11	46,0	23,0	24	30	22
DGS NW 10 HL	L	PN 315	12	M 18 x 1.5	50,0	16,0	5	11	46,0	23,0	24	30	24
DGS NW 16 HL	L	PN 315	18	M 26 x 1.5	61,0	28,0	15	12	56,5	35,5	36	41	36
DGS NW 20 HL	L	PN 160	22	M 30 x 2	63,0	30,5	15	14	56,5	38,0	36	41	41
DGS NW 25 HL	L	PN 160	28	M 36 x 2	75,0	31,0	15	14	68,5	38,5	55	60	46
DGS NW 32 HL	L	PN 160	35	M 45 x 2	74,0	31,5	15	16	68,5	42,0	55	60	55
DGS NW 04 HS H	S	PN 500	8	M 16 x 1.5	42,0	16,0	5	12	37,0	23,0	19	22	22
DGS NW 08 HS H	S	PN 500	12	M 20 x 1.5	52,5	15,5	5	12	48,0	23,0	24	30	27
DGS NW 13 HS H	S	PN 400	16	M 24 x 1.5	51,5	17,5	5	14	46,0	26,0	24	30	32
DGS NW 16 HS H	S	PN 400	20	M 30 x 2	65,5	28,5	15	16	60,0	39,0	36	41	41
DGS NW 20 HS H	S	PN 400	25	M 36 x 2	66,0	30,0	15	18	60,0	42,0	36	41	46
DGS NW 25 HS H	S	PN 400	30	M 42 x 2	75,5	30,5	15	22	69,0	44,0	55	60	50

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XVEWO 45 — Fitting, angle 45°



Connection 1: metric nut thread
Connection 2: metric cylindrical outer thread
Design: Adjustable direction fitting
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised
Product versions: XVEWO 45 VA, Fitting, angle 45°, Stainless steel
VEWO 45, Fitting, angle 45°, Steel

Sealing form 1: 24° outer cone with O-ring
Sealing form 2: 24° inner cone
Construction: Angle 45°
Material: Steel

Identification	Series	Working pressure bar	Ø d2 mm	G1 + G2	L1 mm	L2 mm	L7 mm	SW mm	S1	OR
XVEWO 45 NW 04 HL	L	PN 315	6	M 12 x 1.5	26,0	9,0	16,0	14	14	4.0 x 1.5
XVEWO 45 NW 06 HL	L	PN 315	8	M 14 x 1.5	27,5	12,0	27,5	14	17	6.0 x 1.5
XVEWO 45 NW 08 HL	L	PN 315	10	M 16 x 1.5	29,0	12,0	19,0	19	19	7.5 x 1.5
XVEWO 45 NW 10 HL	L	PN 315	12	M 18 x 1.5	29,5	14,0	21,0	19	22	9.0 x 1.5
XVEWO 45 NW 13 HL	L	PN 315	15	M 22 x 1.5	32,5	17,0	24,0	22	27	12.0 x 2.0
XVEWO 45 NW 16 HL	L	PN 315	18	M 26 x 1.5	35,5	16,5	24,0	27	32	15.0 x 2.0
XVEWO 45 NW 20 HL	L	PN 160	22	M 30 x 2	38,5	18,5	26,0	30	36	20.0 x 2.0
XVEWO 45 NW 25 HL	L	PN 160	28	M 36 x 2	41,5	23,0	30,5	36	41	26.0 x 2.0
XVEWO 45 NW 32 HL	L	PN 160	35	M 45 x 2	51,0	26,5	37,0	50	50	32.0 x 2.5
XVEWO 45 NW 40 HL	L	PN 160	42	M 52 x 2	56,0	26,0	37,0	50	60	38.0 x 2.5
XVEWO 45 NW 03 HS	S	PN 630	6	M 14 x 1.5	27,0	9,0	16,0	14	17	4.0 x 1.5
XVEWO 45 NW 04 HS	S	PN 630	8	M 16 x 1.5	27,5	12,0	19,0	19	19	6.0 x 1.5
XVEWO 45 NW 06 HS	S	PN 630	10	M 18 x 1.5	30,0	13,5	21,0	19	22	7.5 x 1.5

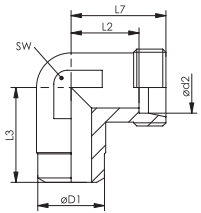
Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

XVEWO 45 (Continuation) Fitting, angle 45°

Identification	Series	Working pressure bar	Ø d2 mm	G1 + G2	L1 mm	L2 mm	L7 mm	SW mm	S1	OR
XVEWO 45 NW 08 HS	S	PN 630	12	M 20 x 1.5	31,0	16,5	24,0	19	24	9.0 x 1.5
XVEWO 45 NW 13 HS	S	PN 400	16	M 24 x 1.5	36,5	15,5	24,0	19	30	12.0 x 2.0
XVEWO 45 NW 16 HS	S	PN 400	20	M 30 x 2	44,5	16,0	26,5	27	36	16.3 x 2.4
XVEWO 45 NW 20 HS	S	PN 400	25	M 36 x 2	50,0	18,5	30,5	36	46	20.3 x 2.4
XVEWO 45 NW 25 HS	S	PN 400	30	M 42 x 2	55,0	23,5	37,0	50	50	25.3 x 2.4
XVEWO 45 NW 32 HS	S	PN 315	38	M 52 x 2	63,0	21,0	37,0	50	60	33.3 x 2.4

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

XWSA Welded on fitting, angle 90°



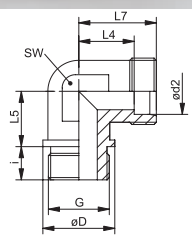
Connection 1: Welded on socket for metric pipe
Sealing form 2: 24° inner cone
Construction: Angle 90°
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: phosphate treated and oiled (Znphr5f)
Product versions: XWSA VA, Welded on fitting, angle 90°, Stainless steel
WSA, Welded on fitting, angle 90°, Steel

Connection 2: metric cylindrical outer thread
Design: Welded on fitting
Standard: ISO 8434-1
Material: Steel

Identification	Series	Working pressure bar	Ø d2 mm	Ø D1 mm	L2 mm	L3 mm	L7 mm	SW mm
XWSA NW 04 HL	L	PN 315	6	10	12,0	19	19	12
XWSA NW 06 HL	L	PN 315	8	12	14,0	23	21	12
XWSA NW 08 HL	L	PN 315	10	14	15,0	24	22	14
XWSA NW 10 HL	L	PN 315	12	16	17,0	25	24	17
XWSA NW 13 HL	L	PN 315	15	19	21,0	30	28	19
XWSA NW 16 HL	L	PN 315	18	22	23,5	33	31	24
XWSA NW 20 HL	L	PN 160	22	27	27,5	37	35	27
XWSA NW 25 HL	L	PN 160	28	32	30,5	42	38	36
XWSA NW 32 HL	L	PN 160	35	40	34,5	49	40	41
XWSA NW 40 HL	L	PN 160	42	46	40,0	57	51	50
XWSA NW 03 HS	S	PN 630	6	11	16,0	23	23	12
XWSA NW 04 HS	S	PN 630	8	13	17,0	24	24	14
XWSA NW 06 HS	S	PN 630	10	15	17,5	25	25	17
XWSA NW 08 HS	S	PN 630	12	17	21,5	29	29	17
XWSA NW 10 HS	S	PN 630	14	19	22,0	30	30	19
XWSA NW 13 HS	S	PN 400	16	21	24,5	33	33	24
XWSA NW 16 HS	S	PN 400	20	26	26,5	37	37	27
XWSA NW 20 HS	S	PN 400	25	31	30,0	42	42	36
XWSA NW 25 HS	S	PN 400	30	36	35,5	49	49	41
XWSA NW 32 HS	S	PN 315	38	44	41,0	57	57	50

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XWR — Screw-in fitting, angle 90°



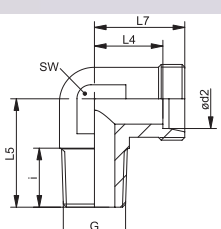
Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Screw-in fitting
Standard: DIN 2353
Material: Steel
Product versions: XWR VA, Screw-in fitting, angle 90°, Stainless steel
WR, Screw-in fitting, angle 90°, Steel

Sealing form 1: Shape B
Sealing form 2: 24° inner cone
Construction: Angle 90°
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G	Ø D mm	i mm	L4 mm	L5 mm	L7 mm	SW mm
XWR NW 20 HL	L	PN 160	22	G 3/4" -14	32	16	27,5	26	35	27
XWR NW 25 HL	L	PN 160	28	G 1" -11	39	18	30,5	30	38	36
XWR NW 32 HL	L	PN 160	35	G 1.1/4" -11	49	20	34,5	34	45	41
XWR NW 40 HL	L	PN 160	42	G 1.1/2" -11	55	22	40,0	39	51	50
XWR NW 16 HS	S	PN 160	20	G 3/4" -14	32	16	26,5	26	32	27
XWR NW 20 HS	S	PN 160	25	G 1" -11	39	18	30,0	30	42	36
XWR NW 25 HS	S	PN 160	30	G 1.1/4" -11	49	20	35,5	34	49	41
XWR NW 32 HS	S	PN 160	38	G 1.1/2" -11	55	22	41,0	39	57	50

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XWRK — Screw-in fitting, angle 90°



Connection 1: BSPT conical external threads
Connection 2: metric cylindrical outer thread
Design: Screw-in fitting
Standard: DIN 2353
Material: Steel
Product versions: XWRK VA, Screw-in fitting, angle 90°, Stainless steel
WRK, Screw-in fitting, angle 90°, Steel

Sealing form 1: thread seal
Sealing form 2: 24° inner cone
Construction: Angle 90°
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G	i mm	L4 mm	L5 mm	L7 mm	SW mm
XWR 04 LL	LL	PN 100	4	R 1/8" K	8	11,0	17,0	15,0	9
XWR 05 LL	LL	PN 100	5	R 1/8" K	8	8,0	17,0	13,5	9
XWR 06 LL	LL	PN 100	6	R 1/8" K	8	9,5	17,0	15,0	9
XWR 08 LL	LL	PN 100	8	R 1/8" K	8	11,5	20,0	17,0	12
XWR 10 LL	LL	PN 100	10	R 1/4" K	12	15,5	26,0	21,0	14
XWR 12 LL	LL	PN 100	12	R 1/4" K	12	12,0	21,5	18,0	17
XWR NW 04 HL	L	PN 315	6	R 1/8" K	8	12,0	20,0	19,0	12
XWR NW 04 HL 1/4	L	PN 315	6	R 1/4" K	12	14,0	26,0	21,0	12
XWR NW 04 HL 3/8	L	PN 315	6	R 3/8" K	12	17,0	28,0	24,0	17
XWR NW 06 HL	L	PN 315	8	R 1/4" K	12	14,0	26,0	21,0	12
XWR NW 06 HL 1/8	L	PN 315	8	R 1/8" K	8	14,0	26,0	21,0	12
XWR NW 06 HL 3/8	L	PN 315	8	R 3/8" K	12	19,0	28,0	26,0	17
XWR NW 06 HL 1/2	L	PN 315	8	R 1/2" K	13	20,0	34,0	27,0	19
XWR NW 08 HL	L	PN 315	10	R 1/4" K	12	15,0	27,0	22,0	14

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

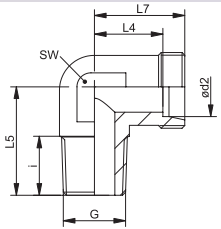
XWRK (Continuation) Screw-in fitting, angle 90°

Identification	Series	Working pressure bar	Ø d2 mm	G	i mm	L4 mm	L5 mm	L7 mm	SW mm
XWR NW 08 HL 1/8	L	PN 315	10	R 1/8" K	8	15,0	27,0	22,0	14
XWR NW 08 HL 3/8	L	PN 315	10	R 3/8" K	12	17,0	28,0	24,0	17
XWR NW 08 HL 1/2	L	PN 316	10	R 1/2" K	14	23,0	34,0	30,0	19
XWR NW 10 HL	L	PN 315	12	R 3/8" K	12	17,0	28,0	24,0	17
XWR NW 10 HL 1/4	L	PN 315	12	R 1/4" K	12	17,0	28,0	24,0	17
XWR NW 10 HL 1/2	L	PN 315	12	R 1/2" K	14	23,0	34,0	30,0	19
XWR NW 10 HL 3/4	L	PN 315	12	R 3/4" K	16	28,0	42,0	35,0	27
XWR NW 13 HL	L	PN 315	15	R 1/2" K	14	21,0	34,0	28,0	19
XWR NW 13 HL 1/4	L	PN 315	15	R 1/4" K	12	21,0	34,0	28,0	19
XWR NW 13 HL 3/8	L	PN 315	15	R 3/8" K	12	21,0	34,0	28,0	19
XWR NW 16 HL	L	PN 315	18	R 1/2" K	14	23,5	36,0	31,0	24
XWR NW 16 HL 3/8	L	PN 315	18	R 3/8" K	12	23,5	36,0	31,0	24
XWR NW 16 HL 3/4	L	PN 315	18	R 3/4" K	16	27,5	42,0	35,0	27
XWRK NW 20 HL	L	PN 160	22	R 3/4" K	16	27,5	42,0	35,0	27
XWR NW 03 HS	S	PN 400	6	R 1/4" K	12	16,0	26,0	23,0	12
XWR NW 04 HS	S	PN 400	8	R 1/4" K	12	17,0	27,0	24,0	14
XWR NW 06 HS	S	PN 400	10	R 3/8" K	12	17,5	28,0	25,0	17
XWR NW 08 HS	S	PN 400	12	R 3/8" K	12	21,5	28,0	29,0	17
XWR NW 08 HS 1/2	S	PN 400	12	R 1/2" K	14	23,5	34,0	31,0	19
XWR NW 10 HS	S	PN 400	14	R 1/2" K	14	22,0	32,0	30,0	19
XWR NW 13 HS	S	PN 400	16	R 1/2" K	14	24,5	32,0	33,0	24
XWR NW 16 HS 1/2	S	PN 400	20	R 1/2" K	14	26,5	42,0	37,0	27
XWR NW 13 HS 3/8	S	PN 400	16	R 3/8" K	12	24,5	32,0	33,0	24

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XWMK Screw-in fitting, angle 90°



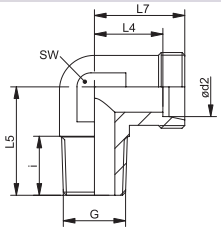
Connection 1: metric conical outer thread
Connection 2: metric cylindrical outer thread
Design: Screw-in fitting
Standard: DIN 2353
Material: Steel
Product versions: XWMK VA, Screw-in fitting, angle 90°, Stainless steel
WMK, Screw-in fitting, angle 90°, Steel

Sealing form 1: thread seal
Sealing form 2: 24° inner cone
Construction: Angle 90°
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G	i mm	L4 mm	L5 mm	L7 mm	SW mm
XWM 04 LL	LL	PN 100	4	M 8 x 1 K	8,0	11,0	17	15	9
XWM 04 LL 6	LL	PN 100	4	M 6 x 1 K	8,0	11,0	17	15	9
XWM 05 LL	LL	PN 100	5	M 8 x 1 K	8,0	9,5	17	15	9
XWM 06 LL 6	LL	PN 100	6	M 6 x 1 K	7,0	9,5	17	15	9
XWM 06 LL 8	LL	PN 100	6	M 8 x 1 K	8,0	9,5	17	15	9
XWM 06 LL	LL	PN 100	6	M 10 x 1 K	9,0	9,5	17	15	9
XWM 08 LL	LL	PN 100	8	M 10 x 1 K	10,0	11,5	20	17	12
XWM NW 04 HL	L	PN 315	6	M 10 x 1 K	8,0	12,0	20	19	12
XWM NW 04 HL 12	L	PN 315	6	M 12 x 1.5 K	12,0	12,0	22	19	12
XWM NW 06 HL	L	PN 315	8	M 12 x 1.5 K	12,0	14,0	26	21	12
XWM NW 08 HL	L	PN 315	10	M 14 x 1.5 K	11,5	15,0	27	22	14
XWM NW 08 HL 16	L	PN 315	10	M 16 x 1.5 K	11,5	15,0	28	22	14
XWM NW 10 HL	L	PN 315	12	M 16 x 1.5 K	11,5	17,0	28	24	17
XWM NW 13 HL	L	PN 315	15	M 18 x 1.5 K	13,5	21,0	32	28	19
XWM NW 16 HL	L	PN 315	18	M 22 x 1.5 K	15,0	23,5	36	31	24
XWM NW 03 HS	S	PN 400	6	M 12 x 1.5 K	12,0	16,0	26	23	12
XWM NW 04 HS	S	PN 400	8	M 14 x 1.5 K	12,0	17,0	27	24	14
XWM NW 06 HS	S	PN 400	10	M 16 x 1.5 K	12,0	17,5	28	25	17
XWM NW 08 HS	S	PN 400	12	M 18 x 1.5 K	12,0	21,5	28	29	17
XWM NW 10 HS	S	PN 400	14	M 20 x 1.5 K	14,0	22,0	32	30	19
XWM NW 13 HS	S	PN 400	16	M 22 x 1.5 K	14,0	24,5	32	33	24

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XWN Screw-in fitting, angle 90°



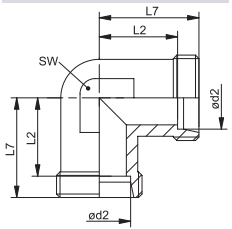
Connection 1: NPT external threads
Connection 2: metric cylindrical outer thread
Design: Screw-in fitting
Standard: DIN 2353
Material: Steel
Product versions: XWN VA, Screw-in fitting, angle 90°, Stainless steel
WN, Screw-in fitting, angle 90°, Steel

Sealing form 1: thread seal
Sealing form 2: 24° inner cone
Construction: Angle 90°
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	External pipe Ø mm	G	i mm	L4 mm	L5 mm	L7 mm	SW mm
XWN 04 LL	LL	PN 100	4	1/8" -27 NPT	8,0	11,0	17	15,0	9
XWN 05 LL	LL	PN 100	5	1/8" -27 NPT	8,0	11,0	17	15,0	9
XWN 06 LL	LL	PN 100	6	1/8" -27 NPT	8,0	9,5	17	15,0	9
XWN 08 LL	LL	PN 100	8	1/8" -27 NPT	10,0	11,5	20	17,0	12
XWN NW 04 HL	L	PN 315	6	1/8" -27 NPT	10,0	12,0	20	19,0	12
XWN NW 04 HL 1/4	L	PN 315	6	1/4" -18 NPT	12,0	14,0	26	21,0	12
XWN NW 04 HL 1/2	L	PN 315	6	1/2" -14 NPT	17,0	23,0	34	30,0	19
XWN NW 06 HL	L	PN 315	8	1/4" -18 NPT	12,0	14,0	26	21,0	12
XWN NW 06 HL 3/8	L	PN 315	8	3/8" -18 NPT	15,2	11,5	20	18,5	12
XWN NW 06 HL 1/2	L	PN 315	8	1/2" -14 NPT	17,5	15,0	26	22,0	12
XWN NW 08 HL	L	PN 315	10	1/4" -18 NPT	14,0	15,0	27	22,0	14
XWN NW 08 HL 3/8	L	PN 315	10	3/8" -18 NPT	15,2	15,0	27	22,0	14
XWN NW 10 HL	L	PN 315	12	3/8" -18 NPT	12,5	17,0	28	24,0	17
XWN NW 10 HL 1/4	L	PN 315	12	1/4" -18 NPT	14,0	17,0	28	24,0	17
XWN NW 10 HL 1/2	L	PN 315	12	1/2" -14 NPT	19,0	23,0	34	30,0	19
XWN NW 13 HL	L	PN 315	15	1/2" -14 NPT	18,5	21,0	34	28,0	19
XWN NW 13 HL 3/8	L	PN 315	15	3/8" -18 NPT	13,0	21,0	34	28,0	19
XWN NW 16 HL	L	PN 315	18	1/2" -14 NPT	20,0	23,5	36	31,0	24
XWN NW 16 HL 3/4	L	PN 315	18	3/4" -14 NPT	18,5	23,5	40	31,0	24
XWN NW 20 HL	L	PN 160	22	3/4" -14 NPT	18,5	27,5	42	35,0	27
XWN NW 25 HL	L	PN 160	28	1" -11.5 NPT	24,0	30,5	48	38,0	36
XWN NW 32 HL	L	PN 160	35	1.1/4" -11.5 NPT	25,5	34,5	54	45,0	41
XWN NW 40 HL	L	PN 160	42	1.1/2" -11.5 NPT	26,0	40,0	61	51,0	50
XWN NW 03 HS	S	PN 630	6	1/4" -18 NPT	12,0	16,0	26	23,0	12
XWN NW 04 HS	S	PN 630	8	1/4" -18 NPT	15,0	17,0	27	24,0	14
XWN NW 06 HS	S	PN 630	10	3/8" -18 NPT	12,0	17,5	28	25,0	17
XWN NW 08 HS	S	PN 630	12	3/8" -18 NPT	12,5	21,5	28	29,0	17
XWN NW 10 HS	S	PN 630	14	1/2" -14 NPT	18,0	22,0	34	30,0	19
XWN NW 13 HS	S	PN 400	16	1/2" -14 NPT	19,0	24,5	36	33,0	24
XWN NW 13 HS 3/4	S	PN 400	16	3/4" -14 NPT	20,0	24,5	40	33,0	24
XWN NW 16 HS	S	PN 400	20	3/4" -14 NPT	20,0	26,6	42	37,0	27
XWN NW 20 HS	S	PN 400	25	1" -11.5 NPT	24,0	30,0	48	42,0	36
XWN NW 25 HS	S	PN 400	30	1.1/4" -11.5 NPT	25,5	35,5	54	49,0	41
XWN NW 32 HS	S	PN 315	38	1.1/2" -11.5 NPT	26,0	41,0	61	57,0	50

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XW Fitting, angle 90°



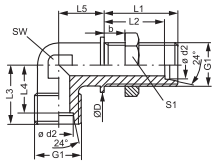
Connection 1 + 2: metric cylindrical outer thread
Design: Fitting
Standard: DIN 2353
Material: Steel
Product versions: XW VA, Fitting, angle 90°, Stainless steel
W, Fitting, angle 90°, Steel

Sealing form 1 + 2: 24° inner cone
Construction: Angle 90°
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	External pipe Ø mm	L2 mm	L7 mm	SW mm
XW 04 LL	LL	PN 100	4	11,0	15	9
XW 05 LL	LL	PN 100	5	9,5	15	9
XW 06 LL	LL	PN 100	6	9,5	15	9
XW 08 LL	LL	PN 100	8	11,5	17	12
XW 10 LL	LL	PN 100	10	12,5	18	14
XW 12 LL	LL	PN 100	12	13,0	19	17
XW NW 04 HL	L	PN 315	6	12,0	19	12
XW NW 06 HL	L	PN 315	8	14,0	21	12
XW NW 08 HL	L	PN 315	10	15,0	22	14
XW NW 10 HL	L	PN 315	12	17,0	24	17
XW NW 13 HL	L	PN 315	15	21,0	28	19
XW NW 16 HL	L	PN 315	18	23,5	31	24
XW NW 20 HL	L	PN 160	22	27,5	35	27
XW NW 25 HL	L	PN 160	28	30,5	38	36
XW NW 32 HL	L	PN 160	35	34,5	45	41
XW NW 40 HL	L	PN 160	42	40,0	51	50
XW NW 03 HS	S	PN 630	6	16,0	23	12
XW NW 04 HS	S	PN 630	8	17,0	24	14
XW NW 06 HS	S	PN 630	10	17,5	25	17
XW NW 08 HS	S	PN 630	12	21,5	29	17
XW NW 10 HS	S	PN 630	14	22,0	30	19
XW NW 13 HS	S	PN 400	16	24,5	33	24
XW NW 16 HS	S	PN 400	20	26,5	37	27
XW NW 20 HS	S	PN 400	25	30,0	42	36
XW NW 25 HS	S	PN 400	30	35,5	49	41
XW NW 32 HS	S	PN 315	38	41,0	57	50

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XSW Bulkhead fitting, angle 90



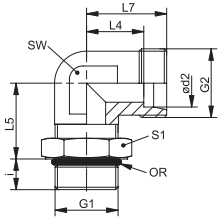
Connection 1 + 2: metric cylindrical outer thread
Design: Bulkhead fitting
Standard: DIN 2353
Material: Steel
Product versions: XSW VA, Bulkhead fitting, angle 90, Stainless steel
SW, Bulkhead fitting, angle 90, Steel

Sealing form 1 + 2: 24° inner cone
Construction: Angle 90°
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	Ø D mm	b mm	L1 mm	L2 mm	L3 mm	L4 mm	L5 mm	SW mm	S1
XSW NW 04 HL	L	PN 315	6	M 12 x 1.5	17	16	34	27,0	19	12,0	14	12	17
XSW NW 06 HL	L	PN 315	8	M 14 x 1.5	19	16	34	27,0	21	14,0	17	12	19
XSW NW 08 HL	L	PN 315	10	M 16 x 1.5	22	16	35	28,0	22	15,0	18	14	22
XSW NW 10 HL	L	PN 315	12	M 18 x 1.5	24	16	36	29,0	24	17,0	20	17	24
XSW NW 13 HL	L	PN 315	15	M 22 x 1.5	27	16	38	31,0	28	21,0	23	19	30
XSW NW 16 HL	L	PN 315	18	M 26 x 1.5	32	16	40	32,5	31	23,5	24	24	36
XSW NW 20 HL	L	PN 160	22	M 30 x 2	36	16	42	34,5	35	27,5	30	27	41
XSW NW 25 HL	L	PN 160	28	M 36 x 2	42	16	43	35,5	38	30,5	34	36	46
XSW NW 32 HL	L	PN 160	35	M 45 x 2	50	16	47	36,5	45	34,5	39	41	55
XSW NW 40 HL	L	PN 160	42	M 52 x 2	60	16	47	36,0	51	40,0	43	50	65
XSW NW 03 HS	S	PN 630	6	M 14 x 1.5	19	16	36	29,0	23	16,0	17	12	19
XSW NW 04 HS	S	PN 630	8	M 16 x 1.5	22	16	36	29,0	24	17,0	18	14	22
XSW NW 06 HS	S	PN 630	10	M 18 x 1.5	24	16	16	29,5	25	17,5	20	17	24
XSW NW 08 HS	S	PN 630	12	M 20 x 1.5	27	16	38	30,5	29	21,5	21	17	27
XSW NW 10 HS	S	PN 630	14	M 22 x 1.5	27	16	40	32,0	30	22,0	23	19	30
XSW NW 13 HS	S	PN 400	16	M 24 x 1.5	30	16	40	31,5	33	24,5	24	24	32
XSW NW 16 HS	S	PN 400	20	M 30 x 2	36	16	44	33,5	37	26,5	30	27	41
XSW NW 20 HS	S	PN 400	25	M 36 x 2	42	16	47	35,0	42	30,0	34	36	46
XSW NW 25 HS	S	PN 400	30	M 42 x 2	50	16	51	37,5	49	35,5	39	41	50
XSW NW 32 HS	S	PN 315	38	M 52 x 2	60	16	53	37,0	57	41,0	43	50	65

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XEWOR Screw-in fitting, angle 90°



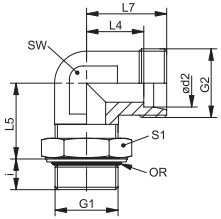
Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Adjustable direction screw-in fitting
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised
Product versions: EWOR, Screw-in fitting, angle 90°, Socket with union nut and cutting ring

Sealing form 1: form G
Sealing form 2: 24° inner cone
Construction: Angle 90°
Material: Steel

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	i mm	L4 mm	L5 mm	L7 mm	SW mm	S1	OR
XEWOR NW 04 HL	L	PN 250	6	G 1/8" -28	M 12 x 1.5	8	12,0	21,5	19	12	14	8.0 x 1.5
XEWOR NW 06 HL	L	PN 250	8	G 1/4" -19	M 14 x 1.5	12	14,0	26,0	21	14	19	10.0 x 2.0
XEWOR NW 06 HL 3/8	L	PN 250	8	G 3/8" -19	M 14 x 1.5	12	17,0	28,5	24	17	22	14.0 x 2.5
XEWOR NW 08 HL	L	PN 250	10	G 1/4" -19	M 16 x 1.5	12	15,0	26,0	22	14	19	10.0 x 2.0
XEWOR NW 10 HL	L	PN 250	12	G 3/8" -19	M 18 x 1.5	12	17,0	28,5	24	17	22	14.0 x 2.5
XEWOR NW 13 HL	L	PN 250	15	G 1/2" -14	M 22 x 1.5	14	21,0	33,5	28	19	27	18.0 x 3.0
XEWOR NW 16 HL	L	PN 160	18	G 1/2" -14	M 26 x 1.5	14	23,5	36,5	31	24	27	18.0 x 3.0
XEWOR NW 20 HL	L	PN 160	22	G 3/4" -14	M 30 x 2	16	27,5	41,0	35	27	32	23.5 x 3.0
XEWOR NW 25 HL	L	PN 100	28	G 1" -11	M 36 x 2	18	30,5	45,0	38	36	41	29.0 x 3.5
XEWOR NW 32 HL	L	PN 100	35	G 1.1/4" -11	M 45 x 2	20	34,5	50,0	45	41	50	38.0 x 3.5
XEWOR NW 40 HL	L	PN 100	42	G 1.1/2" -11	M 52 x 2	22	40,0	56,0	51	50	55	44.0 x 3.5
XEWOR NW 03 HS	S	PN 630	6	G 1/4" -19	M 14 x 1.5	12	15,0	26,0	22	12	19	10.0 x 2.0
XEWOR NW 04 HS	S	PN 630	8	G 1/4" -19	M 16 x 1.5	12	17,0	27,0	24	14	19	10.0 x 2.0
XEWOR NW 06 HS	S	PN 630	10	G 3/8" -19	M 18 x 1.5	12	17,5	28,5	25	17	22	14.0 x 2.5
XEWOR NW 08 HS	S	PN 630	12	G 3/8" -19	M 20 x 1.5	12	21,5	32,5	29	19	22	14.0 x 2.5
XEWOR NW 10 HS	S	PN 630	14	G 1/2" -14	M 22 x 1.5	14	22,0	33,5	30	19	27	18.0 x 3.0
XEWOR NW 13 HS	S	PN 400	16	G 1/2" -14	M 24 x 1.5	14	24,5	36,5	33	24	27	18.0 x 3.0
XEWOR NW 16 HS	S	PN 400	20	G 3/4" -14	M 30 x 2	16	26,5	41,0	39	27	32	23.5 x 3.0
XEWOR NW 20 HS	S	PN 400	25	G 1" -11	M 36 x 2	18	30,0	45,0	42	36	41	29.0 x 3.5
XEWOR NW 25 HS	S	PN 250	30	G 1.1/4" -11	M 42 x 2	20	35,5	50,0	49	41	50	38.0 x 3.5
XEWOR NW 32 HS	S	PN 250	38	G 1.1/2" -11	M 52 x 2	22	41,0	56,0	57	50	55	44.0 x 3.5

PN = Nominal pressure PB = Max. operating pressure Series: LL = Very light L = Light S = Heavy Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XEWORK Screw-in fitting, angle 90°



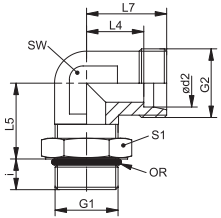
Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Adjustable direction screw-in fitting
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised
Product versions: EWORK, Screw-in fitting, angle 90°, Socket with union nut and cutting ring

Sealing form 1: O-ring and spacer diaphragm ring
Sealing form 2: 24° inner cone
Construction: Angle 90°
Material: Steel

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	i mm	L4 mm	L5 mm	L7 mm	SW mm	S1	OR
XEWORK 04 LL	LL	PN 250	4	G 1/8" -28	M 8 x 1	7,1	11,3	20	15	11	14	7.65 x 1.78
XEWORK 06 LL	LL	PN 250	6	G 1/8" -28	M 10 x 1	7,1	11,3	20	15	11	14	7.65 x 1.78
XEWORK NW 04 HL	L	PN 315	6	G 1/8" -28	M 12 x 1.5	7,0	14,0	19	21	14	14	7.65 x 1.78
XEWORK NW 06 HL	L	PN 315	8	G 1/4" -19	M 14 x 1.5	9,0	16,0	23	23	14	19	10.78 x 2.62
XEWORK NW 06 HL 3/8	L	PN 315	8	G 3/8" -19	M 14 x 1.5	9,0	16,0	23	23	19	22	13.94 x 2.62
XEWORK NW 08 HL	L	PN 315	10	G 1/4" -19	M 16 x 1.5	9,0	17,0	25	24	19	19	10.77 x 2.62
XEWORK NW 10 HL	L	PN 250	12	G 3/8" -19	M 18 x 1.5	9,0	19,0	28	26	19	22	13.94 x 2.62
XEWORK NW 13 HL	L	PN 250	15	G 1/2" -14	M 22 x 1.5	13,0	21,0	30	28	22	27	17.86 x 2.62
XEWORK NW 16 HL	L	PN 250	18	G 1/2" -14	M 26 x 1.5	13,0	24,0	36	31	27	27	17.86 x 2.62
XEWORK NW 20 HL	L	PN 160	22	G 3/4" -14	M 30 x 2	13,0	28,0	36	35	30	36	23.47 x 2.62
XEWORK NW 25 HL	L	PN 160	28	G 1" -11	M 36 x 2	15,0	31,0	44	38	36	41	29.74 x 3.53
XEWORK NW 32 HL	L	PN 160	35	G 1.1/4" -11	M 45 x 2	15,0	38,0	50	48	50	50	37.69 x 3.53
XEWORK NW 40 HL	L	PN 160	42	G 1.1/2" -11	M 52 x 2	15,0	38,0	52	49	50	55	44.04 x 3.53
XEWORK NW 03 HS	S	PN 315	6	G 1/4" -19	M 14 x 1.5	9,0	15,0	23	22	14	19	10.77 x 2.62
XEWORK NW 04 HS	S	PN 315	8	G 1/4" -19	M 16 x 1.5	9,0	17,0	27	24	19	19	10.77 x 2.62
XEWORK NW 06 HS	S	PN 250	10	G 3/8" -19	M 18 x 1.5	9,0	18,0	29	25	19	22	13.94 x 2.62
XEWORK NW 08 HS	S	PN 250	12	G 3/8" -19	M 20 x 1.5	9,0	22,0	29	29	22	22	13.94 x 2.62
XEWORK NW 10 HS	S	PN 250	14	G 1/2" -14	M 22 x 1.5	13,0	25,0	36	33	27	27	18.00 x 3.00
XEWORK NW 13 HS	S	PN 250	16	G 1/2" -14	M 24 x 1.5	13,0	25,0	36	33	27	27	17.86 x 2.62
XEWORK NW 16 HS	S	PN 250	20	G 3/4" -14	M 30 x 2	12,0	28,0	39	38	30	36	23.47 x 2.62
XEWORK NW 20 HS	S	PN 250	25	G 1" -11	M 36 x 2	14,0	30,0	44	42	36	41	29.74 x 3.53
XEWORK NW 25 HS	S	PN 160	30	G 1.1/4" -11	M 42 x 2	15,0	36,0	49	49	50	50	37.69 x 3.53
XEWORK NW 32 HS	S	PN 160	38	G 1.1/2" -11	M 52 x 2	15,0	34,0	55	50	50	55	44.04 x 3.53

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XEWOM Screw-in fitting, angle 90°



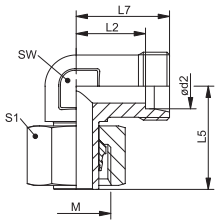
Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Adjustable direction screw-in fitting
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised
Product versions: EWOM, Screw-in fitting, angle 90°, Socket with union nut and cutting ring

Sealing form 1: O-ring seal on screw-in socket
Sealing form 2: 24° inner cone
Construction: Angle 90°
Material: Steel

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	i mm	L4 mm	L5 mm	L7 mm	SW mm	S1	OR
XEWOM 04 LL	LL	PN 100	4	M 8 x 1	M 8 x 1	7,1	11,3	19,8	15	12	12	6.1 x 1.6
XEWOM 04 LL 10	LL	PN 100	4	M 10 x 1	M 8 x 1	7,1	11,3	19,8	15	11	14	8.0 x 1.5
XEWOM 06 LL	LL	PN 100	6	M 10 x 1	M 10 x 1	7,1	9,8	19,8	15	14	14	8.0 x 1.5
XEWOM 06 LL 12-1.5	LL	PN 100	6	M 12 x 1.5	M 10 x 1	9,6	12,8	23,2	18	14	17	9.3 x 2.4
XEWOM NW 04 HL	L	PN 250	6	M 10 x 1	M 12 x 1.5	7,0	14,0	20,0	21	14	14	8.0 x 1.5
XEWOM NW 06 HL	L	PN 250	8	M 12 x 1.5	M 14 x 1.5	10,0	16,0	22,0	23	14	17	9.3 x 2.4
XEWOM NW 08 HL	L	PN 250	10	M 14 x 1.5	M 16 x 1.5	10,0	17,0	25,0	24	19	19	11.3 x 2.4
XEWOM NW 10 HL	L	PN 250	12	M 16 x 1.5	M 18 x 1.5	10,0	19,0	26,0	26	19	22	13.3 x 2.4
XEWOM NW 13 HL	L	PN 250	15	M 18 x 1.5	M 22 x 1.5	11,0	21,0	30,0	28	22	24	15.3 x 2.4
XEWOM NW 13 HL 22	L	PN 315	15	M 22 x 1.5	M 22 x 1.5	12,0	21,0	33,0	24	22	27	17.3 x 2.4
XEWOM NW 16 HL	L	PN 160	18	M 22 x 1.5	M 26 x 1.5	12,0	24,0	33,0	31	27	27	19.3 x 2.4
XEWOM NW 20 HL	L	PN 160	22	M 26 x 1.5	M 30 x 2	14,0	28,0	34,0	35	27	32	23.3 x 2.4
XEWOM NW 20 HL 27	L	PN 160	22	M 27 x 2	M 30 x 2	14,0	28,0	35,0	35	30	32	23.6 x 2.9
XEWOM NW 25 HL	L	PN 100	28	M 33 x 2	M 36 x 2	14,0	31,0	38,0	38	36	41	29.5 x 3.0
XEWOM NW 32 HL	L	PN 100	35	M 42 x 2	M 45 x 2	14,0	38,0	48,0	48	50	50	38.0 x 3.0
XEWOM NW 40 HL	L	PN 100	42	M 48 x 2	M 52 x 2	16,0	38,0	49,0	49	50	55	44.5 x 3.0
XEWOM NW 03 HS	S	PN 630	6	M 12 x 1.5	M 14 x 1.5	10,0	15,0	22,0	22	14	17	9.3 x 2.4
XEWOM NW 04 HS	S	PN 630	8	M 14 x 1.5	M 15 x 1.5	10,0	17,0	26,0	24	19	19	11.3 x 2.4
XEWOM NW 06 HS	S	PN 630	10	M 16 x 1.5	M 18 x 1.5	11,0	18,0	27,0	25	19	22	13.3 x 2.4
XEWOM NW 08 HS	S	PN 630	12	M 18 x 1.5	M 20 x 1.5	12,0	22,0	31,0	29	22	24	15.3 x 2.4
XEWOM NW 10 HS	S	PN 630	14	M 20 x 1.5	M 22 x 1.5	14,0	22,0	34,0	31	27	27	17.3 x 2.4
XEWOM NW 13 HS	S	PN 400	16	M 22 x 1.5	M 24 x 1.5	14,0	25,0	35,0	33	27	27	19.3 x 2.4
XEWOM NW 16 HS	S	PN 400	20	M 27 x 2	M 30 x 2	16,0	28,0	39,0	38	30	32	23.5 x 3.0
XEWOM NW 20 HS	S	PN 315	25	M 33 x 2	M 36 x 2	16,0	30,0	44,0	42	36	41	29.5 x 3.0
XEWOM NW 25 HS	S	PN 250	30	M 42 x 2	M 42 x 2	17,0	36,0	51,0	49	50	50	38.0 x 3.0
XEWOM NW 32 HS	S	PN 200	38	M 48 x 2	M 52 x 2	19,0	34,0	54,0	50	50	55	44.5 x 3.0

PN = Nominal pressure PB = Max. operating pressure Series: LL = Very light L = Light S = Heavy Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XVEW Fitting, angle 90°



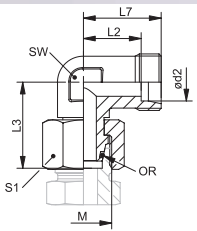
Connection 1: metric nut thread
Connection 2: metric cylindrical outer thread
Design: Adjustable direction fitting
Standard: DIN 2353
Material: Steel
Product versions: XVEW VA, Fitting, angle 90°, Stainless steel
VEW, Fitting, angle 90°, Steel

Sealing form 1: Pipe socket with cutting ring
Sealing form 2: 24° inner cone
Construction: Angle 90°
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	M	L2 mm	L5 mm	L7 mm	SW mm	S1
XVEW NW 04 HL	L	PN 315	6	M 12 x 1.5	12,0	26,0	19	12	14
XVEW NW 06 HL	L	PN 315	8	M 14 x 1.5	14,0	27,5	21	12	17
XVEW NW 08 HL	L	PN 315	10	M 16 x 1.5	15,0	29,0	22	14	19
XVEW NW 10 HL	L	PN 315	12	M 18 x 1.5	17,0	29,5	24	17	22
XVEW NW 13 HL	L	PN 315	15	M 22 x 1.5	21,0	32,5	28	19	27
XVEW NW 16 HL	L	PN 315	18	M 26 x 1.5	23,5	35,5	31	24	32
XVEW NW 20 HL	L	PN 160	22	M 30 x 2	27,5	38,5	35	27	36
XVEW NW 25 HL	L	PN 160	28	M 36 x 2	30,5	41,5	38	36	41
XVEW NW 32 HL	L	PN 160	35	M 45 x 2	34,5	51,0	45	41	50
XVEW NW 40 HL	L	PN 160	42	M 52 x 2	40,0	56,0	51	50	60
XVEW NW 03 HS	S	PN 630	6	M 14 x 1.5	16,0	27,0	23	12	17
XVEW NW 04 HS	S	PN 630	8	M 16 x 1.5	17,0	27,5	24	14	19
XVEW NW 06 HS	S	PN 630	10	M 18 x 1.5	17,5	30,0	25	17	22
XVEW NW 08 HS	S	PN 630	12	M 20 x 1.5	21,5	31,0	29	17	24
XVEW NW 10 HS	S	PN 630	14	M 22 x 1.5	22,0	35,0	30	19	27
XVEW NW 13 HS	S	PN 400	16	M 24 x 1.5	24,5	36,5	33	24	30
XVEW NW 16 HS	S	PN 400	20	M 30 x 2	26,5	44,5	37	27	36
XVEW NW 20 HS	S	PN 400	25	M 36 x 2	30,0	50,0	42	36	46
XVEW NW 25 HS	S	PN 400	30	M 42 x 2	35,5	55,0	49	41	50
XVEW NW 32 HS	S	PN 315	38	M 52 x 2	41,0	63,0	57	50	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XVEWO Fitting, angle 90°



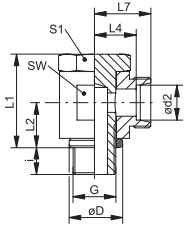
Connection 1: metric nut thread
Connection 2: metric cylindrical outer thread
Design: Adjustable direction fitting
Standard: ISO 8434-4
Material: Steel
Product versions: XVEWO VA, Fitting, angle 90°, Stainless steel
VEWO, Fitting, angle 90°, Steel

Sealing form 1: 24° outer cone with O-ring
Sealing form 2: 24° inner cone
Construction: Angle 90°
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	M	L2 mm	L3 mm	L7 mm	SW mm	S1	OR
XVEWO NW 04 HL	L	PN 315	6	M 12 x 1.5	12,0	26,0	19	12	14	4.0 x 1.5
XVEWO NW 06 HL	L	PN 315	8	M 14 x 1.5	14,0	27,5	21	12	17	6.0 x 1.5
XVEWO NW 08 HL	L	PN 315	10	M 16 x 1.5	15,0	29,0	22	14	19	7.5 x 1.5
XVEWO NW 10 HL	L	PN 315	12	M 18 x 1.5	17,0	29,5	24	17	22	9.0 x 1.5
XVEWO NW 13 HL	L	PN 315	15	M 22 x 1.5	21,0	32,5	28	19	27	12.0 x 2.0
XVEWO NW 16 HL	L	PN 315	18	M 26 x 1.5	23,5	35,5	31	24	32	15.0 x 2.0
XVEWO NW 20 HL	L	PN 160	22	M 30 x 2	27,5	38,5	35	27	36	20.0 x 2.0
XVEWO NW 25 HL	L	PN 160	28	M 36 x 2	30,5	41,5	38	36	41	26.0 x 2.0
XVEWO NW 32 HL	L	PN 160	35	M 45 x 2	34,5	51,0	45	41	50	32.0 x 2.5
XVEWO NW 40 HL	L	PN 160	42	M 52 x 2	40,0	56,0	51	50	60	38.0 x 2.5
XVEWO NW 03 HS	S	PN 630	6	M 14 x 1.5	16,0	27,0	23	12	17	4.0 x 1.5
XVEWO NW 04 HS	S	PN 630	8	M 16 x 1.5	17,0	27,5	24	14	19	6.0 x 1.5
XVEWO NW 06 HS	S	PN 630	10	M 18 x 1.5	17,5	30,0	25	17	22	7.5 x 1.5
XVEWO NW 08 HS	S	PN 630	12	M 20 x 1.5	21,5	31,0	29	17	24	9.0 x 1.5
XVEWO NW 10 HS	S	PN 630	14	M 22 x 1.5	22,0	35,0	30	19	27	10.0 x 2.0
XVEWO NW 13 HS	S	PN 400	16	M 24 x 1.5	24,5	36,5	33	24	30	12.0 x 2.0
XVEWO NW 16 HS	S	PN 400	20	M 30 x 2	26,5	44,5	37	27	36	16.3 x 2.4
XVEWO NW 20 HS	S	PN 400	25	M 36 x 2	30,0	50,0	42	36	46	20.3 x 2.4
XVEWO NW 25 HS	S	PN 400	30	M 42 x 2	35,5	55,0	49	41	50	25.3 x 2.4
XVEWO NW 32 HS	S	PN 315	38	M 52 x 2	41,0	63,0	57	50	60	33.3 x 2.4

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XSWR — Banjo fitting, angle 90°



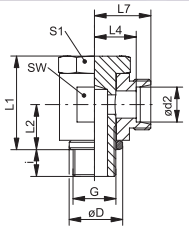
Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Banjo fitting
Standard: DIN 2353
Material: Steel
Product versions: XSWR VA, Banjo fitting, angle 90°, Stainless steel
SWR, Banjo fitting, angle 90°, Steel

Sealing form 1: Edge sealing ring
Sealing form 2: 24° inner cone
Construction: Angle 90°
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G	Ø D mm	i mm	L1 mm	L2 mm	L4 mm	L7 mm	SW mm	S1
XSWR 04 LL	LL	PN 100	4	G 1/8" -28	14,5	6	21,0	10,0	11,5	15,5	14	14
XSWR 05 LL	LL	PN 100	5	G 1/8" -28	14,5	6	21,5	10,0	10,0	14,5	14	14
XSWR 06 LL	LL	PN 100	6	G 1/8" -28	14,5	6	21,5	10,0	10,0	14,5	14	14
XSWR 08 LL	LL	PN 100	8	G 1/8" -28	14,5	6	21,0	10,0	11,0	16,5	14	14
XSWR NW 13 HL 3/8	L	PN 250	15	G 3/8" -19	22,5	9	37,5	18,0	19,0	26,0	27	22

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XSWM — Banjo fitting, angle 90°



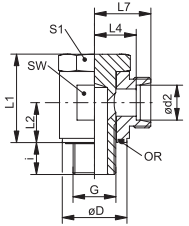
Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Banjo fitting
Standard: DIN 2353
Material: Steel
Product versions: XSWM VA, Banjo fitting, angle 90°, Stainless steel
SWM, Banjo fitting, angle 90°, Steel

Sealing form 1: Edge sealing ring
Sealing form 2: 24° inner cone
Construction: Angle 90°
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G	Ø D mm	i mm	L1 mm	L2 mm	L4 mm	L7 mm	SW mm	S1
XSWM 04 LL	LL	PN 100	4	M 8 x 1	12,5	6	17,0	8	10,5	14,5	12	14
XSWM 05 LL	LL	PN 100	5	M 8 x 1	12,5	6	17,0	10	11,5	17,0	14	14
XSWM 06 LL	LL	PN 100	6	M 10 x 1	14,0	6	21,0	10	10,0	15,5	14	14
XSWM 08 LL	LL	PN 100	8	M 10 x 1	14,0	6	21,0	10	11,0	16,5	14	14
XSWM NW 04 HL 12	L	PN 250	6	M 12 x 1.5	17,0	9	27,5	13	12,5	19,5	17	17

PN = Nominal pressure PB = Max. operating pressure Series: LL = Very light L = Light S = Heavy Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XSDOR Banjo fitting, throttle free, angle 90°



Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Banjo coupling, throttle free
Standard: DIN 2353
Material: Steel
Product versions: XSDOR VA, Banjo fitting, throttle free, angle 90°, Stainless steel
SDOR, Banjo fitting, throttle free, angle 90°, Steel

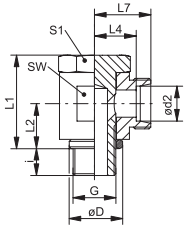
Sealing form 1: Shape F
Sealing form 2: 24° inner cone
Construction: Angle 90°
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G	Ø D mm	i mm	L1 mm	L2 mm	L4 mm	L7 mm	SW mm	S1	OR
XSDOR 04 LL	LL	PN 100	4	G 1/8" -28	14,5	8,0	23,5	10,5	14,0	18,0	17	17	7.65 x 1.78
XSDOR 06 LL	LL	PN 100	6	G 1/8" -28	14,5	8,0	23,5	10,5	13,5	19,0	17	17	7.65 x 1.78
XSDOR 08 LL	LL	PN 100	8	G 1/8" -28	14,5	8,0	23,5	10,5	13,5	19,0	17	17	7.65 x 1.78
XSDOR NW 04 HL	L	PN 315	6	G 1/8" -28	14,5	8,0	23,5	10,5	12,0	19,0	17	17	7.65 x 1.78
XSDOR NW 06 HL	L	PN 315	8	G 1/4" -19	19,0	13,0	29,0	14,0	14,5	21,5	22	19	11.10 x 1.78
XSDOR NW 08 HL	L	PN 315	10	G 1/4" -19	19,0	12,5	29,0	14,0	15,5	22,5	22	19	11.10 x 1.78
XSDOR NW 10 HL 1/4	L	PN 315	12	G 1/4" -19	19,0	12,0	34,0	16,5	18,0	25,0	27	19	11.10 x 1.78
XSDOR NW 10 HL	L	PN 315	12	G 3/8" -19	22,5	12,0	35,0	16,5	18,0	25,0	27	24	14.00 x 1.78
XSDOR NW 10 HL 1/2	L	PN 315	12	G 1/2" -14	27,0	14,0	46,0	21,5	20,5	27,5	32	27	18.77 x 1.78
XSDOR NW 13 HL	L	PN 315	15	G 1/2" -14	27,0	12,0	46,0	21,5	21,5	28,5	32	27	18.77 x 1.78
XSDOR NW 16 HL	L	PN 315	18	G 1/2" -14	27,0	14,0	46,0	21,5	21,0	28,5	32	27	18.77 x 1.78
XSDOR NW 20 HL	L	PN 160	22	G 3/4" -14	32,5	16,0	52,0	24,0	27,5	35,0	41	36	23.81 x 2.62
XSDOR NW 25 HL	L	PN 160	28	G 1" -11	40,0	18,0	64,0	30,5	32,0	39,5	50	46	29.82 x 2.62
XSDOR NW 32 HL	L	PN 160	35	G 1.1/4" -11	50,0	20,0	75,0	35,5	36,0	46,5	60	50	37.77 x 2.62
XSDOR NW 40 HL	L	PN 160	42	G 1.1/2" -11	55,5	22,0	74,0	40,5	40,5	51,5	70	60	41.28 x 3.53
XSDOR NW 03 HS	S	PN 400	6	G 1/4" -19	19,0	13,0	29,0	14,0	16,5	23,5	22	19	11.10 x 1.78
XSDOR NW 04 HS	S	PN 400	8	G 1/4" -19	19,0	13,0	29,0	14,0	16,5	23,5	22	19	11.10 x 1.78
XSDOR NW 06 HS	S	PN 400	10	G 3/8" -19	22,5	12,0	35,5	16,5	18,5	26,0	27	24	14.00 x 1.78
XSDOR NW 08 HS	S	PN 400	12	G 3/8" -19	22,5	12,0	35,0	16,5	18,5	26,0	27	24	14.00 x 1.78
XSDOR NW 10 HS	S	PN 400	14	G 1/2" -14	27,0	12,0	46,0	21,5	22,5	30,5	30	27	18.77 x 1.78
XSDOR NW 13 HS	S	PN 315	16	G 1/2" -14	27,0	14,0	46,0	21,5	22,0	30,5	30	27	18.77 x 1.78
XSDOR NW 16 HS	S	PN 315	20	G 3/4" -14	32,5	16,0	52,0	24,0	26,5	37,0	41	36	23.81 x 2.62
XSDOR NW 20 HS	S	PN 250	25	G 1" -11	40,0	19,0	63,0	30,5	31,5	43,5	50	46	29.82 x 2.62
XSDOR NW 25 HS	S	PN 160	30	G 1.1/4" -11	50,0	20,0	75,0	35,5	37,0	50,5	60	50	37.77 x 2.62
XSDOR NW 32 HS	S	PN 160	38	G 1.1/2" -11	55,5	22,0	74,0	40,5	41,5	57,5	70	60	41.28 x 3.53

PN = Nominal pressure PB = Max. operating pressure Series: LL = Very light L = Light S = Heavy Ø = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XSDR Banjo fitting, throttle free, angle 90°



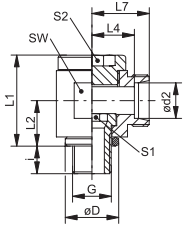
Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Banjo coupling, throttle free
Standard: DIN 2353
Material: Steel
Product versions: XSDR VA, Banjo fitting, throttle free, angle 90°,
SDR, Banjo fitting, throttle free, angle 90°, Steel

Sealing form 1: Edge sealing ring
Sealing form 2: 24° inner cone
Construction: Angle 90°
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G	Ø D mm	i mm	L1 mm	L2 mm	L4 mm	L7 mm	SW mm	S1
XSDR NW 04 HL	L	PN 250	6	G 1/8" -28	14	8	24	10,5	12,0	19,0	17	17
XSDR NW 04 HL 1/4	L	PN 250	6	G 1/4" -19	18	12	30	14,0	14,5	21,5	22	19
XSDR NW 06 HL	L	PN 250	8	G 1/4" -19	18	12	30	14,0	14,5	21,5	22	19
XSDR NW 08 HL	L	PN 250	10	G 1/4" -19	18	12	30	14,0	15,5	22,5	22	19
XSDR NW 10 HL 1/4	L	PN 250	12	G 1/4" -19	22	12	30	14,0	15,5	22,5	22	19
XSDR NW 10 HL	L	PN 250	12	G 3/8" -19	22	12	36	16,5	18,0	25,0	27	24
XSDR NW 10 HL 1/2	L	PN 250	12	G 1/2" -14	26	14	45	21,5	20,5	28,5	32	30
XSDR NW 13 HL	L	PN 250	15	G 1/2" -14	26	14	45	21,5	21,5	28,5	32	30
XSDR NW 16 HL	L	PN 250	18	G 1/2" -14	26	14	45	21,5	21,0	28,5	32	30
XSDR NW 20 HL	L	PN 160	22	G 3/4" -14	32	16	53	24,0	27,5	35,0	41	36
XSDR NW 25 HL	L	PN 160	28	G 1" -11	39	18	66	30,5	32,0	39,5	50	46
XSDR NW 32 HL	L	PN 160	35	G 1.1/4" -11	49	20	76	35,5	36,0	46,5	60	55
XSDR NW 40 HL	L	PN 160	42	G 1.1/2" -11	55	22	87	40,5	40,5	51,5	70	60
XSDR NW 03 HS	S	PN 315	6	G 1/4" -19	18	12	30	14,0	16,5	23,5	22	19
XSDR NW 04 HS	S	PN 315	8	G 1/4" -19	18	12	30	14,0	16,5	23,5	22	19
XSDR NW 06 HS	S	PN 315	10	G 3/8" -19	22	12	36	16,5	18,5	26,0	27	24
XSDR NW 08 HS	S	PN 315	12	G 3/8" -19	22	12	36	16,5	18,5	26,0	27	24
XSDR NW 10 HS	S	PN 315	14	G 1/2" -14	26	14	45	21,5	22,5	30,5	32	30
XSDR NW 13 HS	S	PN 315	16	G 1/2" -14	26	14	45	21,5	22,0	30,5	32	30
XSDR NW 16 HS	S	PN 160	20	G 3/4" -14	32	16	53	24,0	26,5	37,0	41	36
XSDR NW 20 HS	S	PN 160	25	G 1" -11	39	18	66	30,5	31,5	43,5	50	46
XSDR NW 25 HS	S	PN 160	30	G 1.1/4" -11	49	20	76	35,5	37,0	50,5	60	55
XSDR NW 32 HS	S	PN 160	38	G 1.1/2" -11	55	22	87	40,5	41,5	57,5	70	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XDWR Banjo fitting, throttle free, angle 90°

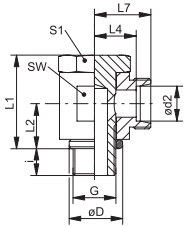


Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Banjo coupling, throttle free
Standard: DIN 2353
Material: Steel
Sealing form 1: Edge sealing ring
Sealing form 2: 24° inner cone
Construction: Angle 90°
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised
Product versions: XDWR VA, Banjo fitting, throttle free, angle 90°, Socket (without union nut and cutting ring)
DWR, Banjo fitting, throttle free, angle 90°, Socket with union nut and cutting ring

Identification	Series	Working pressure bar	Ø d2 mm	G	Ø D mm	i mm	L1 mm	L2 mm	L4 mm	L7 mm	SW mm	S1	S2
XDWR NW 04 HL	L	PN 160	6	G 1/8" -28	14	8	24	12	12,5	19	19	6	6
XDWR NW 06 HL	L	PN 160	8	G 1/4" -19	18	12	30	16	14,5	21	22	8	8
XDWR NW 08 HL	L	PN 100	10	G 1/4" -19	18	12	30	16	15,5	22	22	8	8
XDWR NW 10 HL 1/4	L	PN 100	12	G 1/4" -19	18	12	37	18	15,5	22	22	8	8
XDWR NW 10 HL	L	PN 100	12	G 3/8" -19	22	12	37	18	18,0	25	27	10	10
XDWR NW 13 HL	L	PN 100	15	G 1/2" -14	26	14	42	21	22,0	29	32	12	12
XDWR NW 16 HL	L	PN 100	18	G 1/2" -14	26	14	46	23	21,5	29	36	12	12
XDWR NW 20 HL	L	PN 100	22	G 3/4" -14	32	16	58	28	28,5	36	46	17	17
XDWR NW 25 HL	L	PN 100	28	G 1" -11	39	18	64	32	31,5	39	50	22	22
XDWR NW 32 HL	L	PN 63	35	G 1.1/4" -11	49	20	76	37	35,5	46	60	27	27
XDWR NW 40 HL	L	PN 63	42	G 1.1/2" -11	55	22	85	42	40,0	51	70	32	32
XDWR NW 03 HS	S	PN 160	6	G 1/4" -19	18	12	30	16	16,5	23	22	8	8
XDWR NW 04 HS	S	PN 160	8	G 1/4" -19	18	12	30	16	16,5	23	22	8	8
XDWR NW 06 HS	S	PN 100	10	G 3/8" -19	22	12	37	18	18,5	26	27	10	10
XDWR NW 08 HS	S	PN 100	12	G 3/8" -19	22	12	37	18	18,5	26	27	10	10
XDWR NW 10 HS	S	PN 100	14	G 1/2" -14	26	14	42	21	23,0	31	32	12	12
XDWR NW 13 HS	S	PN 100	16	G 1/2" -14	26	14	46	23	22,5	31	36	12	12
XDWR NW 16 HS	S	PN 100	20	G 3/4" -14	32	16	58	28	27,5	38	46	17	17
XDWR NW 20 HS	S	PN 100	25	G 1" -11	39	18	64	32	31,0	43	50	22	22
XDWR NW 25 HS	S	PN 63	30	G 1.1/4" -11	49	20	76	37	36,5	50	60	27	27
XDWR NW 32 HS	S	PN 63	38	G 1.1/2" -11	55	22	85	42	41,0	57	70	32	32

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XSDM Banjo fitting, throttle free, angle 90°



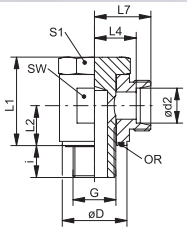
Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Banjo coupling, throttle free
Standard: DIN 2353
Material: Steel
Product versions: SDM, Banjo fitting, throttle free, angle 90°, Steel

Sealing form 1: Edge sealing ring
Sealing form 2: 24° inner cone
Construction: Angle 90°
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G	Ø D mm	i mm	L1 mm	L2 mm	L4 mm	L7 mm	SW mm	S1
XSDM NW 04 HL	L	PN 250	6	M 10 x 1	14	8	24,0	10,5	12,0	19,0	17	17
XSDM NW 06 HL	L	PN 250	8	M 12 x 1.5	17	12	30,0	14,0	14,5	21,5	22	19
XSDM NW 08 HL	L	PN 250	10	M 14 x 1.5	19	12	30,0	14,0	15,5	22,5	22	19
XSDM NW 10 HL	L	PN 250	12	M 16 x 1.5	21	12	36,0	16,5	18,0	25,0	27	24
XSDM NW 10 HL 18	L	PN 250	12	M 18 x 1.5	23	12	38,0	17,0	13,5	25,0	30	27
XSDM NW 13 HL	L	PN 250	15	M 18 x 1.5	23	12	39,5	18,5	20,5	27,5	30	27
XSDM NW 16 HL	L	PN 250	18	M 22 x 1.5	27	14	45,0	21,5	21,0	28,5	32	30
XSDM NW 20 HL	L	PN 160	22	M 26 x 1.5	31	16	53,0	24,0	27,5	35,0	41	36
XSDM NW 25 HL	L	PN 160	28	M 33 x 2	39	18	66,0	30,5	32,0	39,5	50	46
XSDM NW 32 HL	L	PN 160	35	M 42 x 2	49	20	76,0	35,5	36,0	46,5	60	55
XSDM NW 40 HL	L	PN 160	42	M 48 x 2	55	22	87,0	40,5	40,5	51,5	70	60
XSDM NW 03 HS	S	PN 315	6	M 12 x 1.5	17	12	30,0	14,0	16,5	23,5	22	19
XSDM NW 04 HS	S	PN 315	8	M 14 x 1.5	19	12	30,0	14,0	16,5	23,5	22	19
XSDM NW 06 HS	S	PN 315	10	M 16 x 1.5	21	12	36,0	16,5	18,5	26,0	27	24
XSDM NW 08 HS	S	PN 315	12	M 18 x 1.5	23	12	39,5	18,5	20,0	27,5	30	27
XSDM NW 10 HS	S	PN 315	14	M 20 x 1.5	25	14	43,5	20,0	22,5	30,5	32	30
XSDM NW 13 HS	S	PN 315	16	M 22 x 1.5	27	14	45,0	21,5	22,0	30,5	32	30
XSDM NW 16 HS	S	PN 160	20	M 27 x 2	32	16	53,0	24,0	26,5	37,0	41	36
XSDM NW 20 HS	S	PN 160	25	M 33 x 2	39	18	66,0	30,5	31,5	43,5	50	46
XSDM NW 25 HS	S	PN 160	30	M 42 x 2	49	20	76,0	35,5	37,0	50,5	60	55
XSDM NW 32 HS	S	PN 160	38	M 48 x 2	55	22	87,0	40,5	41,5	57,5	70	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XSDOM Banjo fitting, throttle free, angle 90°



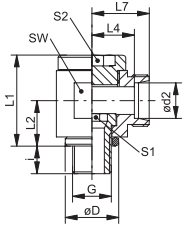
Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Banjo coupling, throttle free
Standard: DIN 2353
Material: Steel
Product versions: **XSDOM VA,** Banjo fitting, throttle free, angle 90°, Stainless steel
SDOM, Banjo fitting, throttle free, angle 90°, Steel

Sealing form 1: Shape F
Sealing form 2: 24° inner cone
Construction: Angle 90°
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G	Ø D mm	i mm	L1 mm	L2 mm	L4 mm	L7 mm	SW mm	S1	OR
XSDOM 06 LL	LL	PN 100	6	M 10 x 1	14,5	8,0	23,5	10,5	13,5	19,0	17	17	7.65 x 1.78
XSDOM 08 LL	LL	PN 100	8	M 10 x 1	14,5	8,0	23,5	10,5	13,5	19,0	17	17	7.65 x 1.78
XSDOM NW 04 HL	L	PN 315	6	M 10 x 1	14,5	8,0	23,5	10,5	12,0	19,0	17	17	7.65 x 1.78
XSDOM NW 06 HL	L	PN 315	8	M 12 x 1.5	17,5	12,5	29,5	14,0	14,5	21,5	22	19	11.10 x 1.78
XSDOM NW 08 HL	L	PN 315	10	M 14 x 1.5	18,5	12,0	30,0	14,0	15,5	22,5	22	19	11.10 x 1.78
XSDOM NW 10 HL	L	PN 315	12	M 16 x 1.5	22,5	12,0	35,0	16,5	18,0	25,0	27	24	14.00 x 1.78
XSDOM NW 10 HL 18	L	PN 315	12	M 18 x 1.5	23,5	12,0	35,0	16,5	18,0	25,0	27	24	18.77 x 1.78
XSDOM NW 13 HL	L	PN 315	15	M 18 x 1.5	23,5	12,0	46,0	21,5	21,5	28,5	32	27	18.77 x 1.78
XSDOM NW 16 HL	L	PN 315	18	M 22 x 1.5	27,5	12,0	46,5	21,5	21,0	28,5	32	27	18.77 x 1.78
XSDOM NW 20 HL	L	PN 160	22	M 26 x 1.5	32,5	16,0	52,0	24,0	27,5	35,0	41	36	23.81 x 2.62
XSDOM NW 25 HL	L	PN 160	28	M 33 x 2	39,5	18,0	64,0	30,5	32,0	39,5	50	46	29.82 x 2.62
XSDOM NW 32 HL	L	PN 160	35	M 42 x 2	49,5	20,0	75,0	35,5	36,0	46,5	60	50	37.77 x 2.62
XSDOM NW 40 HL	L	PN 160	42	M 48 x 2	55,5	22,0	88,0	40,5	40,5	51,5	70	60	41.28 x 3.53
XSDOM NW 03 HS	S	PN 400	6	M 12 x 1.5	17,5	12,0	30,0	14,0	16,5	23,5	22	19	11.10 x 1.78
XSDOM NW 04 HS	S	PN 400	8	M 14 x 1.5	18,5	12,0	30,0	14,0	16,5	23,5	22	19	11.10 x 1.78
XSDOM NW 06 HS	S	PN 400	10	M 16 x 1.5	22,5	12,0	35,0	16,5	18,5	26,0	27	24	14.00 x 1.78
XSDOM NW 08 HS	S	PN 400	12	M 18 x 1.5	23,5	12,0	35,0	16,5	18,5	26,0	27	27	18.77 x 1.78
XSDOM NW 10 HS	S	PN 400	14	M 20 x 1.5	25,5	14,0	46,0	21,5	22,5	30,5	30	27	18.77 x 1.78
XSDOM NW 13 HS	S	PN 315	16	M 22 x 1.5	27,5	14,0	46,0	21,5	22,0	30,5	30	27	18.77 x 1.78
XSDOM NW 16 HS	S	PN 315	20	M 27 x 2	32,5	16,0	52,0	24,0	26,5	37,0	41	36	23.81 x 2.62
XSDOM NW 20 HS	S	PN 250	25	M 33 x 2	39,5	18,0	64,0	30,5	31,5	43,5	50	46	29.82 x 2.62
XSDOM NW 25 HS	S	PN 160	30	M 42 x 2	49,5	20,0	75,0	35,5	37,0	50,5	60	50	37.77 x 2.62
XSDOM NW 32 HS	S	PN 160	38	M 48 x 2	55,5	23,0	87,0	40,5	41,5	57,5	70	60	41.28 x 3.53

PN = Nominal pressure PB = Max. operating pressure Series: LL = Very light L = Light S = Heavy Ø = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XDWM Banjo fitting, throttle free, angle 90°

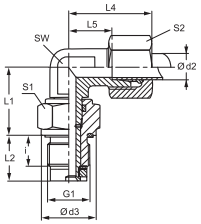


Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Banjo coupling, throttle free
Standard: DIN 2353
Material: Steel
Sealing form 1: Edge sealing ring
Sealing form 2: 24° inner cone
Construction: Angle 90°
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised
Product versions: XDWM VA, Banjo fitting, throttle free, angle 90°, Socket (without union nut and cutting ring)
DWM, Banjo fitting, throttle free, angle 90°, Socket with union nut and cutting ring

Identification	Series	Working pressure bar	Ø d2 mm	G	Ø D mm	i mm	L1 mm	L2 mm	L4 mm	L7 mm	SW mm	S1	S2
XDWM NW 04 HL	L	PN 160	6	M 10 x 1	14	8	24	12	12,5	19	19	6	6
XDWM NW 06 HL	L	PN 160	8	M 12 x 1.5	17	12	30	15	14,5	21	22	6	6
XDWM NW 08 HL	L	PN 100	10	M 14 x 1.5	19	12	30	16	15,5	22	22	8	8
XDWM NW 10 HL	L	PN 100	12	M 16 x 1.5	21	12	37	18	18,0	25	27	10	10
XDWM NW 10 HL 18	L	PN 100	12	M 18 x 1.5	23	12	37	18	18,0	25	30	12	12
XDWM NW 13 HL	L	PN 100	15	M 18 x 1.5	23	12	40	20	22,0	26	30	12	12
XDWM NW 16 HL	L	PN 100	18	M 22 x 1.5	27	14	46	23	21,5	27	36	14	14
XDWM NW 20 HL	L	PN 100	22	M 26 x 1.5	31	16	51	25	26,0	33	41	17	17
XDWM NW 25 HL	L	PN 100	28	M 33 x 2	39	18	64	32	31,5	39	50	22	22
XDWM NW 32 HL	L	PN 63	35	M 42 x 2	49	20	76	37	35,5	46	60	27	27
XDWM NW 40 HL	L	PN 63	42	M 48 x 2	55	22	85	42	40,0	51	70	32	32
XDWM NW 03 HS	S	PN 160	6	M 12 x 1.5	17	12	30	15	16,5	23	22	6	6
XDWM NW 04 HS	S	PN 160	8	M 14 x 1.5	19	12	30	16	16,5	23	22	8	8
XDWM NW 06 HS	S	PN 100	10	M 16 x 1.5	21	12	37	18	18,5	26	27	10	10
XDWM NW 08 HS	S	PN 100	12	M 18 x 1.5	23	12	41	20	20,5	28	30	12	12
XDWM NW 10 HS	S	PN 100	14	M 20 x 1.5	25	14	42	21	23,0	31	32	12	12
XDWM NW 13 HS	S	PN 100	16	M 22 x 1.5	27	14	46	23	22,5	31	36	14	14
XDWM NW 16 HS	S	PN 100	20	M 27 x 2	32	16	58	28	27,5	38	46	17	17
XDWM NW 20 HS	S	PN 100	25	M 33 x 2	39	18	64	32	31,0	43	50	22	22
XDWM NW 25 HS	S	PN 63	30	M 42 x 2	49	20	76	37	36,5	50	60	27	27
XDWM NW 32 HS	S	PN 63	38	M 48 x 2	55	22	85	42	41,0	57	70	32	32

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

GVR 90 Rotary fitting, angle 90°, friction bearing



Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Rotary fitting (screw-in connector)
Construction: Angle 90°
Material: Steel

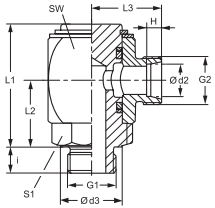
Sealing form 1: Shape E
Sealing form 2: 24° inner cone
Supplementary design information: Friction bearing
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	d3 mm	i mm	L1 mm	L2 mm	L4 mm	L5 mm	SW mm	S1	S2
GVR 90 NW 04 HL 1/4	L	PN 40	6	G 1/4" -19	19	12	20,0	18,0	27	12,0	12	19	14
GVR 90 NW 06 HL	L	PN 40	8	G 1/4" -19	19	12	21,0	18,0	29	14,0	12	19	17
GVR 90 NW 08 HL 3/8	L	PN 40	10	G 3/8" -19	22	12	26,0	18,0	30	15,0	14	24	19
GVR 90 NW 10 HL 1/2	L	PN 40	12	G 1/2" -14	27	14	27,0	21,0	32	17,0	17	27	22
GVR 90 NW 13 HL 3/4	L	PN 40	15	G 3/4" -14	32	16	33,0	24,0	36	21,0	19	32	27
GVR 90 NW 16 HL 1	L	PN 40	18	G 1" -11	40	18	37,5	27,5	40	23,5	27	41	32
GVR 90 NW 20 HL 1	L	PN 40	22	G 1" -11	40	18	39,5	27,5	44	27,5	27	41	36
GVR 90 NW 25 HL 1 1/4	L	PN 40	28	G 1.1/4" -11	50	20	44,0	31,0	47	30,5	36	50	41
GVR 90 NW 32 HL 1 1/2	L	PN 40	35	G 1.1/2" -11	55	22	54,0	35,0	56	34,5	41	55	50
GVR 90 NW 03 HS	S	PN 100	6	G 1/4" -19	19	12	21,0	18,0	31	16,0	12	19	17
GVR 90 NW 04 HS	S	PN 100	8	G 1/4" -19	19	12	22,0	18,0	32	17,0	14	19	19
GVR 90 NW 06 HS	S	PN 100	10	G 3/8" -19	22	12	27,0	18,0	34	17,5	17	24	22
GVR 90 NW 08 HS 1/2	S	PN 100	12	G 1/2" -14	27	14	28,0	21,0	38	21,5	17	27	24
GVR 90 NW 13 HS 3/4	S	PN 100	16	G 3/4" -14	32	16	34,0	24,0	43	24,5	24	32	30
GVR 90 NW 16 HS 1	S	PN 100	20	G 1" -11	40	18	39,5	27,5	48	26,5	27	41	36
GVR 90 NW 20 HS	S	PN 100	25	G 1" -11	40	18	42,5	27,5	54	30,0	36	41	46
GVR 90 NW 25 HS	S	PN 100	30	G 1.1/4" -11	50	20	48,0	31,0	62	35,5	41	50	50
GVR 90 NW 32 HS	S	PN 100	38	G 1.1/2" -11	55	22	55,0	35,0	72	41,0	50	55	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

GVR 90 H

Rotary fitting, angle 90°, friction bearing



Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Rotary fitting (screw-in connector)
Construction: Angle 90°
Material: Steel

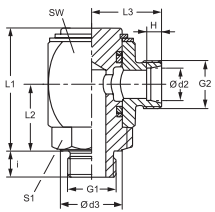
Sealing form 1: Shape E
Sealing form 2: 24° inner cone
Supplementary design information: Friction bearing
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	d3 mm	i mm	H mm	L1 mm	L2 mm	L3 mm	SW mm	S1
GVR 90 NW 04 HL H	L	PN 250	6	G 1/8" -28	M 12 x 1.5	14	8	7,0	40	21	23	27	17
GVR 90 NW 04 HL 1/4 H	L	PN 250	6	G 1/4" -19	M 12 x 1.5	19	12	7,0	41	22	23	27	19
GVR 90 NW 06 HL H	L	PN 250	8	G 1/4" -19	M 14 x 1.5	19	12	7,0	46	25	25	30	22
GVR 90 NW 08 HL H	L	PN 250	10	G 1/4" -19	M 16 x 1.5	19	12	7,0	46	25	26	30	22
GVR 90 NW 08 HL 3/8 H	L	PN 250	10	G 3/8" -19	M 16 x 1.5	22	12	7,0	48	27	27	32	24
GVR 90 NW 10 HL H	L	PN 250	12	G 3/8" -19	M 18 x 1.5	22	12	7,0	48	27	27	32	24
GVR 90 NW 10 HL 1/2 H	L	PN 250	12	G 1/2" -14	M 18 x 1.5	27	14	7,0	55	30	29	36	27
GVR 90 NW 13 HL H	L	PN 250	15	G 1/2" -14	M 22 x 1.5	27	14	7,0	59	33	32	40	32
GVR 90 NW 16 HL H	L	PN 160	18	G 1/2" -14	M 26 x 1.5	27	14	7,5	59	33	32	40	32
GVR 90 NW 16 HL 3/4 H	L	PN 160	18	G 3/4" -14	M 26 x 1.5	32	16	7,5	66	35	32	45	32
GVR 90 NW 20 HL H	L	PN 160	22	G 3/4" -14	M 30 x 2	32	16	7,5	66	35	36	45	36
GVR 90 NW 20 HL 1 H	L	PN 160	22	G 1" -11	M 30 x 2	40	18	7,5	78	41	36	55	36
GVR 90 NW 25 HL H	L	PN 100	28	G 1" -11	M 36 x 2	40	18	7,5	78	41	41	55	41
GVR 90 NW 32 HL 1 1/4 H	L	PN 100	35	G 1.1/4" -11	M 45 x 2	50	20	10,5	92	51	48	65	50
GVR 90 NW 40 HL H	L	PN 100	42	G 1.1/2" -11	M 52 x 2	55	22	11,0	102	56	53	75	55
GVR 90 NW 03 HS H	S	PN 400	6	G 1/4" -19	M 14 x 1.5	19	12	7,0	41	22	25	27	19
GVR 90 NW 04 HS H	S	PN 400	8	G 1/4" -19	M 16 x 1.5	19	12	7,0	41	22	25	27	19
GVR 90 NW 06 HS H	S	PN 400	10	G 3/8" -19	M 18 x 1.5	22	12	7,5	46	25	27	30	22
GVR 90 NW 06 HS 1/4 H	S	PN 400	10	G 1/4" -19	M 18 x 1.5	19	12	7,5	41	22	27	27	22
GVR 90 NW 08 HS H	S	PN 400	12	G 3/8" -19	M 20 x 1.5	22	12	7,5	48	27	28	32	24
GVR 90 NW 08 HS 1/2 H	S	PN 400	12	G 1/2" -14	M 20 x 1.5	27	14	7,5	55	30	27	36	24
GVR 90 NW 10 HS H	S	PN 400	14	G 1/2" -14	M 22 x 1.5	27	14	8,0	55	30	32	36	27
GVR 90 NW 13 HS H	S	PN 400	16	G 1/2" -14	M 24 x 1.5	27	14	8,5	59	33	34	40	32
GVR 90 NW 16 HS H	S	PN 250	20	G 3/4" -14	M 30 x 2	32	16	10,5	66	35	38	45	36
GVR 90 NW 16 HS 1 H	S	PN 250	20	G 1" -11	M 30 x 2	40	18	10,5	78	41	38	55	36
GVR 90 NW 20 HS 3/4 H	S	PN 250	25	G 3/4" -14	M 36 x 2	32	16	12,0	66	35	45	55	41
GVR 90 NW 20 HS H	S	PN 250	25	G 1" -11	M 36 x 2	40	18	12,0	78	41	45	55	41
GVR 90 NW 25 HS H	S	PN 250	30	G 1.1/4" -11	M 42 x 2	50	20	13,5	92	51	52	65	50
GVR 90 NW 32 HS H	S	PN 250	38	G 1.1/2" -11	M 52 x 2	55	22	16,0	102	56	59	75	55

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

GVM 90 H

Rotary fitting, angle 90°, friction bearing



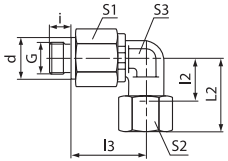
Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Rotary fitting (screw-in connector)
Construction: Angle 90°
Material: Steel

Sealing form 1: Shape E
Sealing form 2: 24° inner cone
Supplementary design information: Friction bearing
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2	d3 mm	i mm	H mm	L1 mm	L2 mm	L3 mm	SW mm	S1
GVM 90 NW 04 HL H	L	PN 250	6	M 10 x 1	M 12 x 1.5	14	8	7,0	40	21	23	27	17
GVM 90 NW 04 HL 12 H	L	PN 250	6	M 12 x 1.5	M 12 x 1.5	14	12	7,0	41	22	23	27	17
GVM 90 NW 06 HL H	L	PN 250	8	M 12 x 1.5	M 14 x 1.5	17	12	7,0	41	22	23	27	19
GVM 90 NW 08 HL H	L	PN 250	10	M 14 x 1.5	M 16 x 1.5	19	12	7,0	46	25	26	30	22
GVM 90 NW 08 HL 16 H	L	PN 250	10	M 16 x 1.5	M 16 x 1.5	22	12	7,0	48	27	27	32	24
GVM 90 NW 10 HL H	L	PN 250	12	M 16 x 1.5	M 18 x 1.5	22	12	7,0	48	27	27	32	24
GVM 90 NW 10 HL 18 H	L	PN 250	12	M 18 x 1.5	M 18 x 1.5	24	12	7,0	55	30	29	36	27
GVM 90 NW 13 HL H	L	PN 250	15	M 18 x 1.5	M 22 x 1.5	24	12	7,0	55	30	30	36	27
GVM 90 NW 13 HL 22 H	L	PN 250	15	M 22 x 1.5	M 22 x 1.5	27	14	7,0	59	33	32	40	32
GVM 90 NW 16 HL H	L	PN 160	18	M 22 x 1.5	M 26 x 1.5	27	14	7,5	59	33	32	40	32
GVM 90 NW 20 HL H	L	PN 160	22	M 26 x 1.5	M 30 x 2	32	16	7,5	66	35	36	45	36
GVM 90 NW 25 HL H	L	PN 100	28	M 33 x 2	M 36 x 2	40	18	7,5	78	41	41	55	41
GVM 90 NW 32 HL H	L	PN 100	35	M 42 x 2	M 45 x 2	50	20	10,5	92	50	48	65	50
GVM 90 NW 40 HL H	L	PN 100	42	M 48 x 2	M 52 x 2	55	22	11,0	102	56	53	75	55
GVM 90 NW 03 HS H	S	PN 400	6	M 12 x 1.5	M 14 x 1.5	17	12	7,0	41	22	25	27	19
GVM 90 NW 03 HS 14 H	S	PN 400	6	M 14 x 1.5	M 14 x 1.5	19	12	7,0	41	22	25	27	19
GVM 90 NW 04 HS H	S	PN 400	8	M 14 x 1.5	M 16 x 1.5	19	12	7,0	41	22	25	27	19
GVM 90 NW 06 HS 14 H	S	PN 400	10	M 14 x 1.5	M 18 x 1.5	19	12	7,5	46	25	27	30	22
GVM 90 NW 06 HS H	S	PN 400	10	M 16 x 1.5	M 18 x 1.5	22	12	7,5	46	25	27	30	22
GVM 90 NW 08 HS H	S	PN 400	12	M 18 x 1.5	M 20 x 1.5	24	12	7,5	48	27	28	32	24
GVM 90 NW 10 HS 18 H	S	PN 400	14	M 18 x 1.5	M 22 x 1.5	24	14	8,0	55	30	32	36	27
GVM 90 NW 10 HS H	S	PN 400	14	M 20 x 1.5	M 22 x 1.5	26	14	8,0	55	30	32	36	27
GVM 90 NW 13 HS H	S	PN 400	16	M 22 x 1.5	M 24 x 1.5	27	14	8,5	59	33	34	40	32
GVM 90 NW 16 HS H	S	PN 250	20	M 27 x 2	M 30 x 2	32	16	10,5	66	35	38	45	36
GVM 90 NW 25 HS H	S	PN 160	30	M 42 x 2	M 42 x 2	50	20	13,5	92	51	52	65	50
GVM 90 NW 32 HS H	S	PN 160	38	M 48 x 2	M 52 x 2	55	22	16,0	102	56	59	75	55

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

DGR 90 — Rotary fitting, angle 90°, ball bearing



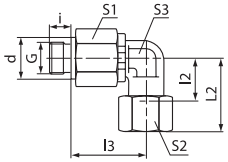
Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Rotary fitting (screw-in connector)
Construction: Angle 90°
Material: Steel

Sealing form 1: Shape E
Sealing form 2: 24° inner cone
Supplementary design information: Ball bearing
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	External pipe Ø mm	G	Ø d mm	i mm	L2 mm	l2 mm	l3 mm	S1	S2	S3
DGR 90 NW 03 HS	S	PN 250	6	G 1/4" -19	19	12	31	16,0	39,5	22	17	17
DGR 90 NW 04 HS	S	PN 250	8	G 1/4" -19	19	12	32	17,0	39,5	22	19	17
DGR 90 NW 08 HS	S	PN 250	12	G 3/8" -19	22	12	38	21,5	51,0	30	24	22
DGR 90 NW 13 HS	S	PN 250	16	G 1/2" -14	27	14	43	24,5	49,0	30	30	22
DGR 90 NW 16 HS	S	PN 250	20	G 3/4" -14	32	16	48	26,5	67,0	41	36	36
DGR 90 NW 20 HS	S	PN 250	25	G 1" -11	40	18	54	30,0	65,0	41	46	36
DGR 90 NW 25 HS	S	PN 250	30	G 1.1/4" -11	50	20	62	35,5	82,5	60	50	50
DGR 90 NW 32 HS	S	PN 250	38	G 1.1/2" -11	55	22	72	41,0	80,5	60	60	50

Ø = External pipe diameter Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

DGM 90 — Rotary fitting, angle 90°, ball bearing



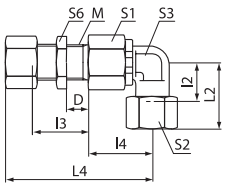
Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Rotary fitting (screw-in connector)
Construction: Angle 90°
Material: Steel

Sealing form 1: Shape E
Sealing form 2: 24° inner cone
Supplementary design information: Ball bearing
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	External pipe Ø mm	G	Ø d mm	i mm	L2 mm	l2 mm	l3 mm	S1	S2	S3
DGM 90 NW 03 HS 14	S	PN 250	6	M 14 x 1.5	19	12	31	16,0	39,5	22	17	17
DGM 90 NW 04 HS	S	PN 250	8	M 14 x 1.5	19	12	32	17,0	39,5	22	19	17
DGM 90 NW 08 HS	S	PN 250	12	M 18 x 1.5	22	12	38	21,5	51,0	30	24	22
DGM 90 NW 13 HS	S	PN 250	16	M 22 x 1.5	27	14	43	24,5	49,0	30	30	22
DGM 90 NW 16 HS	S	PN 250	20	M 27 x 2	32	16	48	26,5	67,0	41	36	36
DGM 90 NW 20 HS	S	PN 250	25	M 33 x 2	40	18	54	30,0	65,0	41	46	36
DGM 90 NW 25 HS	S	PN 250	30	M 42 x 2	50	20	62	35,5	82,5	60	50	50
DGM 90 NW 32 HS	S	PN 250	38	M 48 x 2	55	22	72	41,0	80,5	60	60	50

Ø = External pipe diameter PN = Nominal pressure PB = Max. operating pressure Series: LL = Very light L = Light S = Heavy
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

DGS 90 — Rotary fitting, angle 90°, ball bearing



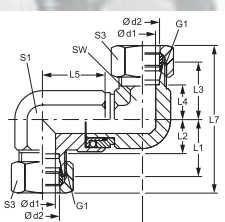
Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Rotary fitting (bulkhead connector)
Construction: Angle 90°
Material: Steel

Sealing form 1: 24° inner cone
Sealing form 2: 24° inner cone
Supplementary design information: Ball bearing
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	External pipe Ø mm	M	D mm	L2 mm	l2 mm	l3 mm	L4 mm	l4 mm	S1	S2	S3	S6
DGS 90 NW 03 HS	S	PN 250	6	M 14 x 1.5	5	31	16,0	16,0	70,0	39,5	22	17	17	19
DGS 90 NW 04 HS	S	PN 250	8	M 16 x 1.5	5	32	17,0	16,0	70,0	39,5	22	19	17	22
DGS 90 NW 08 HS	S	PN 250	12	M 20 x 1.5	5	38	21,5	15,5	83,0	51,0	30	24	22	27
DGS 90 NW 13 HS	S	PN 250	16	M 24 x 1.5	5	43	24,5	17,5	85,0	49,0	30	30	22	32
DGS 90 NW 16 HS	S	PN 250	20	M 30 x 2	15	48	26,5	28,5	117,5	67,0	41	36	36	41
DGS 90 NW 20 HS	S	PN 250	25	M 36 x 2	15	54	30,0	30,0	119,5	65,0	41	46	36	46
DGS 90 NW 25 HS	S	PN 250	30	M 42 x 2	15	62	35,5	30,5	140,0	82,5	60	50	50	50
DGS 90 NW 32 HS	S	PN 250	38	M 52 x 2	15	72	41,0	31,0	142,0	80,5	60	60	50	65

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

DG D H — Rotary fitting 2x 90°, friction bearing



Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Rotary fitting
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

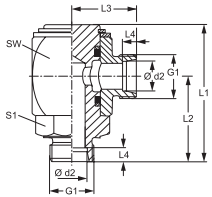
Sealing form 1: 24° inner cone
Sealing form 2: 24° inner cone
Construction: Double angle 90°
Material: Steel

Identification	Series	Working pressure bar	Ø d2 mm	G1	L1 mm	L2 mm	L3 mm	L4 mm	L6 mm	SW mm
DG D NW 08 HS H	S	PN 400	12	M 20 x 1.5	28	20,5	28	20,5	32	32
DG D NW 13 HS H	S	PN 400	16	M 24 x 1.5	34	25,5	34	25,5	40	40
DG D NW 16 HS H	S	PN 250	20	M 30 x 2	38	27,5	38	27,5	45	45
DG D NW 20 HS H	S	PN 250	25	M 36 x 2	45	33,0	45	33,0	55	55
DG D NW 25 HS H	S	PN 250	30	M 42 x 2	52	38,5	52	38,5	65	65
DG D NW 32 HS H	S	PN 250	38	M 52 x 2	59	43,0	59	43,0	75	75

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

GV 90 H

Rotary fitting, angle 90°, friction bearing



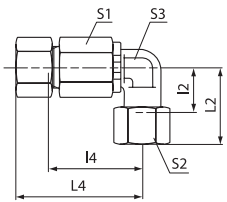
Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Rotary fitting
Construction: Angle 90°
Material: Steel

Sealing form 1: 24° inner cone
Sealing form 2: 24° inner cone
Supplementary design information: Friction bearing
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	L1 mm	L2 mm	L3 mm	L4 mm	SW mm	S1
GV 90 NW 04 HL H	L	PN 250	6	M 12 x 1.5	49	31	23	7,0	27	19
GV 90 NW 06 HL H	L	PN 250	8	M 14 x 1.5	54	33	25	7,0	30	22
GV 90 NW 08 HL H	L	PN 250	10	M 16 x 1.5	57	36	27	7,0	32	24
GV 90 NW 10 HL H	L	PN 250	12	M 18 x 1.5	63	39	29	7,0	36	27
GV 90 NW 13 HL H	L	PN 250	15	M 22 x 1.5	68	42	32	7,0	40	32
GV 90 NW 16 HL H	L	PN 160	18	M 26 x 1.5	75	46	34	7,5	45	36
GV 90 NW 20 HL H	L	PN 160	22	M 30 x 2	89	54	41	7,5	55	41
GV 90 NW 25 HL H	L	PN 100	28	M 36 x 2	103	62	46	7,5	65	50
GV 90 NW 32 HL H	L	PN 100	35	M 45 x 2	115	69	53	10,5	75	55
GV 90 NW 40 HL H	L	PN 100	42	M 52 x 2	147	90	61	11,0	90	70
GV 90 NW 03 HS H	S	PN 400	6	M 14 x 1.5	51	33	25	7,0	27	19
GV 90 NW 04 HS H	S	PN 400	8	M 16 x 1.5	51	33	25	7,0	27	19
GV 90 NW 06 HS H	S	PN 400	10	M 18 x 1.5	56	35	27	7,5	30	22
GV 90 NW 08 HS H	S	PN 400	12	M 20 x 1.5	58	37	28	7,5	32	24
GV 90 NW 10 HS H	S	PN 400	14	M 22 x 1.5	66	42	32	8,0	36	27
GV 90 NW 13 HS H	S	PN 400	16	M 24 x 1.5	70	44	34	8,5	40	32
GV 90 NW 16 HS H	S	PN 250	20	M 30 x 2	79	50	38	10,5	45	36
GV 90 NW 20 HS H	S	PN 250	25	M 36 x 2	93	58	45	12,0	55	41
GV 90 NW 25 HS H	S	PN 250	30	M 42 x 2	109	68	52	13,5	65	50
GV 90 NW 32 HS H	S	PN 250	38	M 52 x 2	121	75	59	16,0	75	55

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

DG 90 — Rotary fitting, angle 90°, ball bearing



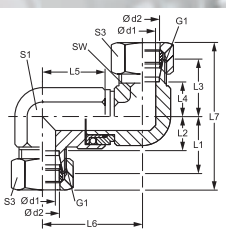
Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Rotary fitting
Construction: Angle 90°
Material: Steel

Sealing form 1: 24° inner cone
Sealing form 2: 24° inner cone
Supplementary design information: Ball bearing
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	External pipe Ø mm	L2 mm	l2 mm	L4 mm	l4 mm	S1	S2	S3
DG 90 NW 03 HS	S	PN 250	6	31	16,0	59,0	44,5	22	17	17
DG 90 NW 04 HS	S	PN 250	8	32	17,0	59,0	44,5	22	19	17
DG 90 NW 08 HS	S	PN 250	12	38	21,5	72,0	55,5	30	24	22
DG 90 NW 13 HS	S	PN 250	16	43	24,5	73,0	54,5	30	30	22
DG 90 NW 16 HS	S	PN 250	20	48	26,5	94,5	72,5	41	36	36
DG 90 NW 20 HS	S	PN 250	25	54	30,0	95,5	71,0	41	46	36
DG 90 NW 25 HS	S	PN 250	30	62	35,5	116,0	89,0	60	50	50
DG 90 NW 32 HS	S	PN 250	38	72	41,0	117,0	86,5	60	60	50

PN = Nominal pressure PB = Max. operating pressure Series: LL = Very light L = Light S = Heavy Ø = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

DG D — Rotary fitting, 2x 90°, ball bearing



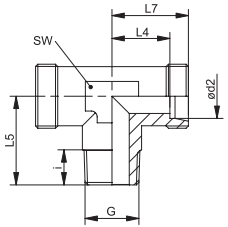
Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Rotary fitting
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Sealing form 1: 24° inner cone
Sealing form 2: 24° inner cone
Construction: Double angle 90°
Material: Steel

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	G1	L1 mm	L2 mm	L3 mm	L4 mm	L5 mm	L6 mm	L7 mm	SW mm	S1	S3
DG D NW 08 HS	S	PN 250	9,5	12	M 20 x 1.5	29,0	21,5	34,0	26,5	39,5	53,0	81,0	24	22	24
DG D NW 13 HS	S	PN 250	9,5	16	M 24 x 1.5	33,0	24,5	34,0	25,5	39,5	53,0	87,0	24	22	30
DG D NW 16 HS	S	PN 250	16,0	20	M 30 x 2	37,0	26,5	50,0	39,5	56,5	76,0	109,0	32	36	36
DG D NW 20 HS	S	PN 250	16,0	25	M 36 x 2	42,0	30,0	50,0	38,0	56,5	76,0	116,0	32	36	46
DG D NW 25 HS	S	PN 250	26,0	30	M 42 x 2	49,0	35,5	58,0	44,5	65,0	92,5	133,0	50	50	50
DG D NW 32 HS	S	PN 250	26,0	38	M 52 x 2	57,0	41,0	58,0	42,0	65,0	92,5	145,0	50	50	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XTRK Screw-in fitting, T shaped



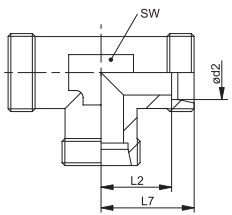
Connection 1: BSPT conical external threads
Connection 2 + 3: metric cylindrical outer thread
Design: Screw-in fitting
Standard: DIN 2353
Material: Steel
Product versions: XTRK VA, Screw-in fitting, T shaped, Stainless steel
TRK, Screw-in fitting, T shaped, Steel

Sealing form 1: thread seal
Sealing form 2 + 3: 24° inner cone
Construction: T shaped
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G	i mm	L4 mm	L5 mm	L7 mm	SW mm
XTR 04 LL	LL	PN 100	4	R 1/8" K	8	11,0	17	15	9
XTR 05 LL	LL	PN 100	5	R 1/8" K	8	9,5	17	15	9
XTR 06 LL	LL	PN 100	6	R 1/8" K	8	9,5	17	15	9
XTR 08 LL	LL	PN 100	8	R 1/8" K	8	11,5	20	17	12
XTR 10 LL	LL	PN 100	10	R 1/4" K	12	12,5	23	16	14
XTR 12 LL	LL	PN 100	12	R 1/4" K	12	13,0	23	17	17
XTR NW 04 HL	L	PN 315	6	R 1/8" K	8	12,0	20	19	12
XTR NW 06 HL	L	PN 315	8	R 1/4" K	12	14,0	26	21	12
XTR NW 08 HL	L	PN 315	10	R 1/4" K	12	15,0	27	22	14
XTR NW 10 HL	L	PN 315	12	R 3/8" K	12	17,0	28	24	17
XTR NW 13 HL	L	PN 315	15	R 1/2" K	14	21,0	34	28	19
XTR NW 16 HL	L	PN 315	18	R 1/2" K	14	23,5	34	31	24
XTR NW 03 HS	S	PN 400	6	R 1/4" K	12	16,0	26	23	12
XTR NW 04 HS	S	PN 400	8	R 1/4" K	12	17,0	26	24	14
XTR NW 06 HS	S	PN 400	10	R 3/8" K	12	17,5	27	25	17
XTR NW 08 HS	S	PN 400	12	R 3/8" K	12	21,5	28	29	19
XTR NW 10 HS	S	PN 400	14	R 1/2" K	14	22,0	32	30	19
XTR NW 13 HS	S	PN 400	16	R 1/2" K	14	24,5	32	33	24

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XT Fitting, T shaped



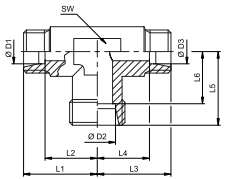
Connection 1 - 3: metric cylindrical outer thread
Design: Fitting
Standard: DIN 2353
Material: Steel
Product versions: XT VA, Fitting, T shaped, Stainless steel
T, Fitting, T shaped, Steel

Sealing form 1 - 3: 24° inner cone
Construction: T shaped
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1 - G3	L2 mm	L7 mm	SW mm
XT 04 LL	LL	PN 100	4	M 8 x 1	11,0	15	9
XT 05 LL	LL	PN 100	5	M 10 x 1	9,5	15	9
XT 06 LL	LL	PN 100	6	M 10 x 1	9,5	15	9
XT 08 LL	LL	PN 100	8	M 12 x 1	11,5	17	12
XT 10 LL	LL	PN 100	10	M 14 x 1	12,5	18	12
XT 12 LL	LL	PN 100	12	M 16 x 1	15,0	21	14
XT NW 04 HL	L	PN 315	6	M 12 x 1.5	12,0	19	12
XT NW 06 HL	L	PN 315	8	M 14 x 1.5	14,0	21	12
XT NW 08 HL	L	PN 315	10	M 16 x 1.5	15,0	22	14
XT NW 10 HL	L	PN 315	12	M 18 x 1.5	17,0	24	17
XT NW 13 HL	L	PN 315	15	M 22 x 1.5	21,0	28	19
XT NW 16 HL	L	PN 315	18	M 26 x 1.5	23,5	31	24
XT NW 20 HL	L	PN 160	22	M 30 x 2	27,5	35	27
XT NW 25 HL	L	PN 160	28	M 36 x 2	30,5	38	36
XT NW 32 HL	L	PN 160	35	M 45 x 2	34,5	45	41
XT NW 40 HL	L	PN 160	42	M 52 x 2	40,0	51	50
XT NW 03 HS	S	PN 630	6	M 14 x 1.5	16,0	23	12
XT NW 04 HS	S	PN 630	8	M 16 x 1.5	17,0	24	14
XT NW 06 HS	S	PN 630	10	M 18 x 1.5	17,5	25	17
XT NW 08 HS	S	PN 630	12	M 20 x 1.5	21,5	29	17
XT NW 10 HS	S	PN 630	14	M 22 x 1.5	22,0	30	19
XT NW 13 HS	S	PN 400	16	M 24 x 1.5	24,5	33	24
XT NW 16 HS	S	PN 400	20	M 30 x 2	26,5	37	27
XT NW 20 HS	S	PN 400	25	M 36 x 2	30,0	42	36
XT NW 25 HS	S	PN 400	30	M 42 x 2	35,5	49	41
XT NW 32 HS	S	PN 315	38	M 52 x 2	41,0	57	50

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XRT T shaped reducing fitting



Connection 1 - 3: metric cylindrical outer thread
Design: Reducing fitting
Standard: ISO 8434-1
Material: Steel
Product versions: XRT VA, T shaped reducing fitting, Stainless steel
RT, T shaped reducing fitting, Steel

Sealing form 1 - 3: 24° inner cone
Construction: T shaped
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	D1 mm	D2 mm	D3 mm	L1 mm	L2 mm	L3 mm	L4 mm	L5 mm	L6 mm	SW mm
XRT 04 08 04 LL	LL	PN 100	4	8	4	17,0	13,0	17,0	13,0	17,0	11,5	12
XRT 06 04 06 LL	LL	PN 100	6	4	6	15,0	9,5	15,0	9,5	15,0	11,0	11
XRT NW 04 06 04 HL	L	PN 315	6	8	6	21,0	14,0	21,0	14,0	21,0	14,0	12
XRT NW 04 08 04 HL	L	PN 315	6	10	6	22,0	15,0	22,0	15,0	22,0	15,0	14
XRT NW 06 04 06 HL	L	PN 315	8	6	8	29,0	14,0	21,0	14,0	21,0	21,0	12
XRT NW 06 06 04 HL	L	PN 315	8	8	6	21,0	14,0	21,0	14,0	21,0	14,0	14
XRT NW 06 08 06 HL	L	PN 315	8	10	8	22,0	15,0	22,0	15,0	22,0	15,0	14
XRT NW 06 10 06 HL	L	PN 315	8	12	8	24,0	17,0	24,0	17,0	24,0	17,0	17
XRT NW 06 13 06 HL	L	PN 315	8	15	8	21,0	14,0	21,0	14,0	21,0	14,0	19
XRT NW 08 04 08 HL	L	PN 315	10	6	10	22,0	15,0	22,0	15,0	22,0	15,0	14
XRT NW 08 06 06 HL	L	PN 315	10	8	8	22,0	15,0	22,0	15,0	22,0	15,0	17
XRT NW 08 06 08 HL	L	PN 315	10	8	10	22,0	15,0	22,0	15,0	22,0	15,0	14
XRT NW 08 08 04 HL	L	PN 315	10	10	6	22,0	15,0	22,0	15,0	22,0	15,0	14
XRT NW 08 10 08 HL	L	PN 315	10	12	10	24,0	17,0	24,0	17,0	24,0	17,0	19
XRT NW 08 13 08 HL	L	PN 315	10	15	10	28,0	21,0	28,0	21,0	28,0	21,0	19
XRT NW 10 04 10 HL	L	PN 315	12	6	12	24,0	17,0	24,0	17,0	24,0	17,0	17
XRT NW 10 06 06 HL	L	PN 315	12	8	8	24,0	17,0	24,0	17,0	24,0	17,0	17
XRT NW 10 06 10 HL	L	PN 315	12	8	12	24,0	17,0	24,0	17,0	24,0	17,0	17
XRT NW 10 08 08 HL	L	PN 315	12	10	10	24,0	17,0	24,0	17,0	24,0	17,0	17
XRT NW 10 08 10 HL	L	PN 315	12	10	12	24,0	17,0	24,0	17,0	24,0	17,0	17
XRT NW 10 10 06 HL	L	PN 315	12	12	8	24,0	17,0	24,0	17,0	24,0	17,0	19
XRT NW 10 10 08 HL	L	PN 315	12	12	10	24,0	17,0	24,0	17,0	24,0	17,0	17
XRT NW 10 13 10 HL	L	PN 315	12	15	12	28,0	21,0	28,0	21,0	28,0	21,0	19
XRT NW 10 16 10 HL	L	PN 315	12	18	12	31,0	24,0	31,0	24,0	31,0	23,5	24
XRT NW 10 20 10 HL	L	PN 160	12	22	12	35,0	28,0	35,0	28,0	35,0	27,5	27
XRT NW 13 04 13 HL	L	PN 315	15	6	15	28,0	21,0	28,0	21,0	28,0	21,0	19
XRT NW 13 06 06 HL	L	PN 315	15	8	8	28,0	21,0	28,0	21,0	28,0	21,0	19
XRT NW 13 06 13 HL	L	PN 315	15	8	15	28,0	21,0	28,0	21,0	28,0	21,0	19
XRT NW 13 08 06 HL	L	PN 315	15	10	8	28,0	21,0	28,0	21,0	28,0	21,0	19
XRT NW 13 08 08 HL	L	PN 315	15	10	10	28,0	21,0	28,0	21,0	28,0	21,0	19
XRT NW 13 08 13 HL	L	PN 315	15	10	15	28,0	21,0	28,0	21,0	28,0	21,0	19
XRT NW 13 10 10 HL	L	PN 315	15	12	12	28,0	21,0	28,0	21,0	28,0	21,0	19
XRT NW 13 10 13 HL	L	PN 315	15	12	15	28,0	21,0	28,0	21,0	28,0	21,0	19
XRT NW 13 13 08 HL	L	PN 315	15	15	10	28,0	21,0	28,0	21,0	28,0	21,0	19
XRT NW 13 13 10 HL	L	PN 315	15	15	12	28,0	21,0	28,0	21,0	28,0	21,0	19
XRT NW 13 16 13 HL	L	PN 315	15	18	15	31,0	24,0	31,0	24,0	31,0	23,5	24
XRT NW 13 20 10 HL	L	PN 160	15	22	12	35,0	28,0	35,0	28,0	35,0	27,5	27
XRT NW 16 06 06 HL	L	PN 315	18	8	8	31,5	24,0	31,0	24,0	30,5	23,5	24
XRT NW 16 06 16 HL	L	PN 315	18	8	18	31,0	23,5	31,0	23,5	31,0	24,0	24

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure D1, D2, D3 = External pipe diameter

T shaped reducing fitting

Identification	Series	Working pressure bar	D1 mm	D2 mm	D3 mm	L1 mm	L2 mm	L3 mm	L4 mm	L5 mm	L6 mm	SW mm
XRT NW 16 08 08 HL	L	PN 315	18	10	10	31,0	23,5	31,0	24,0	31,0	24,0	24
XRT NW 16 08 16 HL	L	PN 315	18	10	18	31,0	23,5	31,0	23,5	31,0	24,0	24
XRT NW 16 10 10 HL	L	PN 315	18	12	12	31,0	23,5	31,0	24,0	31,0	24,0	24
XRT NW 16 10 16 HL	L	PN 315	18	12	18	31,0	23,5	31,0	23,5	31,0	24,0	24
XRT NW 16 13 16 HL	L	PN 315	18	15	18	31,0	23,5	31,0	23,5	31,0	24,0	24
XRT NW 16 16 06 HL	L	PN 315	18	18	8	31,0	23,5	30,5	23,5	31,0	23,5	24
XRT NW 16 16 08 HL	L	PN 315	18	18	10	31,0	23,5	31,0	24,0	31,0	23,5	24
XRT NW 16 16 10 HL	L	PN 315	18	18	12	31,0	23,5	30,5	23,5	31,5	24,0	24
XRT NW 20 08 20 HL	L	PN 160	22	10	22	35,0	27,5	35,0	27,5	35,0	28,0	27
XRT NW 20 10 20 HL	L	PN 160	22	12	22	35,0	27,5	35,0	27,5	35,0	28,0	27
XRT NW 20 13 13 HL	L	PN 160	22	15	15	35,0	27,5	35,0	28,0	35,0	28,0	27
XRT NW 20 13 20 HL	L	PN 160	22	15	22	35,0	27,5	35,0	27,5	35,0	28,0	27
XRT NW 20 16 16 HL	L	PN 160	22	18	18	35,0	27,5	35,0	27,5	35,0	27,5	27
XRT NW 20 16 20 HL	L	PN 160	22	18	22	35,0	27,5	35,0	27,5	35,0	27,5	27
XRT NW 20 20 16 HL	L	PN 160	22	22	18	35,0	27,5	35,0	27,5	35,0	27,5	27
XRT NW 20 25 20 HL	L	PN 160	22	28	22	38,0	30,5	38,0	30,5	38,0	30,5	36
XRT NW 25 08 25 HL	L	PN 160	28	10	28	38,0	30,5	38,0	30,5	38,0	31,0	36
XRT NW 25 10 25 HL	L	PN 160	28	12	28	38,0	30,5	38,0	30,5	38,0	31,0	36
XRT NW 25 13 25 HL	L	PN 160	28	15	28	38,0	30,5	38,0	30,5	38,0	31,0	36
XRT NW 25 16 25 HL	L	PN 160	28	18	28	38,0	30,5	38,0	30,5	38,0	30,5	36
XRT NW 25 20 20 HL	L	PN 160	28	22	22	38,0	30,5	38,0	30,5	38,0	30,5	36
XRT NW 25 20 25 HL	L	PN 160	28	22	28	38,0	30,5	38,0	30,5	38,0	30,5	36
XRT NW 25 25 20 HL	L	PN 160	28	28	22	38,0	30,5	38,0	30,5	38,0	30,5	36
XRT NW 32 20 32 HL	L	PN 160	35	22	35	45,0	34,5	45,0	34,5	45,0	37,5	41
XRT NW 32 25 25 HL	L	PN 160	35	28	28	45,0	34,5	45,0	37,5	45,0	37,5	41
XRT NW 32 25 32 HL	L	PN 160	35	28	35	45,0	34,5	45,0	34,5	45,0	37,5	41
XRT NW 16 HL 16 HS	L/S	PN 315	20	18	20	37,0	26,5	37,0	26,5	37,0	29,5	27
XRT NW 04 03 04 HS	S	PN 630	8	6	8	20,0	13,0	19,0	12,0	20,0	13,0	12
XRT NW 06 03 06 HS	S	PN 630	10	6	10	25,0	17,5	25,0	17,5	25,0	18,0	17
XRT NW 08 03 08 HS	S	PN 630	12	6	12	24,5	17,0	24,5	17,0	24,0	17,0	17
XRT NW 08 04 04 HS	S	PN 630	12	8	8	29,0	21,5	29,0	22,0	29,0	22,0	17
XRT NW 08 04 08 HS	S	PN 630	12	8	12	29,0	21,5	29,0	21,5	29,0	22,0	17
XRT NW 08 06 08 HS	S	PN 630	12	10	12	29,0	21,5	29,0	21,5	29,0	21,5	17
XRT NW 08 13 08 HS	S	PN 630	12	16	12	33,0	25,5	33,0	25,5	33,0	24,5	24
XRT NW 10 06 10 HS	S	PN 630	14	10	14	30,0	22,0	30,0	22,0	30,0	22,5	19
XRT NW 13 03 13 HS	S	PN 400	16	6	16	33,0	24,5	33,0	24,5	33,0	26,0	24
XRT NW 13 04 13 HS	S	PN 400	16	8	16	33,0	24,5	33,0	24,5	33,0	26,0	24
XRT NW 13 06 13 HS	S	PN 400	16	10	16	33,0	24,5	33,0	24,5	33,0	25,5	24
XRT NW 13 08 13 HS	S	PN 400	16	12	16	33,0	24,5	33,0	24,5	33,0	25,5	24
XRT NW 13 16 13 HS	S	PN 400	16	20	16	37,0	28,5	37,0	28,5	37,0	26,5	27
XRT NW 16 06 16 HS	S	PN 400	20	10	20	37,0	26,5	37,0	26,5	37,0	29,5	27
XRT NW 16 08 16 HS	S	PN 400	20	12	20	37,0	26,5	37,0	26,5	37,0	29,5	27
XRT NW 16 10 16 HS	S	PN 400	20	14	20	37,0	26,5	37,0	26,5	37,5	29,5	27
XRT NW 16 13 16 HS	S	PN 400	20	16	20	37,0	26,5	37,0	26,5	37,0	28,5	27
XRT NW 16 16 20 HS	S	PN 400	20	20	25	39,0	28,5	40,5	28,5	37,0	28,5	36

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure D1, D2, D3 = External pipe diameter

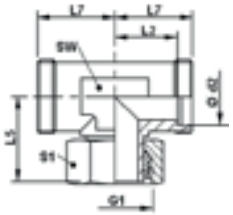
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XRT (Continuation) T shaped reducing fitting

Identification	Series	Working pressure bar	D1 mm	D2 mm	D3 mm	L1 mm	L2 mm	L3 mm	L4 mm	L5 mm	L6 mm	SW mm
XRT NW 16 20 16 HS	S	PN 400	20	25	20	42,0	31,5	42,0	31,5	42,0	30,0	36
XRT NW 20 13 20 HS	S	PN 400	25	16	25	42,0	30,0	42,0	30,0	42,0	33,5	36
XRT NW 20 16 20 HS	S	PN 400	25	20	25	42,0	30,0	42,0	30,0	42,0	31,5	36
XRT NW 20 25 20 HS	S	PN 400	25	30	25	49,0	37,0	49,0	37,0	49,0	35,5	41
XRT NW 25 13 25 HS	S	PN 400	30	16	30	49,0	35,5	49,0	35,5	49,0	40,5	41
XRT NW 25 16 25 HS	S	PN 400	30	20	30	49,0	35,5	49,0	35,5	49,0	38,5	41
XRT NW 25 20 25 HS	S	PN 400	30	25	30	49,0	35,5	49,0	35,5	49,0	37,0	41

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure D1, D2, D3 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XVET Fitting, T shaped



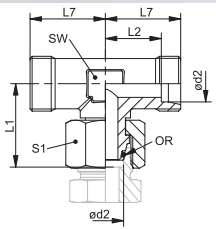
Connection 1: metric nut thread
Connection 2 + 3: metric cylindrical outer thread
Design: Adjustable direction fitting
Standard: DIN 2353
Material: Steel
Product versions: XVET VA, Fitting, T shaped, Stainless steel
VET, Fitting, T shaped, Steel

Sealing form 1: Pipe socket with cutting ring
Sealing form 2 + 3: 24° inner cone
Construction: T shaped
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	L2 mm	L5 mm	L7 mm	SW mm	S1
XVET NW 04 HL	L	PN 315	6	M 12 x 1.5	12,0	26,0	19	12	14
XVET NW 06 HL	L	PN 315	8	M 14 x 1.5	14,0	27,5	21	12	17
XVET NW 08 HL	L	PN 315	10	M 16 x 1.5	15,0	29,0	22	14	19
XVET NW 10 HL	L	PN 315	12	M 18 x 1.5	17,0	29,5	24	17	22
XVET NW 13 HL	L	PN 315	15	M 22 x 1.5	21,0	32,5	28	19	27
XVET NW 16 HL	L	PN 315	18	M 26 x 1.5	23,5	35,5	31	24	32
XVET NW 20 HL	L	PN 160	22	M 30 x 2	27,5	38,5	35	27	36
XVET NW 25 HL	L	PN 160	28	M 36 x 2	30,5	41,5	38	36	41
XVET NW 32 HL	L	PN 160	35	M 45 x 2	34,5	51,0	45	41	50
XVET NW 40 HL	L	PN 160	42	M 52 x 2	40,0	56,0	51	50	60
XVET NW 03 HS	S	PN 630	6	M 14 x 1.5	16,0	27,0	23	12	17
XVET NW 04 HS	S	PN 630	8	M 16 x 1.5	17,0	27,5	24	14	19
XVET NW 06 HS	S	PN 630	10	M 18 x 1.5	17,5	30,0	25	17	22
XVET NW 08 HS	S	PN 630	12	M 20 x 1.5	21,5	31,0	29	17	24
XVET NW 10 HS	S	PN 630	14	M 22 x 1.5	22,0	35,0	30	19	27
XVET NW 13 HS	S	PN 400	16	M 24 x 1.5	24,5	36,5	33	24	30
XVET NW 16 HS	S	PN 400	20	M 30 x 2	26,5	44,5	37	27	36
XVET NW 20 HS	S	PN 400	25	M 36 x 2	30,0	50,0	42	36	46
XVET NW 25 HS	S	PN 400	30	M 42 x 2	35,5	55,0	49	41	50
XVET NW 32 HS	S	PN 315	38	M 52 x 2	41,0	63,0	57	50	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XVETO Fitting, T shaped



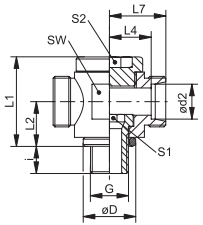
Connection 1: metric nut thread
Connection 2 + 3: metric cylindrical outer thread
Design: Adjustable direction fitting
Standard: ISO 8434-4
Material: Steel
Product versions: XVETO VA, Fitting, T shaped, Stainless steel
VETO, Fitting, T shaped, Steel

Sealing form 1: 24° outer cone with O-ring
Sealing form 2 + 3: 24° inner cone
Construction: T shaped
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	L1 mm	L2 mm	L7 mm	SW mm	S1	OR
XVETO NW 04 HL	L	PN 315	6	26,0	12,0	19	12	14	4.0 x 1.5
XVETO NW 06 HL	L	PN 315	8	27,5	14,0	21	12	17	6.0 x 1.5
XVETO NW 08 HL	L	PN 315	10	29,0	15,0	22	14	19	7.5 x 1.5
XVETO NW 10 HL	L	PN 315	12	29,5	17,0	24	17	22	9.0 x 1.5
XVETO NW 13 HL	L	PN 315	15	32,5	21,0	28	19	27	12.0 x 2.0
XVETO NW 16 HL	L	PN 315	18	35,5	23,5	31	24	32	15.0 x 2.0
XVETO NW 20 HL	L	PN 160	22	38,5	27,5	35	27	36	20.0 x 2.0
XVETO NW 25 HL	L	PN 160	28	41,5	30,5	38	36	41	26.0 x 2.0
XVETO NW 32 HL	L	PN 160	35	51,0	34,5	45	41	50	32.0 x 2.5
XVETO NW 40 HL	L	PN 160	42	56,0	40,0	51	50	60	38.0 x 2.5
XVETO NW 03 HS	S	PN 630	6	27,0	16,0	23	12	17	4.0 x 1.5
XVETO NW 04 HS	S	PN 630	8	27,5	17,0	24	14	19	6.0 x 1.5
XVETO NW 06 HS	S	PN 630	10	30,0	17,5	25	17	22	7.5 x 1.5
XVETO NW 08 HS	S	PN 630	12	31,0	21,5	29	17	24	9.0 x 1.5
XVETO NW 10 HS	S	PN 630	14	35,0	22,0	30	19	27	10.0 x 2.0
XVETO NW 13 HS	S	PN 400	16	36,5	24,5	33	24	30	12.0 x 2.0
XVETO NW 16 HS	S	PN 400	20	44,5	26,5	37	27	36	16.3 x 2.4
XVETO NW 20 HS	S	PN 400	25	50,0	30,0	42	36	46	20.3 x 2.4
XVETO NW 25 HS	S	PN 400	30	55,0	35,5	49	41	50	25.3 x 2.4
XVETO NW 32 HS	S	PN 315	38	63,0	41,0	57	50	60	33.3 x 2.4

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XDTR Banjo fitting, throttle free, T shaped

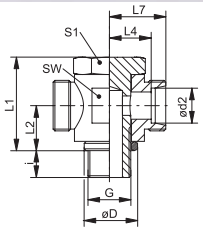


Connection 1: BSP external thread, cylindrical
Connection 2 + 3: metric cylindrical outer thread
Design: Banjo coupling, throttle free
Standard: DIN 3865
Material: Steel
Sealing form 1: Edge sealing ring
Sealing form 2 + 3: 24° inner cone
Construction: T shaped
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised
Product versions: XDTR VA, Banjo fitting, throttle free, T shaped, Socket (without union nut and cutting ring)
DTR, Banjo fitting, throttle free, T shaped, Socket with union nut and cutting ring

Identification	Series	Working pressure bar	Ø d2 mm	G	Ø D mm	i mm	L1 mm	L2 mm	L4 mm	L7 mm	SW mm	S1	S2
XDTR NW 04 HL	L	PN 160	6	G 1/8" -28	14,0	8	24	12	12,0	19	19	6	6
XDTR NW 06 HL	L	PN 160	8	G 1/4" -19	18,0	12	30	15	14,0	21	22	8	8
XDTR NW 08 HL	L	PN 100	10	G 1/4" -19	18,0	12	30	15	15,0	22	22	8	8
XDTR NW 10 HL	L	PN 100	12	G 3/8" -19	22,0	12	36	18	17,5	24	27	10	10
XDTR NW 13 HL	L	PN 100	15	G 1/2" -14	26,0	14	40	20	20,0	27	30	12	12
XDTR NW 16 HL	L	PN 100	18	G 1/2" -14	26,0	14	40	20	19,5	27	30	12	12
XDTR NW 20 HL	L	PN 100	22	G 3/4" -14	32,0	16	52	25	27,0	34	41	17	17
XDTR NW 25 HL	L	PN 100	28	G 1" -11	39,0	18	58	29	29,5	37	46	22	22
XDTR NW 32 HL	L	PN 63	35	G 1.1/4" -11	49,0	20	69	34	33,0	44	55	27	27
XDTR NW 40 HL	L	PN 63	42	G 1.1/2" -11	55,0	22	84	41	40,0	51	70	32	32
XDTR NW 03 HS	S	PN 160	6	G 1/4" -19	18,0	12	30	15	16,0	23	22	8	8
XDTR NW 04 HS	S	PN 160	8	G 1/4" -19	18,0	12	30	15	16,0	23	22	8	8
XDTR NW 06 HS	S	PN 100	10	G 3/8" -19	22,0	12	36	18	18,0	25	27	10	10
XDTR NW 08 HS	S	PN 100	12	G 3/8" -19	22,0	12	36	18	24,0	25	27	10	10
XDTR NW 10 HS	S	PN 100	14	G 1/2" -14	26,0	14	42	21	22,0	30	32	12	12
XDTR NW 13 HS	S	PN 100	16	G 1/2" -14	26,0	14	42	21	21,5	30	32	12	12
XDTR NW 16 HS	S	PN 100	20	G 3/4" -14	32,0	16	57	28	28,5	39	46	17	17
XDTR NW 20 HS	S	PN 100	25	G 1" -11	39,0	18	62	31	31,0	43	50	22	22
XDTR NW 25 HS	S	PN 63	30	G 1.1/4" -11	49,0	20	74	36	36,5	50	60	27	27
XDTR NW 32 HS	S	PN 63	38	G 1.1/2" -11	55,0	22	84	41	41,0	57	70	32	32

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XSTR Banjo fitting, throttle free, T shaped



Connection 1: BSP external thread, cylindrical
Connection 2 + 3: metric cylindrical outer thread
Design: Banjo coupling, throttle free
Standard: DIN 3865
Material: Steel
Product versions: STR, Banjo fitting, throttle free, T shaped, Socket with union nut and cutting ring

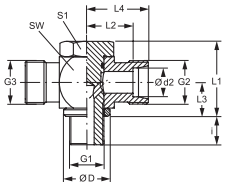
Sealing form 1: Edge sealing ring
Sealing form 2 + 3: 24° inner cone
Construction: T shaped
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G	Ø D mm	i mm	L1 mm	L2 mm	L4 mm	L7 mm	SW mm	S1
XSTR NW 04 HL	L	PN 250	6	G 1/8" -28	14	8	24	10,5	12,0	19,0	17	17
XSTR NW 06 HL	L	PN 250	8	G 1/4" -19	18	12	30	14,0	14,5	21,5	22	19
XSTR NW 08 HL	L	PN 250	10	G 1/4" -19	18	12	30	14,0	15,5	22,5	22	19
XSTR NW 10 HL	L	PN 250	12	G 3/8" -19	22	12	36	16,5	18,0	25,0	27	24
XSTR NW 13 HL	L	PN 250	15	G 1/2" -14	26	14	45	21,5	21,5	28,5	32	30
XSTR NW 16 HL	L	PN 250	18	G 1/2" -14	26	14	45	21,5	21,0	28,5	32	30
XSTR NW 20 HL	L	PN 160	22	G 3/4" -14	32	16	53	24,0	27,5	35,0	41	36
XSTR NW 25 HL	L	PN 160	28	G 1" -11	39	18	66	30,5	32,0	39,5	50	46
XSTR NW 32 HL	L	PN 160	35	G 1.1/4" -11	49	20	76	35,5	36,0	46,5	60	55
XSTR NW 40 HL	L	PN 160	42	G 1.1/2" -11	55	22	87	40,5	40,5	51,5	70	60
XSTR NW 03 HS	S	PN 315	6	G 1/4" -19	18	12	30	14,0	16,5	23,5	22	19
XSTR NW 04 HS	S	PN 315	8	G 1/4" -19	18	12	30	14,0	16,5	23,5	22	19
XSTR NW 06 HS	S	PN 315	10	G 3/8" -19	22	12	36	16,5	18,5	26,0	27	24
XSTR NW 08 HS	S	PN 315	12	G 3/8" -19	22	12	36	16,5	18,5	26,0	27	24
XSTR NW 10 HS	S	PN 315	14	G 1/2" -14	26	14	45	21,5	22,5	30,5	32	30
XSTR NW 13 HS	S	PN 315	16	G 1/2" -14	26	14	45	21,5	22,0	30,5	32	30
XSTR NW 16 HS	S	PN 160	20	G 3/4" -14	32	16	53	24,0	26,5	37,0	41	36
XSTR NW 20 HS	S	PN 160	25	G 1" -11	39	18	66	30,5	31,5	43,5	50	46
XSTR NW 25 HS	S	PN 160	30	G 1.1/4" -11	49	20	76	35,5	37,0	50,5	60	55
XSTR NW 32 HS	S	PN 160	38	G 1.1/2" -11	55	22	87	40,5	41,5	57,5	70	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XSTOR VA — Banjo fitting, throttle free, T shaped



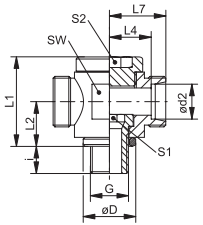
Connection 1: BSP external thread, cylindrical
Connection 2 + 3: metric cylindrical outer thread
Design: Banjo couplings, throttle free (high pressure)
Included in scope of supply: Socket (without union nut and cutting ring)
Product versions: STOR VA, Banjo fitting, throttle free, T shaped, Socket with union nut and cutting ring

Sealing form 1: Edge sealing ring
Sealing form 2 + 3: 24° inner cone
Construction: T shaped
Material: Stainless steel

Identification	Series	Working pressure bar	Ø d2 mm	G1	G2 + G3	Ø D mm	i mm	L1 mm	L2 mm	L3 mm	L4 mm	SW mm	S1
XSTOR 04 LL VA	LL	PN 63	4	G 1/8" -28	M 8 x 1	14,0	8	24	11,0	8,0	15,0	18	17
XSTOR 06 LL VA	LL	PN 63	6	G 1/8" -28	M 10 x 1	14,0	8	24	11,5	10,0	17,0	18	17
XSTOR 08 LL VA	LL	PN 63	8	G 1/8" -28	M 12 x 1	14,0	8	24	11,5	10,0	17,0	18	17
XSTOR NW 04 HL VA	L	PN 250	6	G 1/8" -28	M 12 x 1.5	14,0	8	24	12,0	10,5	19,0	17	17
XSTOR NW 06 HL VA	L	PN 250	8	G 1/4" -19	M 14 x 1.5	18,0	12	30	14,5	14,0	22,0	22	19
XSTOR NW 08 HL VA	L	PN 250	10	G 1/4" -19	M 16 x 1.5	18,0	12	30	15,5	14,0	22,0	22	19
XSTOR NW 10 HL 1/4 VA	L	PN 250	12	G 1/4" -19	M 18 x 1.5	18,0	12	30	15,5	14,0	22,5	22	22
XSTOR NW 10 HL VA	L	PN 250	12	G 3/8" -19	M 18 x 1.5	22,0	12	36	18,0	16,5	28,0	27	24
XSTOR NW 13 HL VA	L	PN 250	15	G 1/2" -14	M 22 x 1.5	26,0	14	45	21,5	21,5	29,0	32	30
XSTOR NW 16 HL VA	L	PN 315	18	G 1/2" -14	M 26 x 1.5	26,0	14	45	21,0	21,5	28,0	32	30
XSTOR NW 20 HL VA	L	PN 160	22	G 3/4" -14	M 30 x 2	32,0	16	53	27,5	24,0	35,0	41	36
XSTOR NW 25 HL VA	L	PN 160	28	G 1" -11	M 36 x 2	39,0	18	66	32,0	30,5	40,0	50	46
XSTOR NW 32 HL VA	L	PN 160	35	G 1.1/4" -11	M 45 x 2	49,0	20	76	36,0	35,5	47,0	60	55
XSTOR NW 40 HL VA	L	PN 160	42	G 1.1/2" -11	M 52 x 2	55,0	22	87	40,5	40,5	51,0	70	60
XSTOR NW 03 HS VA	S	PN 315	6	G 1/4" -19	M 14 x 1.5	18,0	12	30	16,5	14,0	22,0	22	19
XSTOR NW 04 HS VA	S	PN 315	8	G 1/4" -19	M 16 x 1.5	18,0	12	30	16,5	14,0	22,0	22	19
XSTOR NW 06 HS 1/4 VA	S	PN 315	10	G 1/4" -19	M 18 x 1.5	18,0	12	30	16,5	14,0	24,0	22	22
XSTOR NW 06 HS VA	S	PN 315	10	G 3/8" -19	M 18 x 1.5	22,0	12	36	18,5	16,5	26,0	27	24
XSTOR NW 08 HS VA	S	PN 315	12	G 3/8" -19	M 20 x 1.5	22,0	12	36	18,5	16,5	27,0	27	24
XSTOR NW 10 HS VA	S	PN 315	14	G 1/2" -14	M 22 x 1.5	32,0	15	45	22,5	21,5	30,0	32	27
XSTOR NW 13 HS VA	S	PN 315	16	G 1/2" -14	M 24 x 1.5	26,0	14	45	22,0	21,5	30,0	32	30
XSTOR NW 16 HS VA	S	PN 160	20	G 3/4" -14	M 30 x 2	32,0	16	53	26,5	24,0	37,0	41	36
XSTOR NW 20 HS VA	S	PN 160	25	G 1" -11	M 36 x 2	39,0	18	66	31,5	30,5	44,0	50	46
XSTOR NW 25 HS VA	S	PN 160	30	G 1.1/4" -11	M 42 x 2	49,0	20	76	37,0	35,5	51,0	60	55
XSTOR NW 32 HS VA	S	PN 160	38	G 1.1/2" -11	M 52 x 2	55,0	22	87	41,5	40,5	57,0	70	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XDTM Banjo fitting, throttle free, T shaped

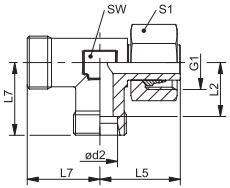


Connection 1: metric cylindrical outer thread
Connection 2 + 3: metric cylindrical outer thread
Design: Banjo coupling, throttle free
Standard: DIN 3865
Material: Steel
Sealing form 1: Edge sealing ring
Sealing form 2 + 3: 24° inner cone
Construction: T shaped
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised
Product versions: XDTM VA, Banjo fitting, throttle free, T shaped, Socket (without union nut and cutting ring)
DTM, Banjo fitting, throttle free, T shaped, Socket with union nut and cutting ring

Identification	Series	Working pressure bar	Ø d2 mm	G	Ø D mm	i mm	L1 mm	L2 mm	L4 mm	L7 mm	SW mm	S1	S2
XDTM NW 04 HL	L	PN 160	6	M 10 x 1	14,0	8	24	12	12,0	19	19	6	6
XDTM NW 06 HL	L	PN 160	8	M 12 x 1.5	17,0	12	27	14	13,0	20	22	6	6
XDTM NW 08 HL	L	PN 100	10	M 14 x 1.5	19,0	12	30	15	15,0	22	22	8	8
XDTM NW 10 HL	L	PN 100	12	M 16 x 1.5	21,0	12	36	18	17,5	24	27	10	10
XDTM NW 13 HL	L	PN 100	15	M 18 x 1.5	23,0	12	39	19	20,0	27	30	12	12
XDTM NW 16 HL	L	PN 100	18	M 22 x 1.5	27,0	14	41	20	20,5	28	32	14	14
XDTM NW 20 HL	L	PN 100	22	M 26 x 1.5	31,0	16	46	22	24,5	32	36	17	17
XDTM NW 25 HL	L	PN 100	28	M 33 x 2	39,0	18	58	29	29,5	37	46	22	22
XDTM NW 32 HL	L	PN 63	35	M 42 x 2	49,0	20	69	33	33,0	44	55	27	27
XDTM NW 40 HL	L	PN 63	42	M 48 x 2	55,0	22	84	41	40,0	51	70	32	32
XDTM NW 03 HS	S	PN 160	6	M 12 x 1.5	17,0	12	27	14	15,0	22	22	6	6
XDTM NW 04 HS	S	PN 160	8	M 14 x 1.5	19,0	12	30	15	16,0	23	22	8	8
XDTM NW 06 HS	S	PN 100	10	M 16 x 1.5	21,0	12	36	18	18,0	25	27	10	10
XDTM NW 08 HS	S	PN 100	12	M 18 x 1.5	23,0	12	39	19	26,0	27	30	12	12
XDTM NW 10 HS	S	PN 100	14	M 20 x 1.5	25,0	14	41	20	22,0	30	32	12	12
XDTM NW 13 HS	S	PN 100	16	M 22 x 1.5	27,0	14	45	22	23,5	32	36	14	14
XDTM NW 16 HS	S	PN 100	20	M 27 x 2	32,0	16	58	28	28,5	39	46	17	17
XDTM NW 20 HS	S	PN 100	25	M 33 x 2	39,0	18	62	31	31,0	43	50	22	22
XDTM NW 25 HS	S	PN 63	30	M 42 x 2	49,0	20	74	36	36,5	50	60	27	27
XDTM NW 32 HS	S	PN 63	38	M 48 x 2	55,0	22	84	41	41,0	57	70	32	32

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XVEL Fitting, L shaped



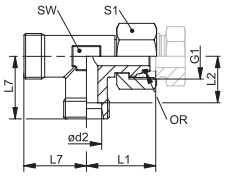
Connection 1: metric nut thread
Connection 2 + 3: metric cylindrical outer thread
Design: Adjustable direction fitting
Standard: DIN 2353
Material: Steel
Product versions: XVEL VA, Fitting, L shaped, Stainless steel
VEL, Fitting, L shaped, Steel

Sealing form 1: Pipe socket, pre-assembled
Sealing form 2 + 3: 24° inner cone
Construction: L shaped
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	L2 mm	L5 mm	L7 mm	SW mm	S1
XVEL NW 04 HL	L	PN 315	6	M 12 x 1.5	12,0	26,0	19	12	14
XVEL NW 06 HL	L	PN 315	8	M 14 x 1.5	14,0	27,5	21	12	17
XVEL NW 08 HL	L	PN 315	10	M 16 x 1.5	15,0	29,0	22	14	19
XVEL NW 10 HL	L	PN 315	12	M 18 x 1.5	17,0	29,5	24	17	22
XVEL NW 13 HL	L	PN 315	15	M 22 x 1.5	21,0	32,5	28	19	27
XVEL NW 16 HL	L	PN 315	18	M 26 x 1.5	23,5	35,5	31	24	32
XVEL NW 20 HL	L	PN 160	22	M 30 x 2	27,5	38,5	35	27	36
XVEL NW 25 HL	L	PN 160	28	M 36 x 2	30,5	41,5	38	36	41
XVEL NW 32 HL	L	PN 160	35	M 45 x 2	34,5	51,0	45	41	50
XVEL NW 40 HL	L	PN 160	42	M 52 x 2	40,0	56,0	51	50	60
XVEL NW 03 HS	S	PN 630	6	M 14 x 1.5	16,0	27,0	23	12	17
XVEL NW 04 HS	S	PN 630	8	M 16 x 1.5	17,0	27,5	24	14	19
XVEL NW 06 HS	S	PN 630	10	M 18 x 1.5	17,5	30,0	25	17	22
XVEL NW 08 HS	S	PN 630	12	M 20 x 1.5	21,5	31,0	29	17	24
XVEL NW 10 HS	S	PN 630	14	M 22 x 1.5	22,0	35,0	30	19	27
XVEL NW 13 HS	S	PN 400	16	M 24 x 1.5	24,5	36,5	33	24	30
XVEL NW 16 HS	S	PN 400	20	M 30 x 2	26,5	44,5	37	27	36
XVEL NW 20 HS	S	PN 400	25	M 36 x 2	30,0	50,0	42	36	46
XVEL NW 25 HS	S	PN 400	30	M 42 x 2	35,5	55,0	49	41	50
XVEL NW 32 HS	S	PN 315	38	M 52 x 2	41,0	63,0	57	50	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XVELO Fitting, L shaped



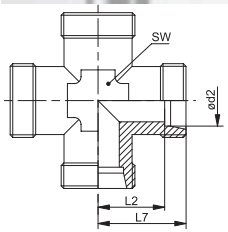
Connection 1: metric nut thread
Connection 2 + 3: metric cylindrical outer thread
Design: Adjustable direction fitting
Standard: ISO 8434-4
Material: Steel
Product versions: XVELO VA, Fitting, L shaped, Stainless steel
VELO, Fitting, L shaped, Steel

Sealing form 1: 24° outer cone with O-ring
Sealing form 2 + 3: 24° inner cone
Construction: L shaped
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	L1 mm	L2 mm	L7 mm	SW mm	S1	OR
XVELO NW 04 HL	L	PN 315	6	M 12 x 1.5	26,0	12,0	19	12	14	4.0 x 1.5
XVELO NW 06 HL	L	PN 315	8	M 14 x 1.5	27,5	14,0	21	12	17	6.0 x 1.5
XVELO NW 08 HL	L	PN 315	10	M 16 x 1.5	29,0	15,0	22	14	19	7.5 x 1.5
XVELO NW 10 HL	L	PN 315	12	M 18 x 1.5	29,5	17,0	24	17	22	9.0 x 1.5
XVELO NW 13 HL	L	PN 315	15	M 22 x 1.5	32,5	21,0	28	19	27	12.0 x 2.0
XVELO NW 16 HL	L	PN 315	18	M 26 x 1.5	35,5	23,5	31	24	32	15.0 x 2.0
XVELO NW 20 HL	L	PN 160	22	M 30 x 2	38,5	27,5	35	27	36	20.0 x 2.0
XVELO NW 25 HL	L	PN 160	28	M 36 x 2	41,5	30,5	38	36	41	26.0 x 2.0
XVELO NW 32 HL	L	PN 160	35	M 45 x 2	51,0	34,5	45	41	50	32.0 x 2.5
XVELO NW 40 HL	L	PN 160	42	M 52 x 2	56,0	40,0	51	50	60	38.0 x 2.5
XVELO NW 03 HS	S	PN 630	6	M 14 x 1.5	27,0	16,0	23	12	17	4.0 x 1.5
XVELO NW 04 HS	S	PN 630	8	M 16 x 1.5	27,5	17,0	24	14	19	6.0 x 1.5
XVELO NW 06 HS	S	PN 630	10	M 18 x 1.5	30,0	17,5	25	17	22	7.5 x 1.5
XVELO NW 08 HS	S	PN 630	12	M 20 x 1.5	31,0	21,5	29	17	24	9.0 x 1.5
XVELO NW 10 HS	S	PN 630	14	M 22 x 1.5	35,0	22,0	30	19	27	10.0 x 2.0
XVELO NW 13 HS	S	PN 400	16	M 24 x 1.5	36,5	24,5	33	24	30	12.0 x 2.0
XVELO NW 16 HS	S	PN 400	20	M 30 x 2	44,5	26,5	37	27	36	16.3 x 2.4
XVELO NW 20 HS	S	PN 400	25	M 36 x 2	50,0	30,0	42	36	46	20.3 x 2.4
XVELO NW 25 HS	S	PN 400	30	M 42 x 2	55,0	35,5	49	41	50	25.3 x 2.4
XVELO NW 32 HS	S	PN 315	38	M 52 x 2	63,0	41,0	57	50	60	33.3 x 2.4

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XK Fitting, cross shaped



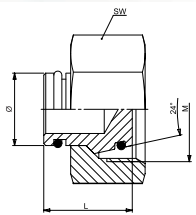
Connection 1 - 4: metric cylindrical outer thread
Design: Fitting
Standard: DIN 2353
Material: Steel
Product versions: XK VA, Fitting, cross shaped, Stainless steel
K, Fitting, cross shaped, Steel

Sealing form 1 - 4: 24° inner cone
Construction: K shaped
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	L2 mm	L7 mm	SW mm
XK 04 LL	LL	PN 100	4	11,0	15,0	9
XK 05 LL	LL	PN 100	5	9,5	15,0	9
XK 06 LL	LL	PN 100	6	9,5	15,0	9
XK 08 LL	LL	PN 100	8	11,5	17,0	12
XK NW 04 HL	L	PN 315	6	12,0	19,0	12
XK NW 06 HL	L	PN 315	8	14,0	21,0	12
XK NW 08 HL	L	PN 315	10	15,0	22,0	14
XK NW 10 HL	L	PN 315	12	17,0	24,0	17
XK NW 13 HL	L	PN 315	15	21,0	28,0	19
XK NW 16 HL	L	PN 315	18	23,5	31,0	24
XK NW 20 HL	L	PN 160	22	27,5	35,0	27
XK NW 25 HL	L	PN 160	28	30,5	38,0	36
XK NW 32 HL	L	PN 160	35	34,5	45,0	41
XK NW 40 HL	L	PN 160	42	40,0	51,0	50
XK NW 03 HS	S	PN 630	6	16,0	23,0	12
XK NW 04 HS	S	PN 630	8	17,0	24,0	14
XK NW 06 HS	S	PN 630	10	17,5	25,0	17
XK NW 08 HS	S	PN 630	12	21,5	29,0	17
XK NW 10 HS	S	PN 630	14	22,0	30,0	19
XK NW 13 HS	S	PN 400	16	24,5	33,0	24
XK NW 16 HS	S	PN 400	20	26,5	37,0	27
XK NW 20 HS	S	PN 400	25	30,0	42,0	36
XK NW 25 HS	S	PN 400	30	35,5	49,0	41
XK NW 32 HS	S	PN 315	38	41,0	57,0	50

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

VLM / VSM Blanking nut



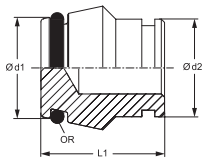
Connection 1: metric nut thread
Design: Blanking nut
Standard: DIN 2353
Surface protection: electro galvanised
Product versions: VLM VA / VSM VA, Blanking nut, Stainless steel

Sealing form 1: 24° outer cone with O-ring
Construction: straight
Material: Steel

Identification	Series	Working pressure bar	External pipe Ø mm	M	l mm	SW mm	OR
VLM NW 04	L	PN 400	6	M 12 x 1.5	18,5	14	4.0 x 1.5
VLM NW 06	L	PN 400	8	M 14 x 1.5	18,0	17	6.0 x 1.5
VLM NW 08	L	PN 400	10	M 16 x 1.5	19,5	19	7.5 x 1.5
VLM NW 10	L	PN 400	12	M 18 x 1.5	19,0	22	9.0 x 1.5
VLM NW 13	L	PN 400	15	M 22 x 1.5	19,0	27	12.0 x 2.0
VLM NW 16	L	PN 315	18	M 26 x 1.5	22,0	32	15.0 x 2.0
VLM NW 20	L	PN 315	22	M 30 x 2	22,0	36	20.0 x 2.0
VLM NW 25	L	PN 250	28	M 36 x 2	23,5	41	26.0 x 2.0
VLM NW 32	L	PN 250	35	M 45 x 2	27,0	50	32.0 x 2.5
VLM NW 40	L	PN 250	42	M 52 x 2	27,5	60	38.0 x 2.5
VSM NW 03	S	PN 630	6	M 14 x 1.5	18,5	17	4.0 x 1.5
VSM NW 04	S	PN 630	8	M 16 x 1.5	18,0	19	6.0 x 1.5
VSM NW 06	S	PN 630	10	M 18 x 1.5	19,5	22	7.5 x 1.5
VSM NW 08	S	PN 630	12	M 20 x 1.5	19,0	24	9.0 x 1.5
VSM NW 10	S	PN 630	14	M 22 x 1.5	21,0	27	10.0 x 2.0
VSM NW 13	S	PN 400	16	M 24 x 1.5	22,0	30	12.0 x 2.0
VSM NW 16	S	PN 400	20	M 30 x 2	26,5	36	16.0 x 2.5
VSM NW 20	S	PN 400	25	M 36 x 2	27,5	46	20.0 x 2.5
VSM NW 25	S	PN 400	30	M 42 x 2	28,5	50	25.0 x 2.5
VSM NW 32	S	PN 315	38	M 52 x 2	32,5	60	33.0 x 2.5

PN = Nominal pressure PB = Max. operating pressure Series: LL = Very light L = Light S = Heavy Ø = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

BZL / BZS Lock without union nut



Sealing form 1: 24° outer cone with O-ring
Construction: straight
Material: Steel
Product versions: **BZL / BZS MG**, Brass
BZL VA / BZS VA, Stainless steel

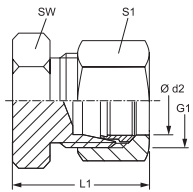
Design: Lock without union nut
Standard: DIN 2353
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	L1 mm	OR
BZL NW 04	L	PN 315	6,6	6	18,5	4.0 x 1.5
BZL NW 06	L	PN 315	8,5	8	18,0	6.0 x 1.5
BZL NW 08	L	PN 315	10,6	10	19,5	7.5 x 1.5
BZL NW 10	L	PN 315	12,6	12	19,0	9.0 x 1.5
BZL NW 13	L	PN 315	15,5	15	19,0	12.0 x 2.0
BZL NW 16	L	PN 315	18,6	18	22,0	15.0 x 2.0
BZL NW 20	L	PN 160	22,6	22	22,0	20.0 x 2.0
BZL NW 25	L	PN 160	28,5	28	23,5	26.0 x 2.0
BZL NW 32	L	PN 160	36,0	35	27,0	32.0 x 2.5
BZL NW 40	L	PN 160	43,0	42	27,5	38.0 x 2.5
BZS NW 10	S	PN 630	14,5	14	21,0	10.0 x 2.0
BZS NW 13	S	PN 400	16,5	16	22,0	12.0 x 2.0
BZS NW 16	S	PN 400	20,9	20	26,5	16.3 x 2.4
BZS NW 20	S	PN 400	25,9	25	27,5	20.3 x 2.4
BZS NW 25	S	PN 400	31,0	30	28,5	25.3 x 2.4
BZS NW 32	S	PN 315	39,0	38	32,5	33.3 x 2.4

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XVHLL / XVHL / XVHS Blanking socket



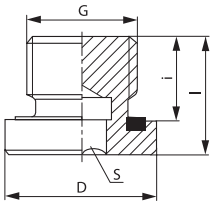
Connection 1: metric cylindrical outer thread
Design: Blanking socket
Standard: DIN 2353
Material: Steel
Product versions: XVHL VA / XVHS VA, Blanking socket, Stainless steel
VHLL / VHL / VHS, Blanking socket, Steel

Sealing form 1: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	L1 mm	SW mm	S1
XVHLL 04	LL	PN 100	4	M 8 x 1	19	9	10
XVHLL 05	LL	PN 100	5	M 10 x 1	19	11	10
XVHLL 06	LL	PN 100	6	M 10 x 1	19	11	12
XVHLL 08	LL	PN 100	8	M 12 x 1	21	12	14
XVHL NW 04	L	PN 315	6	M 12 x 1.5	22	12	14
XVHL NW 06	L	PN 315	8	M 14 x 1.5	23	14	17
XVHL NW 08	L	PN 315	10	M 16 x 1.5	24	17	19
XVHL NW 10	L	PN 315	12	M 18 x 1.5	25	19	22
XVHL NW 13	L	PN 315	15	M 22 x 1.5	26	24	27
XVHL NW 16	L	PN 315	18	M 26 x 1.5	28	27	32
XVHL NW 20	L	PN 160	22	M 30 x 2	30	32	36
XVHL NW 25	L	PN 160	28	M 36 x 2	31	41	41
XVHL NW 32	L	PN 160	35	M 45 x 2	36	46	50
XVHL NW 40	L	PN 160	42	M 52 x 2	39	55	60
XVHS NW 03	S	PN 630	6	M 14 x 1.5	26	14	17
XVHS NW 04	S	PN 630	8	M 16 x 1.5	28	17	19
XVHS NW 06	S	PN 630	10	M 18 x 1.5	29	19	22
XVHS NW 08	S	PN 630	12	M 20 x 1.5	31	22	24
XVHS NW 10	S	PN 630	14	M 22 x 1.5	34	24	27
XVHS NW 13	S	PN 400	16	M 24 x 1.5	34	27	30
XVHS NW 16	S	PN 400	20	M 30 x 2	39	32	36
XVHS NW 20	S	PN 400	25	M 36 x 2	44	41	46
XVHS NW 25	S	PN 400	30	M 42 x 2	47	46	50
XVHS NW 32	S	PN 315	38	M 52 x 2	54	55	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

VHR 90 ED — Blanking screw with hexagon socket



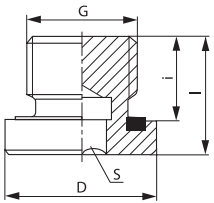
Connection 1: BSP external thread, cylindrical
Design: Blanking screw with hexagon socket
Standard: DIN 2353
Surface protection: electro galvanised
Product versions: VHR 90 ED VA, Blanking screw with hexagon socket, Stainless steel
Spare parts: WD, Soft seal for ED fittings

Sealing form 1: Shape E
Construction: straight
Material: Steel

Identification	Working pressure bar	G	D mm	i mm	l mm	S mm
VHR 90-1/8 ED	PN 400	G 1/8" -28	14	8	12,0	5
VHR 90-1/4 ED	PN 400	G 1/4" -19	19	12	17,0	6
VHR 90-3/8 ED	PN 400	G 3/8" -19	22	12	17,0	8
VHR 90-1/2 ED	PN 400	G 1/2" -14	27	14	19,0	10
VHR 90-3/4 ED	PN 400	G 3/4" -14	32	16	21,0	12
VHR 90-1 ED	PN 400	G 1" -11	40	16	22,5	17
VHR 90-1 1/4 ED	PN 315	G 1.1/4" -11	50	16	22,5	22
VHR 90-1 1/2 ED	PN 315	G 1.1/2" -11	55	16	22,5	24
VHR 90-2 ED	PN 315	G 2" -11	72	24	34,5	32

PN = Nominal pressure PB = Max. operating pressure
Also available without seal as FHR.

VHM 90 ED — Blanking screw with hexagon socket



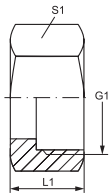
Connection 1: metric cylindrical outer thread
Design: Blanking screw with hexagon socket
Material: Steel
Product versions: VHM 90 ED VA, Blanking screw with hexagon socket, Stainless steel
Spare parts: WD, Soft seal for ED fittings

Sealing form 1: Shape E
Construction: straight
Surface protection: electro galvanised

Identification	Working pressure bar	G	D mm	i mm	l mm	S mm
VHM 90-08 ED	PN 400	M 8 x 1	12,0	8	12,0	4
VHM 90-10 ED	PN 400	M 10 x 1	14,0	8	12,0	5
VHM 90-12 ED	PN 400	M 12 x 1.5	17,0	12	17,0	6
VHM 90-14 ED	PN 400	M 14 x 1.5	19,0	12	17,0	6
VHM 90-16 ED	PN 400	M 16 x 1.5	22,0	12	17,0	8
VHM 90-18 ED	PN 400	M 18 x 1.5	24,0	12	17,0	8
VHM 90-20 ED	PN 400	M 20 x 1.5	26,0	14	19,0	10
VHM 90-22 ED	PN 400	M 22 x 1.5	27,0	14	19,0	10
VHM 90-24ED	PN 400	M 24 x 1.5	29,9	14	19,0	12
VHM 90-26 ED	PN 400	M 26 x 1.5	32,0	16	21,0	12
VHM 90-27 ED	PN 400	M 27 x 2	32,0	16	21,0	12
VHM 90-33 ED	PN 400	M 33 x 2	40,0	16	22,5	17
VHM 90-42 ED	PN 315	M 42 x 2	50,0	16	22,5	22
VHM 90-48 ED	PN 315	M 48 x 2	55,0	16	22,5	24

PN = Nominal pressure PB = Max. operating pressure
Also available without seal as FHM.

UEM AJ — Union nut AJ

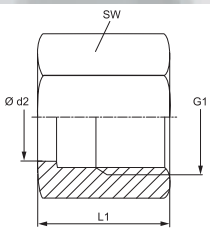


Connection 1: UN/UNF inner thread
Material: Steel
Product versions: UEM AJ VA, Union nut AJ, Stainless steel

Design: Union nut
Surface protection: electro galvanised

Identification	G1	S1	L1 mm
UEM AJ 03	3/8"-24 UNF	11	16,0
UEM AJ 04	7/16"-20 UNF	14	16,0
UEM AJ 05	1/2"-20 UNF	17	17,0
UEM AJ 06	9/16"-18 UNF	19	18,0
UEM AJ 08	3/4"-16 UNF	22	21,0
UEM AJ 10	7/8"-14 UNF	27	25,0
UEM AJ 12	1.1/16" -12 UN	32	26,0
UEM AJ 14	1.3/16" -12 UN	36	27,5
UEM AJ 16	1.5/16" -12 UN	41	28,0
UEM AJ 20	1.5/8" -12 UN	50	31,0
UEM AJ 24	1.7/8" -12 UN	60	36,0
UEM AJ 32	2.1/2" -12 UN	70	45,0

UEM B — Union nut for flange connection



Connection 1: metric nut thread
Material: Steel
Product versions: UEM B VA, Union nut for flange connection, Stainless steel

Design: Union nut for flange connection
Surface protection: electro galvanised

Identification	Series	Working pressure bar	for external pipe Ø mm	G1	Ø d2 mm	L1 mm	SW mm
UEM NW 04 LB	L	PN 315	6	M 12 x 1.5	7,7	18,0	14
UEM NW 06 LB	L	PN 315	8	M 14 x 1.5	9,5	19,0	17
UEM NW 08 LB	L	PN 315	10	M 16 x 1.5	11,7	20,5	19
UEM NW 10 LB	L	PN 315	12	M 18 x 1.5	13,8	21,5	22
UEM NW 13 LB	L	PN 315	15	M 22 x 1.5	17,7	24,0	27
UEM NW 16 LB	L	PN 315	18	M 26 x 1.5	21,1	23,0	32
UEM NW 20 LB	L	PN 160	22	M 30 x 2	24,3	27,5	36
UEM NW 25 LB	L	PN 160	28	M 36 x 2	30,3	27,5	41
UEM NW 32 LB	L	PN 160	35	M 45 x 2	38,2	30,0	50
UEM NW 40 LB	L	PN 160	42	M 52 x 2	45,2	34,0	60
UEM NW 03 SB	S	PN 630	6	M 14 x 1.5	7,7	19,0	17
UEM NW 04 SB	S	PN 630	8	M 16 x 1.5	9,5	20,0	19
UEM NW 06 SB	S	PN 630	10	M 18 x 1.5	11,7	21,5	22
UEM NW 08 SB	S	PN 630	12	M 20 x 1.5	13,8	22,0	24
UEM NW 10 SB	S	PN 630	14	M 22 x 1.5	17,7	24,0	27
UEM NW 13 SB	S	PN 400	16	M 24 x 1.5	18,6	26,5	30
UEM NW 16 SB	S	PN 400	20	M 30 x 2	24,3	27,5	36
UEM NW 20 SB	S	PN 400	25	M 36 x 2	28,6	30,5	46

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure

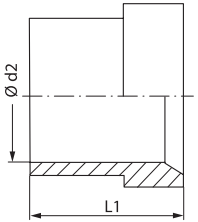
UEM B (Continuation) Union nut for flange connection

Identification	Series	Working pressure bar	for external pipe Ø mm	G1	Ø d2 mm	L1 mm	SW mm
UEM NW 25 SB	S	PN 400	30	M 42 x 2	34,1	32,0	50
UEM NW 32 SB	S	PN 315	38	M 52 x 2	42,2	38,0	60

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

DRD Pressure ring for flare connection

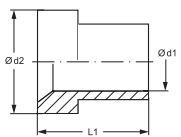


Design: Anel de suporte para conexão flangeada **Material:** Steel
Surface protection: electro galvanised
Product versions: DRD VA, Pressure ring for flare connection, Stainless steel

Identification	Series	Working pressure bar	Ø d2 mm	L1 mm
DRD 06	L/S	PN 630	6	10,5
DRD 08	L/S	PN 630	8	11,0
DRD 10	L/S	PN 630	10	12,5
DRD 12	L/S	PN 630	12	13,0
DRD 15	L	PN 400	15	14,0
DRD 18	L	PN 315	18	14,5
DRD 22	L	PN 315	22	18,0
DRD 28	L	PN 250	28	17,0
DRD 35	L	PN 250	35	19,0
DRD 42	L	PN 250	42	21,0
DRD 14	S	PN 630	14	14,5
DRD 16	S	PN 400	16	17,0
DRD 20	S	PN 400	20	17,5
DRD 25	S	PN 400	25	20,0
DRD 30	S	PN 400	30	21,5
DRD 38	S	PN 315	38	26,5

PN = Nominal pressure PB = Max. operating pressure Series: LL = Very light L = Light S = Heavy

STUETZRING AJM — Support sleeve for flange

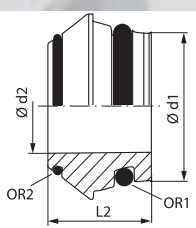


Design: Support sleeve for flange
Material: Steel
Product versions: STUETZRING AJM VA, Support sleeve for flange, Stainless steel

Supplementary design information: for metric pipes
Surface protection: electro galvanised

Identification	External pipe Ø mm	Ø d1 mm	Ø d2 mm	L1 mm
STUETZRING AJM 06	6	6,2	9,7	10,4
STUETZRING AJM 08	8	8,2	11,3	11,2
STUETZRING AJM 10	10	10,2	12,7	12,7
STUETZRING AJM 12	12	12,2	17,3	14,2
STUETZRING AJM 14	14	14,3	20,1	14,3
STUETZRING AJM 15	15	15,1	20,1	17,5
STUETZRING AJM 16	16	16,2	20,2	16,8
STUETZRING AJM 18	18	18,3	24,5	17,4
STUETZRING AJM 20	20	20,2	24,7	17,3
STUETZRING AJM 22	22	22,3	27,8	24,1
STUETZRING AJM 25	25	25,2	31,0	19,8
STUETZRING AJM 30	30	30,3	38,9	23,1
STUETZRING AJM 32	32	32,3	38,9	23,1
STUETZRING AJM 38	38	38,4	45,3	28,4
STUETZRING AJM 42	42	42,4	55,0	29,0
STUETZRING AJM 50	50	50,4	61,2	30,2

ZR OO — Spacer ring, flange connection, 2 O-rings



Design: Spacer ring for flare connection with 2 O-rings
Surface protection: electro galvanised
Product versions: ZR OO VA, Spacer ring, flange connection, 2 O-rings, Stainless steel

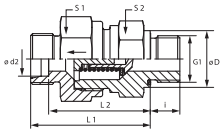
Material: Steel

Identification	Series	Working pressure bar	Ø d1 mm	Ø d2 mm	L2 mm	OR1	OR2
ZR OO 06	L/S	PN 630	6	3	11,5	4.0 x 1.5	4.40 x 0.80
ZR OO 08	L/S	PN 630	8	5	12,0	6.0 x 1.5	6.00 x 0.80
ZR OO 10	L/S	PN 630	10	6	12,5	7.5 x 1.5	7.50 x 0.80
ZR OO 12	L/S	PN 630	12	8	12,5	9.0 x 1.5	9.50 x 0.80
ZR OO 15	L	PN 400	15	11	12,5	12.0 x 2.0	12.50 x 0.80
ZR OO 18	L	PN 400	18	14	13,0	15.0 x 2.0	15.00 x 1.00
ZR OO 22	L	PN 250	22	17	14,2	20.0 x 2.0	18.00 x 1.00
ZR OO 28	L	PN 250	28	23	14,7	26.0 x 2.0	23.00 x 1.00
ZR OO 35	L	PN 250	35	28	18,5	32.0 x 2.5	30.00 x 1.00
ZR OO 42	L	PN 250	42	35	20,5	38.0 x 2.5	37.00 x 1.00
ZR OO 14	S	PN 630	14	9	14,0	10.0 x 2.0	11.00 x 1.00
ZR OO 16	S	PN 400	16	11	15,0	12.0 x 2.0	12.50 x 1.00
ZR OO 20	S	PN 400	20	14	18,5	16.3 x 2.4	16.00 x 1.00
ZR OO 25	S	PN 400	25	19	20,0	20.3 x 2.4	20.00 x 1.00
ZR OO 30	S	PN 400	30	23	22,0	25.3 x 2.4	25.00 x 1.00
ZR OO 38	S	PN 315	38	30	26,0	33.3 x 2.4	32.00 x 1.78

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d1 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XHVR ED

Non-return valve, screw-in connection



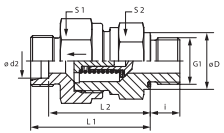
Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Non-return valve, screw-in connection
Standard: DIN 3865
Material: Steel
Product versions: XHVR ED VA, Non-return valve, screw-in connection, Stainless steel
HVR ED, Non-return valve, screw-in connection, Steel
Spare parts: WD, Soft seal for ED fittings
Accessories: RD FEDER, Spring for non-return valve

Sealing form 1: Shape E
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	Ø D mm	i mm	L1 mm	L2 mm	S1	S2
XHVR NW 04 HL ED	L	PN 250	6	G 1/8" -28	14	8	35,0	28,0	17	17
XHVR NW 06 HL ED	L	PN 250	8	G 1/4" -19	19	12	37,0	30,0	19	19
XHVR NW 08 HL ED	L	PN 250	10	G 1/4" -19	19	12	45,5	38,5	22	24
XHVR NW 10 HL ED	L	PN 250	12	G 3/8" -19	22	12	49,5	42,5	30	27
XHVR NW 13 HL ED	L	PN 250	15	G 1/2" -14	27	14	52,5	45,5	32	27
XHVR NW 16 HL ED	L	PN 160	18	G 1/2" -14	27	14	57,5	50,0	36	36
XHVR NW 20 HL ED	L	PN 160	22	G 3/4" -14	32	16	62,5	55,0	46	41
XHVR NW 25 HL ED	L	PN 100	28	G 1" -11	40	18	70,5	63,0	55	50
XHVR NW 32 HL ED	L	PN 100	35	G 1.1/4" -11	50	20	79,5	69,0	60	60
XHVR NW 40 HL ED	L	PN 100	42	G 1.1/2" -11	55	22	79,5	68,5	70	65
XHVR NW 03 HS ED	S	PN 400	6	G 1/4" -19	19	12	38,5	31,5	19	19
XHVR NW 04 HS ED	S	PN 400	8	G 1/4" -19	19	12	38,5	31,5	19	19
XHVR NW 06 HS ED	S	PN 400	10	G 3/8" -19	22	12	45,5	38,0	24	22
XHVR NW 08 HS ED	S	PN 400	12	G 3/8" -19	22	12	48,5	41,0	27	24
XHVR NW 10 HS ED	S	PN 315	14	G 1/2" -14	27	14	52,5	44,5	32	27
XHVR NW 13 HS ED	S	PN 315	16	G 1/2" -14	27	14	56,5	48,0	36	32
XHVR NW 16 HS ED	S	PN 250	20	G 3/4" -14	32	16	62,5	52,0	46	41
XHVR NW 20 HS ED	S	PN 250	25	G 1" -11	40	18	66,5	54,5	50	46
XHVR NW 25 HS ED	S	PN 250	30	G 1.1/4" -11	50	20	77,5	64,0	60	60
XHVR NW 32 HS ED	S	PN 250	38	G 1.1/2" -11	55	22	85,5	69,5	70	65

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.Also available with opening pressure of 0.2; 0.5; 2; 3; 5 bar.

XHVM ED — Non-return valve, screw-in connection



Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Design: Non-return valve, screw-in connection
Standard: DIN 3865
Material: Steel
Product versions: XHVM ED VA, Non-return valve, screw-in connection, Stainless steel
HVM ED, Non-return valve, screw-in connection, Steel
Spare parts: WD, Soft seal for ED fittings
Accessories: RD FEDER, Spring for non-return valve

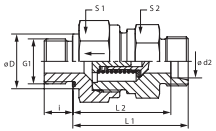
Sealing form 1: Shape E
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	Ø D mm	i mm	L1 mm	L2 mm	S1	S2
XHVM NW 04 HL ED	L	PN 250	6	M 10 x 1	14	8	35,0	28,0	17	17
XHVM NW 06 HL ED	L	PN 250	8	M 12 x 1.5	17	12	36,0	29,0	19	19
XHVM NW 08 HL ED	L	PN 250	10	M 14 x 1.5	19	12	45,5	38,5	24	22
XHVM NW 10 HL ED	L	PN 250	12	M 16 x 1.5	22	12	49,5	42,5	30	27
XHVM NW 13 HL ED	L	PN 250	15	M 18 x 1.5	24	12	52,5	45,5	32	27
XHVM NW 16 HL ED	L	PN 160	18	M 22 x 1.5	27	14	57,5	50,0	36	36
XHVM NW 20 HL ED	L	PN 160	22	M 26 x 1.5	32	16	62,5	55,0	46	41
XHVM NW 25 HL ED	L	PN 100	28	M 33 x 2	40	18	70,5	63,0	55	50
XHVM NW 32 HL ED	L	PN 100	35	M 42 x 2	50	20	79,5	69,0	60	60
XHVM NW 40 HL ED	L	PN 100	42	M 48 x 2	55	22	79,5	68,5	70	65
XHVM NW 03 HS ED	S	PN 400	6	M 12 x 1.5	17	12	38,5	31,5	19	19
XHVM NW 04 HS ED	S	PN 400	8	M 14 x 1.5	19	12	38,5	31,5	19	19
XHVM NW 06 HS ED	S	PN 400	10	M 16 x 1.5	22	12	45,5	38,0	24	22
XHVM NW 08 HS ED	S	PN 400	12	M 18 x 1.5	24	12	48,5	41,0	27	24
XHVM NW 10 HS ED	S	PN 315	14	M 20 x 1.5	26	14	52,5	44,5	32	27
XHVM NW 13 HS ED	S	PN 315	16	M 22 x 1.5	27	14	56,5	48,0	36	32
XHVM NW 16 HS ED	S	PN 250	20	M 27 x 2	32	16	62,5	52,0	46	41
XHVM NW 20 HS ED	S	PN 250	25	M 33 x 2	40	18	66,5	54,5	50	46
XHVM NW 25 HS ED	S	PN 250	30	M 42 x 2	50	20	77,5	64,0	60	60
XHVM NW 32 HS ED	S	PN 250	38	M 48 x 2	55	22	85,5	69,5	70	65

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.Also available with opening pressure of 0.2; 0.5; 2; 3; 5 bar.

XHZR ED

Non-return valve, screw-in connection



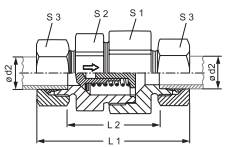
Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Design: Non-return valve, screw-in connection
Standard: DIN 3865
Material: Steel
Product versions: XHZR ED VA, Non-return valve, screw-in connection, Stainless steel
HZR ED, Non-return valve, screw-in connection, Steel
Spare parts: WD, Soft seal for ED fittings
Accessories: RD FEDER, Spring for non-return valve

Sealing form 1: Shape E
Sealing form 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	Ø D mm	i mm	L1 mm	L2 mm	S1	S2
XHZR NW 04 HL ED	L	PN 250	6	G 1/8" -28	14	8	33,5	26,5	17	17
XHZR NW 06 HL ED	L	PN 250	8	G 1/4" -19	19	12	33,5	28,5	19	19
XHZR NW 08 HL ED	L	PN 250	10	G 1/4" -19	19	12	45,5	38,5	24	22
XHZR NW 10 HL ED	L	PN 250	12	G 3/8" -19	22	12	47,5	40,5	30	27
XHZR NW 13 HL ED	L	PN 250	15	G 1/2" -14	27	14	49,5	42,5	32	27
XHZR NW 16 HL ED	L	PN 160	18	G 1/2" -14	27	14	55,5	48,0	36	36
XHZR NW 20 HL ED	L	PN 160	22	G 3/4" -14	32	16	63,5	56,0	46	41
XHZR NW 25 HL ED	L	PN 100	28	G 1" -11	40	18	71,5	64,0	55	50
XHZR NW 32 HL ED	L	PN 100	35	G 1.1/4" -11	50	20	80,5	70,0	60	60
XHZR NW 40 HL ED	L	PN 100	42	G 1.1/2" -11	55	22	81,5	70,5	70	65
XHZR NW 03 HS ED	S	PN 400	6	G 1/4" -19	19	12	38,5	31,5	19	19
XHZR NW 04 HS ED	S	PN 400	8	G 1/4" -19	19	12	38,5	31,5	19	19
XHZR NW 06 HS ED	S	PN 400	10	G 3/8" -19	22	12	45,5	38,0	24	22
XHZR NW 08 HS ED	S	PN 400	12	G 3/8" -19	22	12	48,5	41,0	27	24
XHZR NW 10 HS ED	S	PN 315	14	G 1/2" -14	27	14	51,5	43,5	32	27
XHZR NW 13 HS ED	S	PN 315	16	G 1/2" -14	27	14	54,5	46,0	36	32
XHZR NW 16 HS ED	S	PN 250	20	G 3/4" -14	32	16	60,5	50,0	46	41
XHZR NW 20 HS ED	S	PN 250	25	G 1" -11	40	18	66,5	54,5	50	46
XHZR NW 25 HS ED	S	PN 250	30	G 1.1/4" -11	50	20	77,5	64,0	60	60
XHZR NW 32 HS ED	S	PN 250	38	G 1.1/2" -11	55	22	87,5	71,5	70	65

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.Also available with opening pressure of 0.2; 0.5; 2; 3; 5 bar.

XRD Non-return valve, connector



Connection 1 + 2: metric cylindrical outer thread
Design: Non-return valve, connector
Standard: DIN 3865
Material: Steel
Product versions: XRD VA, Non-return valve, connector, Stainless steel
RD, Non-return valve, connector, Steel
Accessories: RD FEDER, Spring for non-return valve

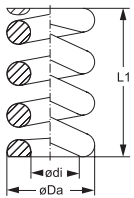
Sealing form 1 + 2: 24° inner cone
Construction: straight
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	G1	L1 mm	L2 mm	S1	S2
XRD NW 04 HL	L	PN 250	6	M 12 x 1.5	58,0	29,0	17	17
XRD NW 06 HL	L	PN 250	8	M 14 x 1.5	59,0	30,0	19	19
XRD NW 08 HL	L	PN 250	10	M 16 x 1.5	69,5	40,5	24	22
XRD NW 10 HL	L	PN 250	12	M 18 x 1.5	72,5	43,5	30	27
XRD NW 13 HL	L	PN 250	15	M 22 x 1.5	77,5	47,5	32	27
XRD NW 16 HL	L	PN 160	18	M 26 x 1.5	83,5	51,5	36	36
XRD NW 20 HL	L	PN 160	22	M 30 x 2	93,5	61,5	46	41
XRD NW 25 HL	L	PN 100	28	M 36 x 2	102,5	69,5	55	50
XRD NW 32 HL	L	PN 100	35	M 45 x 2	117,5	74,5	60	60
XRD NW 40 HL	L	PN 100	42	M 52 x 2	119,0	74,0	70	65
XRD NW 03 HS	S	PN 400	6	M 14 x 1.5	63,5	34,5	19	17
XRD NW 04 HS	S	PN 400	8	M 16 x 1.5	63,5	34,5	19	17
XRD NW 06 HS	S	PN 400	10	M 18 x 1.5	72,5	40,5	24	22
XRD NW 08 HS	S	PN 400	12	M 20 x 1.5	74,5	42,5	27	24
XRD NW 10 HS	S	PN 315	14	M 22 x 1.5	82,5	47,5	32	27
XRD NW 13 HS	S	PN 315	16	M 24 x 1.5	86,5	50,5	36	32
XRD NW 16 HS	S	PN 250	20	M 30 x 2	97,5	54,5	41	38
XRD NW 20 HS	S	PN 250	25	M 36 x 2	106,5	58,5	50	46
XRD NW 25 HS	S	PN 250	30	M 42 x 2	122,5	69,5	60	55
XRD NW 32 HS	S	PN 250	38	M 52 x 2	136,5	75,5	70	65

Ø = External pipe diameter Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.Also available with opening pressure of 0.2; 0.5; 2; 3; 5 bar.

RD FEDER — Spring for non-return valve



Design: Spring for non-return valve
Surface protection: electro galvanised
Accessories: **XHVM ED,** Non-return valve, screw-in connection
XHVR ED, Non-return valve, screw-in connection
XHZR ED, Non-return valve, screw-in connection
XRD, Non-return valve, connector

Material: Steel

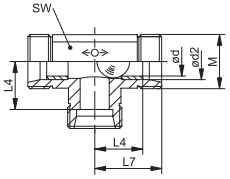
Identification	for series	Opening pressure bar	Ø Da mm	Ø di mm	L1 mm
RD FEDER 01-0.2	06L; 06S; 08S	0,2	4,6	3,7	9,5
RD FEDER 01-0.5	06L; 06S; 08S	0,5	4,9	3,8	9,3
RD FEDER 01-2.0	06L; 06S; 08S	2,0	5,3	3,8	9,1
RD FEDER 01-3.0	06L; 06S; 08S	3,0	5,3	3,8	9,4
RD FEDER 01-5.0	06L; 06S; 08S	5,0	5,7	3,9	10,5
RD FEDER 02-0.2	08L; 10S	0,2	6,5	5,4	14,8
RD FEDER 02-0.5	08L; 10S	0,5	6,7	6,5	14,5
RD FEDER 02-2.0	08L; 10S	2,0	7,2	5,5	14,5
RD FEDER 02-3.0	08L; 10S	3,0	7,3	5,4	14,3
RD FEDER 02-5.0	08L; 10S	5,0	7,4	5,4	20,2
RD FEDER 03-0.2	10L; 12S	0,2	7,5	6,1	19,5
RD FEDER 03-0.5	10L; 12S	0,5	7,8	6,3	19,1
RD FEDER 03-2.0	10L; 12S	2,0	8,3	6,3	18,7
RD FEDER 03-3.0	10L; 12S	3,0	8,6	6,2	19,2
RD FEDER 03-5.0	10L; 12S	5,0	10,0	6,5	37,5
RD FEDER 04-0.2	12L; 14S	0,2	9,7	8,0	22,7
RD FEDER 04-0.5	12L; 14S	0,5	9,9	8,0	22,6
RD FEDER 04-2.0	12L; 14S	2,0	10,5	8,0	23,0
RD FEDER 04-3.0	12L; 14S	3,0	11,0	8,0	22,8
RD FEDER 04-5.0	12L; 14S	5,0	11,1	8,0	25,4
RD FEDER 05-0.2	15L; 16S	0,2	10,8	8,9	23,9
RD FEDER 05-0.5	15L; 16S	0,5	11,4	8,9	24,2
RD FEDER 05-2.0	15L; 16S	2,0	12,3	8,9	23,6
RD FEDER 05-3.0	15L; 16S	3,0	12,7	9,0	24,1
RD FEDER 05-5.0	15L; 16S	5,0	12,6	8,9	28,3
RD FEDER 06-0.2	18L; 20S	0,2	14,4	11,9	28,4
RD FEDER 06-0.5	18L; 20S	0,5	15,0	11,9	28,5
RD FEDER 06-2.0	18L; 20S	2,0	16,2	12,0	28,0
RD FEDER 06-3.0	18L; 20S	3,0	16,6	12,0	28,0
RD FEDER 06-5.0	18L; 20S	5,0	17,4	12,0	28,5
RD FEDER 07-0.2	22L; 25S	0,2	16,7	14,0	37,0
RD FEDER 07-0.5	22L; 25S	0,5	17,5	14,0	37,0
RD FEDER 07-2.0	22L; 25S	2,0	18,9	14,0	37,0
RD FEDER 07-3.0	22L; 25S	3,0	19,1	14,0	36,6
RD FEDER 07-5.0	22L; 25S	5,0	18,6	14,0	50,0
RD FEDER 08-0.2	28L; 30S	0,2	21,3	17,8	43,5
RD FEDER 08-0.5	28L; 30S	0,5	22,1	17,7	45,2
RD FEDER 08-2.0	28L; 30S	2,0	23,3	17,7	45,5
RD FEDER 08-3.0	28L; 30S	3,0	26,6	18,0	61,0
RD FEDER 08-5.0	28L; 30S	5,0	25,0	18,0	47,0
RD FEDER 09-0.2	35L; 42L; 38S	0,2	22,1	19,0	56,7

RD FEDER (Continuation) Spring for non-return valve

Identification	for series	Opening pressure bar	Ø Da mm	Ø di mm	L1 mm
RD FEDER 09-0.5	35L; 42L; 38S	0,5	23,5	18,9	55,2
RD FEDER 09-2.0	35L; 42L; 38S	2,0	24,6	18,7	56,5
RD FEDER 09-3.0	35L; 42L; 38S	3,0	26,6	19,3	49,0
RD FEDER 09-5.0	35L; 42L; 38S	5,0	33,5	19,0	53,2

The RD springs vary depending on the supplier.

XWV Shuttle valve, connector



Connection 1 - 3: metric cylindrical outer thread
Design: Shuttle valve, connector
Standard: DIN 3865
Material: Steel
Product versions: WV, Shuttle valve, connector, Socket with union nut and cutting ring

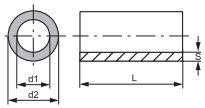
Sealing form 1 - 3: 24° inner cone
Construction: T shaped
Included in scope of supply: Socket (without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Working pressure bar	Ø d2 mm	M	Ø d mm	L4 mm	L7 mm	S1
XWV NW 06 HL	L	PN 250	8	M 14 x 1.5	4,5	14,0	21	14
XWV NW 08 HL	L	PN 250	10	M 16 x 1.5	6,0	15,0	22	17
XWV NW 10 HL	L	PN 250	12	M 18 x 1.5	7,5	17,0	24	19
XWV NW 13 HL	L	PN 160	15	M 22 x 1.5	10,0	21,0	28	19
XWV NW 03 HS	S	PN 630	6	M 14 x 1.5	3,0	16,0	24	14
XWV NW 04 HS	S	PN 630	8	M 16 x 1.5	4,5	17,0	24	17
XWV NW 06 HS	S	PN 630	10	M 18 x 1.5	6,0	17,5	25	19
XWV NW 13 HS	S	PN 630	16	M 24 x 1.5	7,5	21,5	30	22

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

PR VZ (M) Metric precision steel pipe, ST37



Design: Precision steel pipe, metric
Material: Steel ST 37.4 NBK (1.0255)
Pipe length: 6 metres

Standard: DIN EN 10305-4
Surface protection: electro galvanised

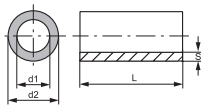
Identification	Ø d2 mm	AD tolerance +/- mm	Ø d1 mm	ID tolerance +/- mm	S mm	Specific load I bar	Specific load III bar
PR 04-1 VZ	4,0	0,08	2,0	0,15	1,00	602	484
PR 05-0.75 VZ	5,0	0,08	2,5	0,15	0,75	325	282
PR 05-1 VZ	5,0	0,08	3,0	0,15	1,00	482	400
PR 06-0.75 VZ	6,0	0,08	4,5	0,15	0,75	286	251
PR 06-1 VZ	6,0	0,08	4,0	0,12	1,00	416	352
PR 06-1.5 VZ	6,0	0,08	3,0	0,15	1,50	663	524
PR 06-2 VZ	6,0		2,0		2,00		
PR 08-1 VZ	8,0	0,08	6,0	0,10	1,00	320	278
PR 08-1.5 VZ	8,0	0,08	5,0	0,10	1,50	516	424
PR 08-2 VZ	8,0	0,08	4,0	0,15	2,00	693	543
PR 10-1 VZ	10,0	0,08	8,0	0,08	1,00	263	232
PR 10-1.5 VZ	10,0	0,08	7,0	0,12	1,50	407	345
PR 10-2 VZ	10,0	0,08	6,0	0,15	2,00	554	451
PR 10-2.5 VZ	10,0	0,08	5,0	0,15	2,50	711	555
PR 12-1 VZ	12,0	0,08	10,0	0,08	1,00	219	196
PR 12-1.5 VZ	12,0	0,08	9,0	0,10	1,50	344	297
PR 12-2 VZ	12,0	0,08	8,0	0,12	2,00	469	391
PR 12-2.5 VZ	12,0	0,08	7,0	0,15	2,50	592	477
PR 14-1.5 VZ	14,0	0,08	11,0	0,08	1,50	299	262
PR 14-2 VZ	14,0	0,08	10,0	0,10	2,00	407	345
PR 14-2.5 VZ	14,0	0,08	9,0	0,12	2,50	514	423
PR 15-1 VZ	15,0	0,08	13,0	0,08	1,00	175	159
PR 15-1.5 VZ	15,0	0,08	12,0	0,08	1,50	279	246
PR 15-2 VZ	15,0	0,08	11,0	0,10	2,00	380	324
PR 15-2.5 VZ	15,0	0,08	10,0	0,08	2,50		
PR 16-1.5 VZ	16,0	0,08	13,0	0,08	1,50	262	231
PR 16-2 VZ	16,0	0,08	12,0	0,15	2,00	346	298
PR 16-2.5 VZ	16,0	0,08	11,0	0,12	2,50	450	377
PR 18-1 VZ	18,0	0,08	16,0	0,08	1,00	146	133
PR 18-1.5 VZ	18,0	0,08	15,0	0,08	1,50	233	207
PR 18-2 VZ	18,0		14,0	0,08	2,00	320	278
PR 18-2.5 VZ	18,0	0,08	13,0	0,15	2,50	395	335
PR 20-1.5 VZ	20,0	0,08	17,0	0,08	1,50	209	188
PR 20-2 VZ	20,0	0,08	16,0	0,08	2,00	288	252
PR 20-2.5 VZ	20,0	0,08	15,0	0,15	2,50	355	305
PR 20-3 VZ	20,0	0,08	14,0	0,15	3,00	433	364
PR 20-3.5 VZ	20,0		13,0		3,50		
PR 22-1.5 VZ	22,0	0,08	19,0	0,08	1,50	190	172
PR 22-2 VZ	22,0	0,08	18,0	0,08	2,00	262	231
PR 22-2.5 VZ	22,0	0,08	17,0	0,08	2,50	333	288
PR 25-1.5 VZ	25,0		22,0		1,50		
PR 25-2 VZ	25,0	0,08	21,0	0,08	2,00	230	205
PR 25-2.5 VZ	25,0	0,08	20,0	0,08	2,50	293	256
PR 25-3 VZ	25,0	0,08	19,0	0,15	3,00	347	299

PR VZ (M) (Continuation) Metric precision steel pipe, ST37

Identification	Ø d2 mm	AD tolerance +/- mm	Ø d1 mm	ID tolerance +/- mm	S mm	Specific load I bar	Specific load III bar
PR 25-3.5 VZ	25,0		18,0		3,50		
PR 25-4 VZ	25,0	0,08	17,0	0,15	4,00	472	393
PR 28-1.5 VZ	28,0	0,08	25,0	0,08	1,50	149	136
PR 28-2 VZ	28,0	0,08	24,0	0,08	2,00	205	184
PR 28-2.5 VZ	28,0	0,08	23,0	0,08	2,50	261	231
PR 28-3 VZ	28,0	0,08	22,0	0,15	3,00	309	270
PR 30-2.5 VZ	30,0	0,08	25,0	0,08	2,50	244	217
PR 30-3 VZ	30,0	0,08	24,0	0,15	3,00	289	253
PR 30-4 VZ	30,0	0,08	22,0	0,15	4,00	393	334
PR 30-5 VZ	30,0	0,08	20,0	0,15	5,00	498	411
PR 35-1.5 VZ	35,0		32,0		1,50		
PR 35-2 VZ	35,0	0,15	31,0	0,15	2,00	152	138
PR 35-3 VZ	35,0	0,15	29,0	0,15	3,00	241	214
PR 35-4 VZ	35,0	0,15	27,0	0,15	4,00	331	286
PR 38-2 VZ	38,0		34,0		2,00		
PR 38-2.5 VZ	38,0	0,15	23,0	0,15	2,50	181	163
PR 38-3 VZ	38,0	0,15	32,0	0,15	3,00	222	198
PR 38-4 VZ	38,0	0,15	30,0	0,15	4,00	305	266
PR 38-5 VZ	38,0	0,15	28,0	0,15	5,00	387	330
PR 38-6 VZ	38,0	0,15	26,0	0,15	6,00	469	391
PR 42-2 VZ	42,0	0,20	38,0	0,20	2,00	119	109
PR 42-3 VZ	42,0	0,20	36,0	0,20	3,00	193	174

The pressure figures are based on straight pipes.The appropriate wall thickness needs to be calculated for pipes with bends as stipulated in DIN EN 13480-4.

PR (M) Metric precision steel pipe, ST37



Design: Precision steel pipe, metric
Material: Steel ST 37.4 NBK (1.0255)
Pipe length: 6 metres

Standard: DIN EN 10305-4
Surface protection: phosphate treated and oiled

Identification	Ø d2 mm	AD tolerance +/- mm	Ø d1 mm	ID tolerance +/- mm	S mm	Specific load I bar	Specific load III bar
PR 04-0.5	4,0	0,08	3,0	0,15	0,50	210	189
PR 04-0.75	4,0	0,08	2,5	0,15	0,75	405	345
PR 04-1	4,0	0,08	2,0	0,15	1,00	602	484
PR 05-0.75	5,0	0,08	3,5	0,15	0,75	325	282
PR 05-1	5,0	0,08	3,0	0,15	1,00	482	400
PR 06-0.75	6,0	0,08	4,5	0,12	0,75	286	251
PR 06-1	6,0	0,08	4,0	0,12	1,00	416	352
PR 06-1.5	6,0	0,08	3,0	0,15	1,50	663	524
PR 06-2	6,0	0,08	2,0	0,15	2,00	924	683
PR 06-2.25	6,0	0,08	1,5	0,15	2,25	1053	755
PR 08-1	8,0	0,08	6,0	0,10	1,00	320	278
PR 08-1.5	8,0	0,08	5,0	0,10	1,50	516	424
PR 08-2	8,0	0,08	4,0	0,15	2,00	693	543
PR 08-2.5	8,0	0,08	3,0	0,15	2,50	888	663
PR 10-1	10,0	0,08	8,0	0,08	1,00	263	232
PR 10-1.5	10,0	0,08	7,0	0,12	1,50	407	345
PR 10-2	10,0	0,08	6,0	0,15	2,00	554	451
PR 10-2.5	10,0	0,08	5,0	0,15	2,50	711	555
PR 10-3	10,0	0,08	4,0	0,15	3,00	867	650
PR 10-4	10,0		2,0		4,00		
PR 12-1	12,0	0,08	10,0	0,08	1,00	219	196
PR 12-1.5	12,0	0,08	9,0	0,10	1,50	344	297
PR 12-2	12,0	0,08	8,0	0,12	2,00	469	391
PR 12-2.5	12,0	0,08	7,0	0,15	2,50	592	477
PR 12-3	12,0	0,08	6,0	0,15	3,00	723	562
PR 12-4	12,0	0,08	4,0	0,15	4,00	984	717
PR 14-1	14,0	0,08	12,0	0,08	1,00	187	169
PR 14-1.5	14,0	0,08	11,0	0,08	1,50	299	262
PR 14-2	14,0	0,08	10,0	0,10	2,00	407	345
PR 14-2.5	14,0	0,08	9,0	0,12	2,50	514	423
PR 14-3	14,0	0,08	8,0	0,15	3,00	619	495
PR 14-3.5	14,0	0,08	7,0	0,15	3,50	731	568
PR 15-1	15,0	0,08	13,0	0,08	1,00	175	159
PR 15-1.5	15,0	0,08	12,0	0,08	1,50	279	246
PR 15-2	15,0	0,08	11,0	0,10	2,00	380	324
PR 15-2.5	15,0	0,08	10,0	0,12	2,50	480	398
PR 15-3	15,0	0,08	9,0	0,15	3,00	578	467
PR 16-1	16,0	0,08	14,0	0,08	1,00	164	149
PR 16-1.5	16,0	0,08	13,0	0,08	1,50	262	231
PR 16-2	16,0	0,08	12,0	0,15	2,00	346	298
PR 16-2.5	16,0	0,08	11,0	0,12	2,50	450	377
PR 16-3	16,0	0,08	10,0	0,15	3,00	542	442
PR 16-4	16,0	0,08	8,0	0,15	4,00	738	572
PR 17-2	17,0		13,0		2,00		

PR (M) (Continuation) Metric precision steel pipe, ST37

Identification	Ø d2 mm	AD tolerance +/- mm	Ø d1 mm	ID tolerance +/- mm	S mm	Specific load I bar	Specific load III bar
PR 18-1	18,0	0,08	16,0	0,08	1,00	146	133
PR 18-1.5	18,0	0,08	15,0	0,08	1,50	233	207
PR 18-2	18,0	0,08	14,0	0,08	2,00	320	278
PR 18-2.5	18,0	0,08	13,0	0,15	2,50	395	335
PR 18-3	18,0	0,08	12,0	0,15	3,00	482	400
PR 20-1.5	20,0	0,08	17,0	0,08	1,50	209	188
PR 20-2	20,0	0,08	16,0	0,08	2,00	288	252
PR 20-2.5	20,0	0,08	15,0	0,15	2,50	355	305
PR 20-3	20,0	0,08	14,0	0,15	3,00	433	364
PR 20-3.5	20,0	0,08	13,0	0,15	3,50	512	421
PR 20-4	20,0	0,08	12,0	0,15	4,00	590	475
PR 22-1	22,0	0,08	20,0	0,08	1,00	119	109
PR 22-1.5	22,0	0,08	19,0	0,08	1,50	190	172
PR 22-2	22,0	0,08	18,0	0,08	2,00	262	231
PR 22-2.5	22,0	0,08	17,0	0,08	2,50	333	288
PR 22-3	22,0	0,08	16,0	0,15	3,00	394	335
PR 25-1	25,0	0,08	23,0	0,08	1,00	105	97
PR 25-1.5	25,0	0,08	20,0	0,08	1,50	167	152
PR 25-2	25,0	0,08	21,0	0,08	2,00	230	205
PR 25-2.5	25,0	0,08	20,0	0,08	2,50	293	256
PR 25-3	25,0	0,08	19,0	0,15	3,00	347	299
PR 25-3.5	25,0	0,08	18,0	0,15	3,50	409	347
PR 25-4	25,0	0,08	17,0	0,15	4,00	472	393
PR 25-4.5	25,0	0,08	16,0	0,15	4,50	535	437
PR 25-5	25,0	0,08	15,0	0,15	5,00	597	480
PR 28-1	28,0		26,0		1,00		
PR 28-1.5	28,0	0,08	25,0	0,08	1,50	149	136
PR 28-2	28,0	0,08	24,0	0,08	2,00	205	184
PR 28-2.5	28,0	0,08	23,0	0,08	2,50	261	231
PR 28-3	28,0	0,08	20,0	0,15	3,00	309	270
PR 28-4	28,0	0,08	20,0	0,15	4,00	421	355
PR 28-4.5	28,0	0,08	19,0	0,15	4,50	477	396
PR 28-5	28,0	0,08	18,0	0,15	5,00	533	436
PR 30-1.5	30,0		27,0		1,50		
PR 30-2	30,0	0,08	26,0	0,08	2,00	192	173
PR 30-2.5	30,0	0,08	25,0	0,08	2,50	244	217
PR 30-3	30,0	0,08	24,0	0,15	3,00	289	253
PR 30-4	30,0	0,08	20,0	0,15	4,00	393	334
PR 30-5	30,0	0,08	20,0	0,15	5,00	498	411
PR 30-6	30,0		18,0		6,00		
PR 32-1.5	32,0	0,08	29,0	0,08	1,50	131	120
PR 32-2.5	32,0		27,0		2,50		
PR 35-2	35,0	0,15	31,0	0,15	2,00	152	138
PR 35-2.5	35,0	0,15	30,0	0,15	2,50	196	177
PR 35-3	35,0	0,15	29,0	0,15	3,00	241	214
PR 35-4	35,0	0,15	27,0	0,15	4,00	331	286

The pressure figures are based on straight pipes.The appropriate wall thickness needs to be calculated for pipes with bends as stipulated in DIN EN 13480-4.

PR (M) (Continuation) Metric precision steel pipe, ST37

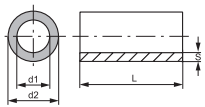
Identification	Ø d2 mm	AD tolerance +/- mm	Ø d1 mm	ID tolerance +/- mm	S mm	Specific load I bar	Specific load III bar
PR 35-5	35,0	0,15	25,0	0,15	5,00	420	355
PR 38-2.5	38,0	0,15	33,0	0,15	2,50	181	163
PR 38-3	38,0	0,15	32,0	0,15	3,00	222	198
PR 38-4	38,0	0,15	30,0	0,15	4,00	305	266
PR 38-5	38,0	0,15	28,0	0,15	5,00	387	330
PR 38-6	38,0	0,15	26,0	0,15	6,00	469	391
PR 38-7	38,0	0,15	24,0	0,15	7,00	552	449
PR 42-2	42,0	0,20	38,0	0,20	2,00	119	109
PR 42-3	42,0	0,20	36,0	0,20	3,00	193	174
PR 42-4	42,0	0,20	34,0	0,20	4,00	268	236
PR 42-5	42,0	0,20	32,0	0,20	5,00	343	296
PR 45-5	45,0		35,0		5,00		
PR 50-4	50,0	0,20	42,0	0,20	4,00	225	201
PR 50-5	50,0	0,20	40,0	0,20	5,00	288	252
PR 50-6	50,0	0,20	38,0	0,20	6,00	350	302
PR 60-3	60,0	0,25	54,0	0,25	3,00	130	119
PR 60-4	60,0	0,25	52,0	0,25	4,00	182	165
PR 60-10	60,0	0,25	40,0	0,25	10,00	496	410
PR 65-8	65,0	0,30	49,0	0,30	8,00	356	306
PR 80-10	80,0	0,35	60,0	0,35	10,00	364	312

The pressure figures are based on straight pipes.The appropriate wall thickness needs to be calculated for pipes with bends as stipulated in DIN EN 13480-4.

PR V1 (M) Metric precision steel pipe, 1.4301

Design: Precision steel pipe, metric
Pipe length: 6 metres

Material: Stainless steel 1.4301



Identification	Ø d2 mm	AD tolerance +/- mm	Ø d1 mm	ID tolerance +/- mm	S mm	Specific load I bar	Specific load III bar
PR 04-1 V1	4,0	0,08	2,0	0,15	1,00	558	376
PR 05-1 V1	5,0	0,08	3,0	0,15	1,00	447	311
PR 06-1 V1	6,0	0,08	4,0	0,15	1,00	372	265
PR 06-1.5 V1	6,0		3,0		1,50		
PR 08-1 V1	8,0	0,08	6,0	0,15	1,00	279	204
PR 08-1.5 V1	8,0	0,08	5,0	0,15	1,50	460	319
PR 10-1 V1	10,0	0,08	8,0	0,15	1,00	223	166
PR 10-1.5 V1	10,0	0,08	7,0	0,15	1,50	369	262
PR 12-1 V1	12,0	0,08	10,0	0,15	1,00	186	140
PR 12-1.5 V1	12,0	0,08	9,0	0,15	1,50	307	223
PR 12-2 V1	12,0	0,08	8,0	0,15	2,00	428	299
PR 12-3 V1	12,0		6,0		3,00		
PR 14-2 V1	14,0	0,08	10,0	0,15	2,00	367	261
PR 14-3 V1	14,0		8,0		3,00		
PR 15-1.5 V1	15,0	0,08	12,0	0,15	1,50	246	182
PR 16-1 V1	16,0	0,08	14,0		1,00		
PR 16-2 V1	16,0	0,08	12,0	0,15	2,00	321	232
PR 18-1 V1	18,0	0,08	16,0	0,08	1,00	135	104
PR 18-1.5 V1	18,0	0,08	15,0	0,08	1,50	216	161

PR V1 (M) (Continuation) Metric precision steel pipe, 1.4301

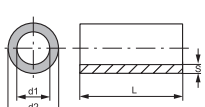
Identification	Ø d2 mm	AD tolerance +/- mm	Ø d1 mm	ID tolerance +/- mm	S mm	Specific load I bar	Specific load III bar
PR 18-2 V1	18,0	0,08	14,0	0,08	2,00	297	216
PR 22-1 V1	22,0	0,08	20,0	0,08	1,00	110	85
PR 20-2 V1	20,0	0,08	16,0	0,15	2,00	257	189
PR 22-1.5 V1	22,0	0,08	19,0	0,08	1,50	176	133
PR 22-2 V1	22,0	0,08	18,0	0,15	2,00	233	173
PR 25-5 V1	25,0	0,08	15,0	0,15	5,00	554	373
PR 28-1 V1	28,0	0,08	26,0	0,08	1,00	87	67
PR 28-2 V1	28,0	0,08	24,0	0,08	2,00	191	143
PR 28-3 V1	28,0	0,08	22,0	0,15	3,00	287	210
PR 28-4 V1	28,0		20,0		4,00		
PR 30-2 V1	30,0	0,08	26,0	0,08	2,00	178	134
PR 30-3 V1	30,0		24,0		3,00		
PR 30-4 V1	30,0		22,0		4,00		
PR 30-5 V1	30,0		20,0		5,00		
PR 40-4 V1	40,0		32,0		4,00		
PR 40-5 V1	40,0	0,15	30,0	0,20	5,00	337	243
PR 50-1.5 V1	50,0	0,20	47,0	0,20	1,50	63	50
PR 50-2 V1	50,0	0,20	46,0	0,20	2,00	93	72
PR 57-2 V1	57,0	0,25	53,0	0,25	2,00	76	59
PR 64-2 V1	64,0		60,0		2,00		
PR 70-2 V1	70,0		66,0		2,00		

The pressure figures are based on straight pipes.The appropriate wall thickness needs to be calculated for pipes with bends as stipulated in DIN EN 13480-4.

PR V2 (M) Metric precision steel pipe, 1.4541

Design: Precision steel pipe, metric
Pipe length: 6 metres

Material: Stainless steel 1.4541



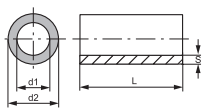
Identification	Ø d2 mm	AD tolerance +/- mm	Ø d1 mm	ID tolerance +/- mm	S mm	Specific load I bar	Specific load III bar
PR 04-1 V2	4,0	0,08	2,0	0,15	1,00	567	387
PR 06-1 V2	6,0	0,08	4,0	0,15	1,00	379	272
PR 08-1 V2	8,0	0,08	6,0	0,15	1,00	284	210
PR 08-1.5 V2	8,0	0,08	5,0	0,15	1,50	469	328
PR 10-1 V2	10,0	0,08	8,0	0,15	1,00	227	171
PR 10-1.5 V2	10,0	0,08	7,0	0,15	1,50	375	270
PR 10-2 V2	10,0	0,08	6,0	0,15	2,00	523	360
PR 12-1 V2	12,0	0,08	10,0	0,15	1,00	189	144
PR 12-1.5 V2	12,0	0,08	9,0	0,15	1,50	313	229
PR 12-2 V2	12,0	0,08	8,0	0,15	2,00	436	308
PR 14-1 V2	14,0	0,08	12,0	0,15	1,00	162	125
PR 14-2 V2	14,0	0,08	10,0	0,15	2,00	374	269
PR 14-2.5 V2	14,0		9,0		2,50		
PR 15-1 V2	15,0	0,08	13,0	0,08	1,00	165	127
PR 15-1.5 V2	15,0	0,08	12,0	0,15	1,50	250	187
PR 15-2 V2	15,0	0,08	11,0	0,15	2,00	349	253
PR 16-1 V2	16,0	0,08	14,0	0,15	1,00	155	119
PR 16-1.5 V2	16,0	0,08	13,0	0,15	1,50	234	176

PR V2 (M) (Continuation) Metric precision steel pipe, 1.4541

Identification	Ø d2 mm	AD tolerance +/- mm	Ø d1 mm	ID tolerance +/- mm	S mm	Specific load I bar	Specific load III bar
PR 16-2 V2	16,0	0,08	12,0	0,15	2,00	327	239
PR 18-1 V2	18,0	0,08	16,0	0,08	1,00	138	107
PR 18-1.5 V2	18,0	0,08	15,0	0,08	1,50	220	166
PR 18-2 V2	18,0	0,08	14,0	0,08	2,00	302	222
PR 18-2.5 V2	18,0	0,08	13,0	0,15	2,50	373	268
PR 20-1 V2	20,0	0,08	18,0	0,08	1,00	124	96
PR 20-1.5 V2	20,0	0,08	17,0	0,15	1,50	187	143
PR 20-2 V2	20,0	0,08	16,0	0,15	2,00	261	195
PR 20-2.5 V2	20,0		15,0		2,50		
PR 20-3 V2	20,0	0,08	14,0	0,08	3,00	420	298
PR 22-1 V2	22,0	0,08	20,0	0,08	1,00	113	88
PR 22-1.5 V2	22,0	0,08	19,0	0,08	1,50	180	137
PR 22-2 V2	22,0	0,08	18,0	0,15	2,00	238	178
PR 22-2.5 V2	22,0		17,0		2,50		
PR 23-1.5 V2	23,0	0,08	20,0	0,15	1,50	163	125
PR 25-2 V2	25,0	0,08	21,0	0,08	2,00	217	164
PR 25-2.5 V2	25,0	0,08	20,0	0,08	2,50	277	205
PR 25-3 V2	25,0	0,08	19,0	0,08	3,00	336	244
PR 28-1 V2	28,0	0,08	26,0	0,08	1,00	88	69
PR 28-2 V2	28,0	0,08	24,0	0,08	2,00	194	147
PR 28-2.5 V2	28,0	0,08	23,0	0,08	2,50	247	185
PR 28-3 V2	28,0	0,08	22,0	0,15	3,00	292	216
PR 28-4 V2	28,0		20,0		4,00		
PR 30-1.5 V2	30,0	0,08	27,0	0,08	1,50	132	102
PR 30-2 V2	30,0	0,08	26,0	0,08	2,00	181	138
PR 30-3 V2	30,0	0,08	24,0	0,15	3,00	273	202
PR 30-4 V2	30,0	0,08	22,0	0,15	4,00	371	267
PR 30-2.5 V2	30,0		25,0		2,50		
PR 30-5 V2	30,0	0,08	20,0	0,15	5,00	496	347
PR 32-1.5 V2	32,0	0,15	29,0	0,15	1,50	110	86
PR 32-2 V2	32,0	0,15	28,0	0,15	2,00	157	121
PR 34-2 V2	34,0	0,15	30,0	0,15	2,00	147	114
PR 35-1.5 V2	35,0	0,15	32,0	0,15	1,50	101	79
PR 38-2 V2	38,0	0,15	34,0	0,15	2,00	132	102
PR 38-3 V2	38,0	0,15	32,0	0,15	3,00	210	159
PR 40-1.5 V2	40,0	0,15	37,0	0,15	1,50	87	69
PR 42-2 V2	42,0	0,20	38,0	0,20	2,00	112	88
PR 42-6 V2	42,0		30,0		6,00		
PR 54-2 V 2	54,0	0,25	50,0	0,25	2,00	82	64

The pressure figures are based on straight pipes.The appropriate wall thickness needs to be calculated for pipes with bends as stipulated in DIN EN 13480-4.

PR V2 (Z) — Imperial precision steel pipe, 1.4541

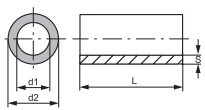


Design: Precision steel pipe, imperial
Pipe length: 6 metres
Material: Stainless steel 1.4541

Identification	Ø d2 mm	AD tolerance +/- mm	Ø d1 mm	ID tolerance +/- mm	S mm	Specific load I bar	Specific load III bar
PR 12.7-0.91 V 2	12,70	0,08	10,88	0,15	0,91	158	121
PR 13.5-2.3 V 2	13,50		2,30		8,90		
PR 26.9-2.6 V 2	26,90	0,08	21,70	0,08	2,60	268	199
PR 26.9-3.2 V 2	26,90	0,08	20,50	0,15	3,20	326	238
PR 33.7-1.6 V2	33,70		30,50		1,60		
PR 33.7-2 V2	33,70		29,70		2,00		
PR 33.7-2.6 V 2	33,70		28,50		2,60		
PR 48.3-2.6 V 2	48,30	0,20	43,10	0,20	2,60	134	104
PR 48.3-4.05 V 2	48,30	0,20	40,20	0,20	4,05	223	168
PR 60.3-2 V 2	60,30	0,20	56,30	0,20	2,00	78	62
PR 60.3-5 V 2	60,30		50,30		5,00		
PR 76.1-2 V 2	76,10	0,20	72,10	0,20	2,00	62	49
PR 88.9-4.5 V 2	88,90		79,90		4,50		
PR 101.6-4.05 V 2	101,60	0,45	93,50	0,50	4,05	90	71
PR 114.3-3.6 V 2	114,30		107,10		3,60		

The pressure figures are based on straight pipes.The appropriate wall thickness needs to be calculated for pipes with bends as stipulated in DIN EN 13480-4.

PR V4 (M) — Metric precision steel pipe, 1.4571



Design: Precision steel pipe, metric
Pipe length: 6 metres
Material: Stainless steel 1.4571

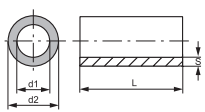
Identification	Ø d2 mm	AD tolerance +/- mm	Ø d1 mm	ID tolerance +/- mm	S mm	Specific load I bar	Specific load III bar
PR 04-1 V4	4,0	0,08	2,0	0,15	1,00	600	408
PR 06-1 V4	6,0	0,08	4,0	0,15	1,00	400	287
PR 06-1.5 V4	6,0	0,08	3,0	0,15	1,50	660	442
PR 06-2 V4	6,0		2,0		2,00		
PR 08-1 V4	8,0	0,08	6,0	0,15	1,00	300	222
PR 08-1.5 V4	8,0	0,08	5,0	0,15	1,50	495	347
PR 08-2 V4	8,0	0,08	4,0	0,15	2,00	690	458
PR 10-0.5 V4	10,0		9,0		0,50		
PR 10-1 V4	10,0	0,08	8,0	0,15	1,00	240	181
PR 10-1.5 V4	10,0	0,08	7,0	0,15	1,50	396	285
PR 10-2 V4	10,0	0,08	6,0	0,15	2,00	552	380
PR 12-1 V4	12,0	0,08	10,0	0,15	1,00	200	152
PR 12-1.5 V4	12,0	0,08	9,0	0,15	1,50	330	242
PR 12-2 V4	12,0	0,08	8,0	0,15	2,00	460	325
PR 12-3 V4	12,0	0,08	6,0	0,25	3,00	694	461
PR 14-1.5 V4	14,0	0,08	11,0	0,15	1,50	283	210
PR 14-2 V4	14,0	0,08	10,0	0,15	2,00	394	284
PR 14-2.5 V4	14,0	0,08	9,0	0,15	2,50	505	353
PR 15-1 V4	15,0	0,08	13,0	0,08	1,00	174	134
PR 15-1.5 V4	15,0	0,08	12,0	0,15	1,50	264	197

PR V4 (M) (Continuation) Metric precision steel pipe, 1.4571

Identification	Ø d2 mm	AD tolerance +/- mm	Ø d1 mm	ID tolerance +/- mm	S mm	Specific load I bar	Specific load III bar
PR 15-2 V4	15,0	0,08	11,0	0,15	2,00	368	267
PR 16-1.5 V4	16,0	0,08	13,0	0,08	1,50	261	195
PR 16-2 V4	16,0	0,08	12,0	0,15	2,00	345	252
PR 16-2.5 V4	16,0	0,08	11,0	0,15	2,50	442	314
PR 16-3 V4	16,0	0,08	10,0	0,15	3,00	540	373
PR 18-1 V4	18,0	0,08	16,0	0,08	1,00	145	112
PR 18-1.5 V4	18,0	0,08	15,0	0,08	1,50	232	175
PR 18-2 V4	18,0	0,08	14,0	0,08	2,00	318	234
PR 18-2.5 V4	18,0	0,08	13,0	0,15	2,50	393	283
PR 20-2 V4	20,0	0,08	16,0	0,08	2,00	287	213
PR 20-2.5 V4	20,0	0,08	15,0	0,15	2,50	354	258
PR 20-3 V4	20,0	0,08	14,0	0,15	3,00	432	308
PR 20-3.5 V4	20,0		13,0		3,50		
PR 22-1.5 V4	22,0	0,08	19,0	0,08	1,50	190	145
PR 22-2 V4	22,0	0,08	18,0	0,08	2,00	260	195
PR 22-2.5 V4	22,0	0,08	17,0	0,15	2,50	321	236
PR 22-3 V4	22,0	0,08	16,0	0,15	3,00	392	283
PR 25-1.5 V4	25,0	0,08	22,0	0,08	1,50	167	128
PR 25-2 V4	25,0	0,08	21,0	0,08	2,00	229	173
PR 25-2.5 V4	25,0	0,08	20,0	0,08	2,50	292	216
PR 25-3 V4	25,0	0,08	19,0	0,15	3,00	345	252
PR 28-1.5 V4	28,0	0,08	25,0	0,08	1,50	149	115
PR 28-2 V4	28,0	0,08	24,0	0,08	2,00	205	156
PR 28-2.5 V4	28,0	0,08	23,0	0,08	2,50	260	195
PR 30-2 V4	30,0	0,08	26,0	0,08	2,00	191	146
PR 30-2.5 V4	30,0	0,08	25,0	0,08	2,50	243	183
PR 30-3 V4	30,0	0,08	24,0	0,15	3,00	288	214
PR 30-4 V4	30,0	0,08	22,0	0,15	4,00	392	282
PR 30-5 V4	30,0	0,08	20,0	0,15	5,00	496	347
PR 35-1.5 V 4	35,0		32,0		1,50		
PR 35-2 V4	35,0	0,15	31,0	0,15	2,00	151	117
PR 35-2.5 V4	35,0	0,15	30,0	0,15	2,50	196	149
PR 35-5 V 4	35,0		25,0		5,00		
PR 38-4 V4	38,0	0,15	30,0	0,15	4,00	303	224
PR 38-5 V4	38,0	0,15	28,0	0,15	5,00	385	278
PR 42-2 V4	42,0	0,20	38,0	0,20	2,00	118	92
PR 42-3 V4	42,0	0,20	36,0	0,20	3,00	193	147

The pressure figures are based on straight pipes.The appropriate wall thickness needs to be calculated for pipes with bends as stipulated in DIN EN 13480-4.

PR V4 (Z) — Imperial precision steel pipe, 1.4571

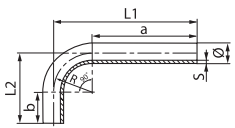


Design: Precision steel pipe, imperial
Pipe length: 6 metres
Material: Stainless steel 1.4571

Identification	Ø d2 mm	AD tolerance +/- mm	Ø d1 mm	ID tolerance +/- mm	S mm	Specific load I bar	Specific load III bar
PR 17.2-2.3 V4	17,20	0,08	12,60	0,15	2,30	375	272
PR 21.3-2 V4	21,30	0,08	17,30	0,08	2,00	269	201
PR 33.7-1.6 V4	33,70	0,08	30,50	0,15	1,60	126	98
PR 33.7-3.2 V4	33,70	0,08	27,30	0,15	3,20	274	205
PR 42.4-1.6 V4	42,40		39,20		1,60		
PR 42.4-2 V4	42,40	0,20	38,40	0,20	2,00	117	92
PR 42.4-2.6 V4	42,40	0,20	37,20	0,20	2,60	161	124
PR 42.4-3.2 V4	42,40	0,20	36,00	0,20	3,20	206	156
PR 48.3-1.6 V4	48,30	0,20	45,10	0,20	1,60	77	61
PR 48.3-3.2 V4	48,30	0,20	41,90	0,20	3,20	180	138
PR 60.3-2.9 V4	60,30	0,25	54,50	0,30	2,90	121	95
PR 76.1-2.9 V4	76,10	0,35	70,30	0,35	2,90	90	71
PR 88.9-2.9 V4	88,90	0,40	83,10	0,45	2,90	71	57
PR 88.9-3.2 V4	88,90	0,40	82,50	0,45	3,20	82	65
PR 88.9-11.13 V4	88,90		66,64		11,13		

The pressure figures are based on straight pipes.The appropriate wall thickness needs to be calculated for pipes with bends as stipulated in DIN EN 13480-4.

RB — Pipe bend 90°



Design: Pipe bend 90°
Material: Steel ST 37.4 NBK (1.0255)
Standard: DIN 2391/C
Surface protection: phosphate treated and oiled

Identification	External pipe Ø mm	Internal Ø mm	S mm	Bending radius R mm	a mm	b mm	L1 mm	L2 mm
RB 14-1.5	14,0	11,0	1,50	30	200,0	40,0	230,0	70,0
RB 15-1.5	15,0	12,0	1,50	30	200,0	40,0	230,0	70,0
RB 15-2	15,0	11,0	2,00	30	200,0	40,0	230,0	70,0
RB 16-2	16,0	12,0	2,00	30	200,0	40,0	230,0	70,0
RB 18-1.5	18,0	15,0	1,50	36	200,0	35,0	236,0	71,0
RB 18-2	18,0	14,0	2,00	36	200,0	35,0	236,0	72,0
RB 20-2	20,0	16,0	2,00	36	200,0	45,0	236,0	81,0
RB 20-2.5	20,0	15,0	2,50	36	200,0	45,0	236,0	81,0
RB 20-3	20,0	14,0	3,00	36	200,0	45,0	236,0	81,0
RB 22-1.5	22,0	19,0	1,50	38	200,0	40,0	238,0	78,0
RB 22-2	22,0	18,0	2,00	38	200,0	40,0	238,0	78,0
RB 22-2.5	22,0	17,0	2,50	38	200,0	40,0	238,0	78,0
RB 22-3.5	22,0	15,0	3,50	38	200,0	40,0	238,0	78,0
RB 25-2	25,0	21,0	2,00	44	200,0	50,0	244,0	94,0
RB 25-2.5	25,0	20,0	2,50	44	200,0	50,0	244,0	94,0
RB 25-3	25,0	19,0	3,00	44	200,0	50,0	244,0	94,0
RB 25-4	25,0	17,0	4,00	44	200,0	50,0	244,0	94,0
RB 28-1.5	28,0	25,0	1,50	48	200,0	50,0	248,0	98,0
RB 28-2	28,0	24,0	2,00	48	200,0	50,0	248,0	98,0
RB 28-3	28,0	22,0	3,00	48	200,0	50,0	248,0	98,0

RB (Continuation) Pipe bend 90°

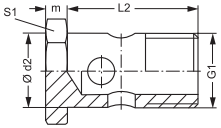
Identification	External pipe Ø mm	Internal Ø mm	S mm	Bending radius R mm	a mm	b mm	L1 mm	L2 mm
RB 30-2.5	30,0	25,0	2,50	50	200,0	60,0	250,0	110,0
RB 30-3	30,0	24,0	3,00	50	200,0	60,0	250,0	110,0
RB 30-4	30,0	22,0	4,00	50	200,0	60,0	250,0	110,0
RB 35-2	35,0	31,0	2,00	60	200,0	65,0	260,0	125,0
RB 35-3	35,0	29,0	3,00	60	200,0	65,0	260,0	125,0
RB 38-2.5	38,0	33,0	2,50	65	200,0	75,0	265,0	140,0
RB 38-3	38,0	32,0	3,00	65	200,0	75,0	265,0	140,0
RB 38-4	38,0	30,0	4,00	65	200,0	75,0	265,0	140,0
RB 38-5	38,0	28,0	5,00	65	200,0	75,0	265,0	140,0
RB 42-2	42,0	38,0	2,00	80	200,0	85,0	280,0	165,0
RB 42-3	42,0	36,0	3,00	80	200,0	85,0	280,0	165,0
RB 50-6	50,0	38,0	6,00	210	100,0	100,0	310,0	310,0
RB 65-8	65,0	49,0	8,00	210	110,0	110,0	320,0	320,0
RB 80-10	80,0	60,0	10,00	210	120,0	120,0	330,0	330,0

HS R Hollow screw

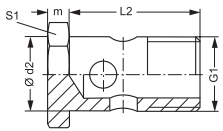
Connection 1: BSP external thread, cylindrical
Material: Steel
Product versions: HS R VA, Hollow screw, Stainless steel

Design: Hollow screw
Surface protection: electro galvanised

Identification	G1	Ø d2 mm	L2 mm	m mm	S1
HS R 1/8	G 1/8" -28	9,9	19,0	5	14
HS R 1/4	G 1/4" -19	13,1	25,5	5	17
HS R 3/8	G 3/8" -19	16,6	31,0	7	22
HS R 1/2	G 1/2" -14	20,9	40,0	8	27
HS R 5/8	G 5/8" -14	22,9	47,0	9	32
HS R 3/4	G 3/4" -14	26,4	47,0		32
HS R 1	G 1" -11	33,2	58,0	10	41



HS M — Hollow screw

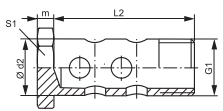


Connection 1: metric cylindrical outer thread
Material: Steel
Product versions: HS M VA, Hollow screw, Stainless steel

Design: Hollow screw
Surface protection: electro galvanised

Identification	G1	Ø d2 mm	L2 mm	m mm	S1
HS M 06	M 6 x 1	6	17	4	11
HS M 08	M 8 x 1	8	17	5	12
HS M 10	M 10 x 1	10	19	6	14
HS M 12	M 12 x 1.5	12	24	6	17
HS M 14	M 14 x 1.5	14	26	6	19
HS M 16	M 16 x 1.5	16	28	6	22
HS M 18	M 18 x 1.5	18	32	6	24
HS M 22	M 22 x 1.5	22	39	7	27
HS M 26	M 26 x 1.5	26	45	7	32
HS M 30	M 30 x 1.5	30	51	7	36
HS M 38	M 38 x 1.5	38	61	8	46

DHS M / DHS R — Double hollow screw

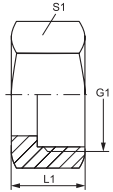


Connection 1: metric / BSP external thread
Standard: DIN 7643
Surface protection: electro galvanised

Design: Double hollow screw
Material: Steel

Identification	G1	Ø d2 mm	L2 mm	m mm	S1
DHS M 06	M 6 x 1	6	25	5	11
DHS M 08	M 8 x 1	8	27	5	12
DHS M 10	M 10 x 1	10	30	6	14
DHS M 12	M 12 x 1.5	12	38	6	17
DHS M 14	M 14 x 1.5	14	42	6	19
DHS M 16	M 16 x 1.5	16	46	6	22
DHS M 18	M 18 x 1.5	18	54	6	24
DHS M 22	M 22 x 1.5	22	69	7	27
DHS M 26	M 26 x 1.5	26	77	8	32
DHS M 30	M 30 x 1.5	30	86	8	36
DHS R 1/4	G 1/4" -19	13	41	6	19

UEM AJF — Union nut AJF

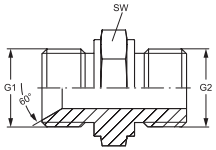


Connection 1: ORFS nut threads
Design: Union nut
Surface protection: electro galvanised
Product versions: UEM AJF VA, Union nut AJF, Stainless steel

Sealing form 1: flat sealing
Material: Steel

Identification	G1	L1 mm	S1
UEM AJF 04	9/16"-18 UNF	15,0	17
UEM AJF 06	11/16" -16 UN	17,0	22
UEM AJF 08	13/16" -16 UN	20,0	24
UEM AJF 10	1" -14 UNS	24,0	30
UEM AJF 12	1.3/16" -12 UN	26,5	36
UEM AJF 16	1.7/16" -12 UN	27,5	41
UEM AJF 20	1.11/16" -12 UN	27,5	50
UEM AJF 24	2" -12 UN	27,5	60

GE HB HR — Screw-in sockets



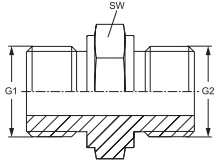
Connection 1: BSP external thread, cylindrical
Connection 2: BSP cylindrical external threads
Design: Screw-in sockets
Material: Steel

Sealing form 1: 60° inner cone
Sealing form 2: Flat seal
Construction: straight
Surface protection: electro galvanised

Identification	G1	G2	SW mm
GE HB 04 HR 02	G 1/4" -19	G 1/8" -28	14
GE HB 04 HR	G 1/4" -19	G 1/4" -19	19
GE HB 04 HR 06	G 1/4" -19	G 3/8" -19	22
GE HB 06 HR 04	G 3/8" -19	G 1/4" -19	19
GE HB 06 HR	G 3/8" -19	G 3/8" -19	22
GE HB 08 HR 06	G 1/2" -14	G 3/8" -19	22
GE HB 08 HR	G 1/2" -14	G 1/2" -14	27
GE HB 08 HR 12	G 1/2" -14	G 3/4" -14	27
GE HB 10 HR 08	G 5/8" -14	G 1/2" -14	27
GE HB 10 HR	G 5/8" -14	G 5/8" -14	30

Identification	G1	G2	SW mm
GE HB 10 HR 12	G 5/8" -14	G 3/4" -14	32
GE HB 12 HR 08	G 3/4" -14	G 1/2" -14	27
GE HB 12 HR 10	G 3/4" -14	G 5/8" -14	30
GE HB 12 HR	G 3/4" -14	G 3/4" -14	32
GE HB 16 HR 12	G 1" -11	G 3/4" -14	36
GE HB 16 HR	G 1" -11	G 1" -11	41
GE HB 20 HR 16	G 1.1/4" -11	G 1" -11	46
GE HB 20 HR	G 1.1/4" -11	G 1.1/4" -11	50
GE HB 24 HR 20	G 1.1/2" -11	G 1.1/4" -11	50
GE HB 24 HR	G 1.1/2" -11	G 1.1/2" -11	55

GE HR Screw-in sockets

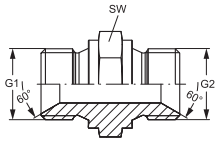


Connection 1: BSP external thread, cylindrical
Connection 2: BSP cylindrical external threads
Design: Screw-in sockets
Material: Steel

Sealing form 1: Shape A
Sealing form 2: Shape A
Construction: straight
Surface protection: electro galvanised

Identification	G1	G2	SW mm
GE HR 04	G 1/4" -19	G 1/4" -19	19
GE HR 06 HR 04	G 3/8" -19	G 1/4" -19	22
GE HR 06	G 3/8" -19	G 3/8" -19	22
GE HR 08 HR 06	G 1/2" -14	G 3/8" -19	27
GE HR 08	G 1/2" -14	G 1/2" -14	27
GE HR 12 HR 08	G 3/4" -14	G 1/2" -14	32
GE HR 12	G 3/4" -14	G 3/4" -14	32

G HB Connection sockets



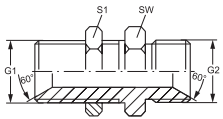
Connection 1: BSP external thread, cylindrical
Connection 2: BSP cylindrical external threads
Design: Connection sockets
Material: Steel
Product versions : G HB VA, Connection sockets, Stainless steel

Sealing form 1: 60° inner cone
Sealing form 2: 60° inner cone
Construction: straight
Surface protection: electro galvanised

Identification	G1	G2	SW mm
G HB 02	G 1/8" -28	G 1/8" -28	14
G HB 02 HB 04	G 1/8" -28	G 1/4" -19	19
G HB 02 HB 06	G 1/8" -28	G 3/8" -19	22
G HB 02 HB 08	G 1/8" -28	G 1/2" -14	27
G HB 04	G 1/4" -19	G 1/4" -19	19
G HB 04 HB 06	G 1/4" -19	G 3/8" -19	22
G HB 04 HB 08	G 1/4" -19	G 1/2" -14	27
G HB 04 HB 10	G 1/4" -19	G 5/8" -14	30
G HB 04 HB 12	G 1/4" -19	G 3/4" -14	32
G HB 04 HB 16	G 1/4" -19	G 1" -11	41
G HB 04 HB 20	G 1/4" -19	G 1.1/4" -11	50
G HB 06	G 3/8" -19	G 3/8" -19	22
G HB 06 HB 08	G 3/8" -19	G 1/2" -14	27
G HB 06 HB 10	G 3/8" -19	G 5/8" -14	32
G HB 06 HB 12	G 3/8" -19	G 3/4" -14	32
G HB 06 HB 16	G 3/8" -19	G 1" -11	41
G HB 06 HB 20	G 3/8" -19	G 1.1/4" -11	50
G HB 08	G 1/2" -14	G 1/2" -14	27
G HB 08 HB 10	G 1/2" -14	G 5/8" -14	30
G HB 08 HB 12	G 1/2" -14	G 3/4" -14	32
G HB 08 HB 16	G 1/2" -14	G 1" -11	41
G HB 08 HB 20	G 1/2" -14	G 1.1/4" -11	50
G HB 08 HB 24	G 1/2" -14	G 1.1/2" -11	55

Identification	G1	G2	SW mm
G HB 08 HB 32	G 1/2" -14	G 2" -11	70
G HB 10	G 5/8" -14	G 5/8" -14	30
G HB 10 HB 12	G 5/8" -14	G 3/4" -14	32
G HB 10 HB 16	G 5/8" -14	G 1" -11	41
G HB 10 HB 20	G 5/8" -14	G 1.1/4" -11	50
G HB 12	G 3/4" -14	G 3/4" -14	32
G HB 12 HB 16	G 3/4" -14	G 1" -11	41
G HB 12 HB 20	G 3/4" -14	G 1.1/4" -11	50
G HB 12 HB 24	G 3/4" -14	G 1.1/2" -11	55
G HB 12 HB 32	G 3/4" -14	G 2" -11	70
G HB 16	G 1" -11	G 1" -11	41
G HB 16 HB 20	G 1"	G 1.1/4" -11	50
G HB 16 HB 24	G 1" -11	G 1.1/2" -11	55
G HB 16 HB 32	G 1" -11	G 2" -11	70
G HB 20	G 1.1/4" -11	G 1.1/4" -11	50
G HB 20 HB 24	G 1.1/4" -11	G 1.1/2" -11	55
G HB 20 HB 32	G 1.1/4" -11	G 2" -11	70
G HB 24	G 1.1/2" -11	G 1.1/2" -11	55
G HB 24 HB 32	G 1.1/2" -11	G 2" -11	70
G HB 32	G 2" -11	G 2" -11	70
G HB 40 HB 48	G 2.1/2" -11	G 3" -11	100
G HB 48	G 3" -11	G 3" -11	110

SV HB — Bulkhead fitting socket

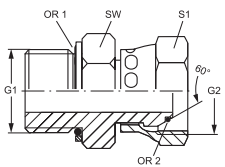


Connection 1: BSP external thread, cylindrical
Connection 2: BSP cylindrical external threads
Design: Bulkhead fitting socket
Material: Steel
Product versions: SV HB VA, Bulkhead fitting socket, Stainless steel

Sealing form 1: 60° inner cone
Sealing form 2: 60° inner cone
Construction: straight
Surface protection: electro galvanised

Identification	G1 + G2	SW mm	S1
SV HB 02	G 1/8" -28	14	14
SV HB 04	G 1/4" -19	19	19
SV HB 06	G 3/8" -19	22	22
SV HB 08	G 1/2" -14	27	27
SV HB 10	G 5/8" -14	30	30
SV HB 12	G 3/4" -14	32	32
SV HB 16	G 1" -11	41	41
SV HB 20	G 1.1/4" -11	50	50
SV HB 24	G 1.1/2" -11	55	55
SV HB 32	G 2" -11	70	70

GE HROK AOB — Screw-in sockets

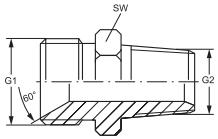


Connection 1: BSP external thread, cylindrical
Connection 2: BSP nut thread
Design: Screw-in sockets
Material: Steel

Sealing form 1: Thread socket with O-ring + spacer diaphragm ring
Sealing form 2: 60° outer cone with O-ring
Construction: straight
Surface protection: electro galvanised

Identification	G1 + G2	SW mm	S1	OR1	OR2
GE HROK 04 AOB	G 1/4" -19	20	17	10.77 x 2.62	6.0 x 1.0
GE HROK 06 AOB	G 3/8" -19	24	22	13.94 x 2.62	8.1 x 1.6
GE HROK 08 AOB	G 1/2" -14	28	27	17.86 x 2.62	12.1 x 1.6
GE HROK 12 AOB	G 3/4" -14	35	32	23.47 x 2.62	17.1 x 1.6
GE HROK 16 AOB	G 1" -11	43	41	29.75 x 3.53	22.1 x 1.6
GE HROK 20 AOB	G 1.1/4" -11	52	50	37.69 x 3.53	29.1 x 1.6
GE HROK 24 AOB	G 1.1/2" -11	58	60	44.04 x 3.53	35.1 x 1.6

GE HB HN Screw-in sockets



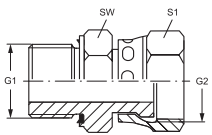
Connection 1: BSP external thread, cylindrical
Connection 2: NPT external threads
Design: Screw-in sockets
Material: Steel
Product versions : GE HB HN VA, Screw-in sockets, Stainless steel

Sealing form 1: 60° inner cone
Sealing form 2: thread seal
Construction: straight
Surface protection: electro galvanised

Identification	G1	G2	SW mm
GE HB 02 HN	G 1/8" -28	1/8" -27 NPT	11
GE HB 02 HN 04	G 1/8" -28	1/4" -18 NPT	17
GE HB 04 HN 02	G 1/4" -19	1/8" -27 NPT	17
GE HB 04 HN	G 1/4" -19	1/4" -18 NPT	17
GE HB 04 HN 06	G 1/4" -19	3/8" -18 NPT	17
GE HB 04 HN 08	G 1/4" -19	1/2" -14 NPT	22
GE HB 04 HN 12	G 1/4" -19	3/4" -14 NPT	27
GE HB 06 HN 02	G 3/8" -19	1/8" -27 NPT	17
GE HB 06 HN 04	G 3/8" -19	1/4" -18 NPT	17
GE HB 06 HN	G 3/8" -19	3/8" -18 NPT	17
GE HB 06 HN 08	G 3/8" -19	1/2" -14 NPT	22
GE HB 06 HN 12	G 3/8" -19	3/4" -14 NPT	27
GE HB 06 HN 16	G 3/8" -19	1" -11.5 NPT	36
GE HB 08 HN 04	G 1/2" -14	1/4" -18 NPT	22
GE HB 08 HN 06	G 1/2" -14	3/8" -18 NPT	22
GE HB 08 HN	G 1/2" -14	1/2" -14 NPT	22
GE HB 08 HN 12	G 1/2" -14	3/4" -14 NPT	27
GE HB 08 HN 16	G 1/2" -14	1" -11.5 NPT	36
GE HB 10 HN 08	G 5/8" -14	1/2" -14 NPT	27
GE HB 10 HN 12	G 5/8" -14	3/4" -14 NPT	27
GE HB 12 HN 04	G 3/4" -14	1/4" -18 NPT	27
GE HB 12 HN 06	G 3/4" -14	3/8" -18 NPT	27

Identification	G1	G2	SW mm
GE HB 12 HN 08	G 3/4" -14	1/2" -14 NPT	27
GE HB 12 HN	G 3/4" -14	3/4" -14 NPT	27
GE HB 12 HN 16	G 3/4" -14	1" -11.5 NPT	36
GE HB 12 HN 20	G 3/4" -14	1.1/4" -11.5 NPT	46
GE HB 16 HN 08	G 1" -11	1/2" -14 NPT	36
GE HB 16 HN 12	G 1" -11	3/4" -14 NPT	36
GE HB 16 HN	G 1" -11	1" -11.5 NPT	36
GE HB 16 HN 20	G 1" -11	1.1/4" -11.5 NPT	46
GE HB 16 HN 24	G 1" -11	1.1/2" -11.5 NPT	50
GE HB 16 HN 32	G 1" -11	2" -11.5 NPT	65
GE HB 20 HN 12	G 1.1/4" -11	3/4" -14 NPT	46
GE HB 20 HN 16	G 1.1/4" -11	1" -11.5 NPT	46
GE HB 20 HN	G 1.1/4" -11	1.1/4" -11.5 NPT	46
GE HB 20 HN 24	G 1.1/4" -11	1.1/2" -11.5 NPT	50
GE HB 24 HN 16	G 1.1/2" -11	1" -11.5 NPT	50
GE HB 24 HN 20	G 1.1/2" -11	1.1/4" -11.5 NPT	50
GE HB 24 HN	G 1.1/2" -11	1.1/2" -11.5 NPT	50
GE HB 24 HN 32	G 1.1/2" -11	2" -11.5 NPT	65
GE HB 32 HN 20	G 2" -11	1.1/4" -11.5 NPT	65
GE HB 32 HN 24	G 2" -11	1.1/2" -11.5 NPT	65
GE HB 32 HN	G 2" -11	2" -11.5 NPT	65

GE HRED AJF — Screw-in sockets

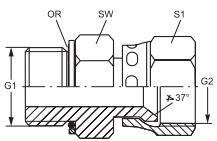


Connection 1: BSP external thread, cylindrical
Connection 2: ORFS nut threads
Design: Screw-in sockets
Material: Steel
Spare parts: WD, Soft seal for ED fittings

Sealing form 1: Shape E
Sealing form 2: Flat seal
Construction: straight
Surface protection: electro galvanised

Identification	Working pressure bar	G1	G2	SW mm	S1
GE HRED 02 AJ F 04	PN 500	G 1/8" -28	9/16"-18 UNF	14	17
GE HRED 04 AJF	PN 500	G 1/4" -19	9/16"-18 UNF	19	17
GE HRED 04 AJF 06	PN 630	G 1/4" -19	11/16" -16 UN	19	22
GE HRED 04 AJF 08	PN 630	G 1/4" -19	13/16" -16 UN	22	24
GE HRED 06 AJF	PN 630	G 3/8" -19	11/16" -16 UN	22	22
GE HRED 06 AJF 08	PN 630	G 3/8" -19	13/16" -16 UN	22	24
GE HRED 08 AJF 06	PN 420	G 1/2" -14	11/16" -16 UN	27	22
GE HRED 08 AJF	PN 420	G 1/2" -14	13/16" -16 UN	27	24
GE HRED 08 AJF 10	PN 400	G 1/2" -14	1" -14 UNS	27	30
GE HRED 08 AJF 12	PN 420	G 1/2" -14	1.3/16" -12 UN	30	36
GE HRED 12 AJF 10	PN 420	G 3/4" -14	1" -14 UNS	32	30
GE HRED 12 AJF	PN 400	G 3/4" -14	1.3/16" -12 UN	32	36
GE HRED 16 AJF	PN 400	G 1" -11	1.7/16" -12 UN	41	41
GE HRED 20 AJF	PN 250	G 1.1/4" -11	1.11/16" -12 UN	50	50
GE HRED 24 AJF	PN 250	G 1.1/2" -11	2" -12 UN	55	60

GE HROK AJ — Screw-in sockets



Connection 1: BSP external thread, cylindrical
Connection 2: UN/UNF nut threads
Design: Screw-in sockets
Material: Steel

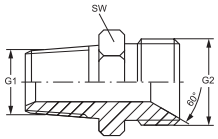
Sealing form 1: Thread socket with O-ring + spacer diaphragm ring
Sealing form 2: 74° inner cone
Construction: straight
Surface protection: electro galvanised

Identification	Working pressure bar	G1	G2	SW mm	S1	OR
GE HROK 02 AJ 04	PN 315	G 1/8" -28	7/16"-20 UNF	16	14	7.97 x 1.88
GE HROK 02 AJ 05	PN 315	G 1/8" -28	1/2"-20 UNF	16	17	7.97 x 1.88
GE HROK 04 AJ	PN 315	G 1/4" -19	7/16"-20 UNF	19	14	10.77 x 2.62
GE HROK 04 AJ 05	PN 315	G 1/4" -19	1/2"-20 UNF	19	17	10.77 x 2.62
GE HROK 04 AJ 06	PN 250	G 1/4" -19	9/16"-18 UNF	19	19	10.77 x 2.62
GE HROK 04 AJ 08	PN 250	G 1/4" -19	3/4"-16 UNF	19	22	10.77 x 2.62
GE HROK 06 AJ 04	PN 315	G 3/8" -19	7/16"-20 UNF	22	14	13.94 x 2.62
GE HROK 06 AJ 05	PN 315	G 3/8" -19	1/2"-20 UNF	22	17	13.94 x 2.62
GE HROK 06 AJ	PN 250	G 3/8" -19	9/16"-18 UNF	22	19	13.94 x 2.62
GE HROK 06 AJ 08	PN 250	G 3/8" -19	3/4"-16 UNF	22	22	13.94 x 2.62
GE HROK 06 AJ 10	PN 200	G 3/8" -19	7/8"-14 UNF	22	27	13.94 x 2.62
GE HROK 08 AJ 06	PN 250	G 1/2" -14	9/16"-18 UNF	30	19	17.86 x 2.62
GE HROK 08 AJ	PN 250	G 1/2" -14	3/4"-16 UNF	30	22	17.86 x 2.62
GE HROK 08 AJ 10	PN 200	G 1/2" -14	7/8"-14 UNF	30	27	17.86 x 2.62
GE HROK 08 AJ 12	PN 200	G 1/2" -14	1.1/16" -12 UN	30	32	17.86 x 2.62
GE HROK 12 AJ 10	PN 200	G 3/4" -14	7/8"-14 UNF	36	27	23.47 x 2.62
GE HROK 12 AJ	PN 200	G 3/4" -14	1.1/16" -12 UN	36	32	23.47 x 2.62

GE HROK AJ (Continuation) Screw-in sockets

Identification	Working pressure bar	G1	G2	SW mm	S1	OR
GE HROK 12 AJ 16	PN 160	G 3/4" -14	1.5/16" -12 UN	36	41	23.47 x 2.62
GE HROK 16 AJ 12	PN 200	G 1" -11	1.1/16" -12 UN	46	32	29.74 x 3.53
GE HROK 16 AJ	PN 160	G 1" -11	1.5/16" -12 UN	46	41	29.74 x 3.53
GE HROK 16 AJ 20	PN 125	G 1" -11	1.5/8" -12 UN	46	50	29.74 x 3.53
GE HROK 20 AJ 16	PN 160	G 1.1/4" -11	1.5/16" -12 UN	50	41	37.69 x 3.53
GE HROK 20 AJ	PN 125	G 1.1/4" -11	1.5/8" -12 UN	50	50	37.69 x 3.53
GE HROK 20 AJ 24	PN 100	G 1.1/4" -11	1.7/8" -12 UN	50	60	37.69 x 3.53
GE HROK 24 AJ	PN 100	G 1.1/2" -11	1.7/8" -12 UN	55	60	44.04 x 3.53

GE HRK HB Screw-in sockets



Connection 1: BSPT conical external threads
Connection 2: BSP cylindrical external threads
Design: Screw-in sockets
Material: Steel
Product versions : GE HRK HB VA, Screw-in sockets, Stainless steel

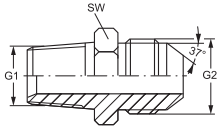
Sealing form 1: thread seal
Sealing form 2: 60° inner cone
Construction: straight
Surface protection: electro galvanised

Identification	G1	G2	SW mm
GE HRK 02 HB	R 1/8" K	G 1/8" -28	14
GE HRK 02 HB 04	R 1/8" K	G 1/4" -19	14
GE HRK 02 HB 06	R 1/8" K	G 3/8" -19	19
GE HRK 04 HB 02	R 1/4" K	G 1/8" -28	14
GE HRK 04 HB	R 1/4" K	G 1/4" -19	19
GE HRK 04 HB 06	R 1/4" K	G 3/8" -19	22
GE HRK 04 HB 08	R 1/4" K	G 1/2" -14	27
GE HRK 04 HB 12	R 1/4" K	G 3/4" -14	32
GE HRK 06 HB 02	R 3/8" K	G 1/8" -28	19
GE HRK 06 HB 04	R 3/8" K	G 1/4" -19	19
GE HRK 06 HB	R 3/8" K	G 3/8" -19	22
GE HRK 06 HB 08	R 3/8" K	G 1/2" -14	27
GE HRK 06 HB 10	R 3/8" K	G 5/8" -14	30
GE HRK 06 HB 12	R 3/8" K	G 3/4" -14	32
GE HRK 08 HB 04	R 1/2" K	G 1/4" -19	22
GE HRK 08 HB 06	R 1/2" K	G 3/8" -19	22
GE HRK 08 HB	R 1/2" K	G 1/2" -14	27
GE HRK 08 HB 10	R 1/2" K	G 5/8" -14	30
GE HRK 08 HB 12	R 1/2" K	G 3/4" -14	32
GE HRK 08 HB 16	R 1/2" K	G 1" -11	41
GE HRK 10 HB 08	R 5/8" K	G 1/2" -14	30
GE HRK 10 HB	R 5/8" K	G 5/8" -14	30
GE HRK 10 HB 12	R 5/8" K	G 3/4" -14	32
GE HRK 12 HB 04	R 3/4" K	G 1/4" -19	30
GE HRK 12 HB 06	R 3/4" K	G 3/8" -19	30

Identification	G1	G2	SW mm
GE HRK 12 HB 08	R 3/4" K	G 1/2" -14	30
GE HRK 12 HB 10	R 3/4" K	G 5/8" -14	30
GE HRK 12 HB	R 3/4" K	G 3/4" -14	32
GE HRK 12 HB 16	R 3/4" K	G 1" -11	41
GE HRK 12 HB 20	R 3/4" K	G 1.1/4" -11	50
GE HRK 16 HB 06	R 1" K	G 3/8" -19	36
GE HRK 16 HB 08	R 1" K	G 1/2" -14	36
GE HRK 16 HB 12	R 1" K	G 3/4" -14	36
GE HRK 16 HB	R 1" K	G 1" -11	41
GE HRK 16 HB 20	R 1" K	G 1.1/4" -11	50
GE HRK 16 HB 24	R 1" K	G 1.1/2" -11	55
GE HRK 20 HB 12	R 1.1/4" K	G 3/4" -14	50
GE HRK 20 HB 16	R 1.1/4" K	G 1" -11	50
GE HRK 20 HB	R 1.1/4" K	G 1.1/4" -11	50
GE HRK 20 HB 24	R 1.1/4" K	G 1.1/2" -11	55
GE HRK 20 HB 32	R 1.1/4" K	G 2" -11	60
GE HRK 24 HB 16	R 1.1/2" K	G 1" -11	55
GE HRK 24 HB 20	R 1.1/2" K	G 1.1/4" -11	55
GE HRK 24 HB	R 1.1/2" K	G 1.1/2" -11	55
GE HRK 24 HB 32	R 1.1/2" K	G 2" -11	60
GE HRK 32 HB 16	R 2" K	G 1" -11	65
GE HRK 32 HB 20	R 2" K	G 1.1/4" -11	65
GE HRK 32 HB 24	R 2" K	G 1.1/2" -11	65
GE HRK 32 HB	R 2" K	G 2" -11	65
GE HRK 40 HB	R 2.1/2" K	G 2.1/2" -11	70

GE HRK HJ

Screw-in sockets



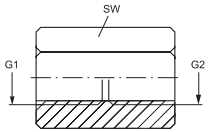
Connection 1: BSPT conical external threads
Connection 2: UN/UNF external threads
Design: Screw-in sockets
Material: Steel
Product versions : GE HRK HJ VA, Screw-in sockets, Stainless steel

Sealing form 1: thread seal
Sealing form 2: 74° outer cone
Construction: straight
Surface protection: electro galvanised

Identification	G1	G2	SW mm
GE HRK 02 HJ 04	R 1/8" K	7/16"-20 UNF	14
GE HRK 02 HJ 05	R 1/8" K	1/2"-20 UNF	14
GE HRK 04 HJ	R 1/4" K	7/16"-20 UNF	14
GE HRK 04 HJ 05	R 1/4" K	1/2"-20 UNF	14
GE HRK 04 HJ 06	R 1/4" K	9/16"-18 UNF	19
GE HRK 04 HJ 08	R 1/4" K	3/4"-16 UNF	22
GE HRK 06 HJ 04	R 3/8" K	7/16"-20 UNF	19
GE HRK 06 HJ 05	R 3/8" K	1/2"-20 UNF	19
GE HRK 06 HJ	R 3/8" K	9/16"-18 UNF	19
GE HRK 06 HJ 08	R 3/8" K	3/4"-16 UNF	22
GE HRK 06 HJ 10	R 3/8" K	7/8"-14 UNF	24
GE HRK 06 HJ 12	R 3/8" K	1.1/16" -12 UN	27
GE HRK 08 HJ 06	R 1/2" K	9/16"-18 UNF	22
GE HRK 08 HJ	R 1/2" K	3/4"-16 UNF	22
GE HRK 08 HJ 10	R 1/2" K	7/8"-14 UNF	24
GE HRK 08 HJ 12	R 1/2" K	1.1/16" -12 UN	27
GE HRK 08 HJ 16	R 1/2" K	1.5/16" -12 UN	36
GE HRK 10 HJ	R 5/8" K	7/8"-14 UNF	24
GE HRK 12 HJ 06	R 3/4" K	9/16"-18 UNF	27
GE HRK 12 HJ 08	R 3/4" K	3/4"-16 UNF	27

Identification	G1	G2	SW mm
GE HRK 12 HJ 10	R 3/4" K	7/8"-14 UNF	27
GE HRK 12 HJ	R 3/4" K	1.1/16" -12 UN	27
GE HRK 12 HJ 16	R 3/4" K	1.5/16" -12 UN	36
GE HRK 12 HJ 20	R 3/4" K	1.5/8" -12 UN	46
GE HRK 16 HJ 08	R 1" K	3/4"-16 UNF	36
GE HRK 16 HJ 10	R 1" K	7/8"-14 UNF	36
GE HRK 16 HJ 12	R 1" K	1.1/16" -12 UN	36
GE HRK 16 HJ	R 1" K	1.5/16" -12 UN	36
GE HRK 16 HJ 20	R 1" K	1.5/8" -12 UN	46
GE HRK 20 HJ 12	R 1.1/4" K	1.1/16" -12 UN	46
GE HRK 20 HJ 16	R 1.1/4" K	1.5/16" -12 UN	46
GE HRK 20 HJ	R 1.1/4" K	1.5/8" -12 UN	46
GE HRK 20 HJ 24	R 1.1/4" K	1.7/8" -12 UN	50
GE HRK 24 HJ 16	R 1.1/2" K	1.5/16" -12 UN	50
GE HRK 24 HJ 20	R 1.1/2" K	1.5/8" -12 UN	50
GE HRK 24 HJ	R 1.1/2" K	1.7/8" -12 UN	50
GE HRK 24 HJ 32	R 1.1/2" K	2.1/2" -12 UN	65
GE HRK 32 HJ	R 2" K	2.1/2" -12 UN	65
GE HRK 40 HJ	R 2.1/2" K	3" -11 UN	70
GE HRK 48 HJ	R 3" K	3.1/2" -11 UN	80

G IR — Connection sockets



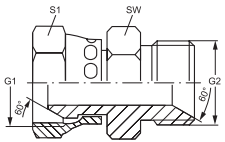
Connection 1: BSP cylindrical internal threads
Design: Connection sockets
Material: Steel
Product versions : G IR VA, Connection sockets, Stainless steel

Connection 2: BSP cylindrical internal threads
Construction: straight
Surface protection: electro galvanised

Identification	G1	G2	SW mm
G IR 02	G 1/8" -28	G 1/8" -28	14
G IR 04 IR 02	G 1/4" -19	G 1/8" -28	17
G IR 04	G 1/4" -19	G 1/4" -19	17
G IR 06 IR 04	G 3/8" -19	G 1/4" -19	22
G IR 06	G 3/8" -19	G 3/8" -19	22
G IR 08 IR 04	G 1/2" -14	G 1/4" -19	27
G IR 08 IR 06	G 1/2" -14	G 3/8" -19	27
G IR 08	G 1/2" -14	G 1/2" -14	27
G IR 10 IR 08	G 5/8" -14	G 1/2" -14	32
G IR 10	G 5/8" -14	G 5/8" -14	32
G IR 12	G 3/4" -14	G 3/4" -14	32

Identification	G1	G2	SW mm
G IR 12 IR 08	G 3/4" -14	G 1/2" -14	32
G IR 16 IR 12	G 1" -11	G 3/4" -14	43
G IR 16	G 1" -11	G 1" -11	43
G IR 20 IR 12	G 1.1/4" -11	G 3/4" -14	50
G IR 20 IR 16	G 1.1/4" -11	G 1" -11	50
G IR 20	G 1.1/4" -11	G 1.1/4" -11	50
G IR 24 IR 20	G 1.1/2" -11	G 1.1/4" -11	55
G IR 24	G 1.1/2" -11	G 1.1/2" -11	55
G IR 32 IR 24	G 2" -11	G 1.1/2" -11	70
G IR 32	G 2" -11	G 2" -11	70

G AB HB — Connectors



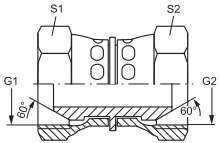
Connection 1: BSP nut thread
Connection 2: BSP cylindrical external threads
Design: Connectors
Material: Steel
Product versions: G AB HB VA, Connectors, Stainless steel

Sealing form 1: 60° outer cone
Sealing form 2: 60° inner cone
Construction: straight
Surface protection: electro galvanised

Identification	G1	G2	SW mm	S1
G AB 02 HB	G 1/8" -28	G 1/8" -28	14	14
G AB 02 HB 04	G 1/8" -28	G 1/4" -19	19	19
G AB 04 HB 02	G 1/4" -19	G 1/8" -28	19	19
G AB 04 HB	G 1/4" -19	G 1/4" -19	19	19
G AB 04 HB 06	G 1/4" -19	G 3/8" -19	22	19
G AB 04 HB 08	G 1/4" -19	G 1/2" -14	27	19
G AB 06 HB 04	G 3/8" -19	G 1/4" -19	19	22
G AB 06 HB	G 3/8" -19	G 3/8" -19	22	22
G AB 06 HB 08	G 3/8" -19	G 1/2" -14	27	22
G AB 06 HB 12	G 3/8" -19	G 3/4" -14	27	27
G AB 08 HB 04	G 1/2" -14	G 1/4" -19	19	27
G AB 08 HB 06	G 1/2" -14	G 3/8" -19	22	27
G AB 08 HB	G 1/2" -14	G 1/2" -14	27	27
G AB 08 HB 10	G 1/2" -14	G 5/8" -14	27	32
G AB 08 HB 12	G 1/2" -14	G 3/4" -14	32	27
G AB 08 HB 16	G 1/2" -14	G 1" -11	27	41
G AB 10 HB 06	G 5/8" -14	G 3/8" -19	32	22

Identification	G1	G2	SW mm	S1
G AB 10 HB 08	G 5/8" -14	G 1/2" -14	32	32
G AB 10 HB	G 5/8" -14	G 5/8" -14	32	32
G AB 10 HB 12	G 5/8" -14	G 3/4" -14	32	32
G AB 10 HB 16	G 5/8" -14	G 1" -11	32	41
G AB 12 HB 06	G 3/4" -14	G 3/8" -19	27	32
G AB 12 HB 08	G 3/4" -14	G 1/2" -14	27	32
G AB 12 HB 10	G 3/4" -14	G 5/8" -14	32	32
G AB 12 HB	G 3/4" -14	G 3/4" -14	32	32
G AB 12 HB 16	G 3/4" -14	G 1" -11	41	32
G AB 12 HB 20	G 3/4" -14	G 1.1/4" -11	41	46
G AB 16 HB 08	G 1" -11	G 1/2" -14	41	32
G AB 16 HB 10	G 1" -11	G 5/8" -14	41	32
G AB 16 HB 12	G 1" -11	G 3/4" -14	41	36
G AB 16 HB	G 1" -11	G 1" -11	41	41
G AB 16 HB 20	G 1" -11	G 1.1/4" -11	41	46
G AB 20 HB 12	G 1.1/4" -11	G 3/4" -14	50	41
G AB 20 HB 16	G 1.1/4" -11	G 1" -11	46	41
G AB 20 HB	G 1.1/4" -11	G 1.1/4" -11	50	50
G AB 20 HB 24	G 1.1/4" -11	G 1.1/2" -11	50	55
G AB 24 HB 20	G 1.1/2" -11	G 1.1/4" -11	55	50
G AB 24 HB	G 1.1/2" -11	G 1.1/2" -11	55	55
G AB 24 HB 32	G 1.1/2" -11	G 2" -11	55	70
G AB 32 HB 24	G 2" -11	G 1.1/2" -11	70	55
G AB 32 HB	G 2" -11	G 2" -11	70	70

G AB Connectors

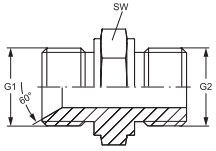


Connection 1: BSP nut thread
Connection 2: BSP nut thread
Design: Connectors
Material: Steel
Product versions: G AB VA, Connectors, Stainless steel

Sealing form 1: 60° outer cone
Sealing form 2: 60° outer cone
Construction: straight
Surface protection: electro galvanised

Identification	G1	G2	S1	S2
G AB 02	G 1/8" -28	G 1/8" -28	14	14
G AB 04 AB 02	G 1/4" -19	G 1/8" -28	19	14
G AB 04	G 1/4" -19	G 1/4" -19	19	19
G AB 06 AB 04	G 3/8" -19	G 1/4" -19	22	19
G AB 06	G 3/8" -19	G 3/8" -19	22	22
G AB 08 AB 04	G 1/2" -14	G 1/4" -19	27	19
G AB 08 AB 06	G 1/2" -14	G 3/8" -19	27	22
G AB 08	G 1/2" -14	G 1/2" -14	27	27
G AB 10 AB 06	G 5/8" -14	G 3/8" -19	30	22
G AB 10 AB 08	G 5/8" -14	G 1/2" -14	30	27
G AB 10	G 5/8" -14	G 5/8" -14	30	30
G AB 12 AB 06	G 3/4" -14	G 3/8" -19	32	22
G AB 12 AB 08	G 3/4" -14	G 1/2" -14	32	27
G AB 12 AB 10	G 3/4" -14	G 5/8" -14	32	30
G AB 12	G 3/4" -14	G 3/4" -14	32	32
G AB 16 AB 06	G 1" -11	G 3/8" -19	41	22
G AB 16 AB 08	G 1" -11	G 1/2" -14	41	27
G AB 16 AB 12	G 1" -11	G 3/4" -14	41	32
G AB 16	G 1" -11	G 1" -11	41	41
G AB 20 AB 16	G 1.1/4" -11	G 1" -11	50	41
G AB 20	G 1.1/4" -11	G 1.1/4" -11	50	50
G AB 24	G 1.1/2" -11	G 1.1/2" -11	60	60
G AB 32	G 2" -11	G 2" -11	70	70

GE H R — Screw-in sockets

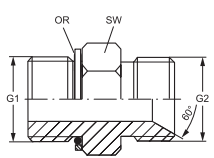


Connection 1: metric cylindrical outer thread
Connection 2: BSP cylindrical external threads
Design: Screw-in sockets
Material: Steel
Product versions: GE H R VA, Screw-in sockets, Stainless steel

Sealing form 1: 60° inner cone
Sealing form 2: Shape A
Construction: straight
Surface protection: electro galvanised

Identification	G1	G2	SW mm
GE H 06 R	M 14 x 1.5	G 1/4" -19	19
GE H 08 R 06	M 16 x 1.5	G 1/4" -19	22
GE H 08 R 10	M 16 x 1.5	G 3/8" -19	22
GE H 10 R	M 18 x 1.5	G 3/8" -19	24
GE H 10 R 13	M 18 x 1.5	G 1/2" -14	27
GE H 13 R	M 22 x 1.5	G 1/2" -14	27
GE H 13 R 20	M 22 x 1.5	G 3/4" -14	32
GE H 16 R 13	M 26 x 1.5	G 1/2" -14	27
GE H 16 R 20	M 26 x 1.5	G 3/4" -14	32
GE H 20 R	M 30 x 1.5	G 3/4" -14	32
GE H 20 R 25	M 30 x 1.5	G 1" -11	41
GE H 25 R	M 38 x 1.5	G 1" -11	41
GE H 32 R	M 45 x 1.5	G 1.1/4" -11	50
GE H 40 R	M 52 x 1.5	G 1.1/2" -11	55
GE H 50 R	M 65 x 2	G 2" -11	70
GE H 60 R	M 78 x 2	G 2.1/2" -11	85

GE HMOK HB — Screw-in sockets



Connection 1: metric cylindrical outer thread
Connection 2: BSP cylindrical external threads
Design: Screw-in sockets
Material: Steel

Sealing form 1: Thread socket with O-ring + spacer diaphragm ring
Sealing form 2: 60° inner cone
Construction: straight
Surface protection: electro galvanised

Identification	G1	G2	SW mm	OR
GE HMOK 10 HB 02	M 10 x 1	G 1/8" -28	14	8.1 x 1.6
GE HMOK 12 HB 02	M 12 x 1.5	G 1/8" -28	17	9.3 x 2.2
GE HMOK 12 HB 04	M 12 x 1.5	G 1/4" -19	19	9.3 x 2.2
GE HMOK 14 HB 04	M 14 x 1.5	G 1/4" -19	19	11.3 x 2.2
GE HMOK 14 HB 06	M 14 x 1.5	G 3/8" -19	22	11.3 x 2.2
GE HMOK 16 HB 04	M 16 x 1.5	G 1/4" -19	22	13.3 x 2.2
GE HMOK 16 HB 06	M 16 x 1.5	G 3/8" -19	22	13.3 x 2.2
GE HMOK 18 HB 06	M 18 x 1.5	G 3/8" -19	24	15.3 x 2.2
GE HMOK 18 HB 08	M 18 x 1.5	G 1/2" -14	24	15.3 x 2.2
GE HMOK 20 HB 08	M 20 x 1.5	G 1/2" -14	27	17.3 x 2.2
GE HMOK 22 HB 08	M 22 x 1.5	G 1/2" -14	27	19.3 x 2.2
GE HMOK 22 HB 10	M 22 x 1.5	G 5/8" -14	27	19.3 x 2.2
GE HMOK 22 HB 12	M 22 x 1.5	G 3/4" -14	32	19.3 x 2.2
GE HMOK 26 HB 12	M 26 x 1.5	G 3/4" -14	32	23.6 x 2.9
GE HMOK 27 HB 12	M 27 x 2	G 3/4" -14	32	23.6 x 2.9
GE HMOK 27 HB 16	M 27 x 2	G 1" -11	41	23.6 x 2.9

GE HMOK HB (Continuation) Screw-in sockets

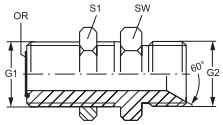
Identification	G1	G2	SW mm	OR
GE HMOK 33 HB 16	M 33 x 2	G 1" -11	41	29.6 x 2.9
GE HMOK 42 HB 20	M 42 x 2	G 1.1/4" -11	50	38.6 x 2.9
GE HMOK 48 HB 24	M 48 x 2	G 1.1/2" -11	55	44.6 x 2.9

SV HJOF HB Bulkhead fitting socket

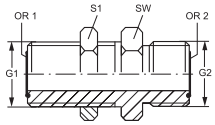
Connection 1: ORFS external threads
Connection 2: BSP cylindrical external threads
Design: Bulkhead fitting socket
Material: Steel

Sealing form 1: flat seal with O-ring
Sealing form 2: 60° inner cone
Construction: straight
Surface protection: electro galvanised

Identification	G1	G2	SW mm	S1	OR
SV HJOF 06 HB	11/16" -16 UN	G 3/8" -19	27	27	9.25 x 1.78
SV HJOF 08 HB	13/16" -16 UN	G 1/2" -14	27	30	12.42 x 1.78
SV HJOF 12 HB	1.3/16" -12 UN	G 3/4" -14	36	41	18.77 x 1.78
SV HJOF 16 HB	1.7/16" -12 UN	G 1" -11	41	46	23.52 x 1.78



SV HJOF — Bulkhead fitting socket

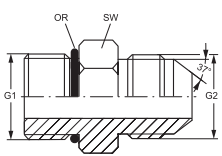


Connection 1: ORFS external threads
Connection 2: ORFS external threads
Design: Bulkhead fitting socket
Material: Steel
Product versions: SV HJOF VA, Bulkhead fitting socket, Stainless steel

Sealing form 1: flat seal with O-ring
Sealing form 2: flat seal with O-ring
Construction: straight
Surface protection: electro galvanised

Identification	G1 + G2	SW mm	S1	OR1 + OR2
SV HJOF 04	9/16"-18 UNF	22	22	7.66 x 1.78
SV HJOF 06	11/16" -16 UN	27	27	9.25 x 1.78
SV HJOF 08	13/16" -16 UN	30	30	12.42 x 1.78
SV HJOF 10	1" -14 UNS	36	36	15.60 x 1.78
SV HJOF 12	1.3/16" -12 UN	41	41	18.77 x 1.78
SV HJOF 16	1.7/16" -12 UN	46	46	23.52 x 1.78
SV HJOF 20	1.11/16" -12 UN	50	50	29.87 x 1.78
SV HJOF 24	2" -12 UN	60	60	37.82 x 1.78

GE O HJ — Screw-in sockets



Connection 1: UN/UNF external threads
Connection 2: UN/UNF external threads
Design: Screw-in sockets
Material: Steel
Product versions: GE O HJ VA, Screw-in sockets, Stainless steel

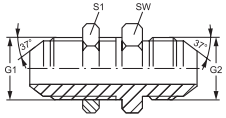
Sealing form 1: O-ring seal on screw-in socket
Sealing form 2: 74° outer cone
Construction: straight
Surface protection: electro galvanised

Identification	G1	G2	SW mm	OR
GE O 03 HJ 04	3/8"-24 UNF	7/16"-20 UNF	14	7.65 x 1.78
GE O 04 HJ	7/16"-20 UNF	7/16"-20 UNF	14	8.92 x 1.83
GE O 04 HJ 05	7/16"-20 UNF	1/2"-20 UNF	14	8.92 x 1.83
GE O 04 HJ 06	7/16"-20 UNF	9/16"-18 UNF	16	8.92 x 1.83
GE O 05 HJ 04	1/2"-20 UNF	7/16"-20 UNF	16	10.52 x 1.83
GE O 05 HJ	1/2"-20 UNF	1/2"-20 UNF	16	10.52 x 1.83
GE O 05 HJ 06	1/2"-20 UNF	9/16"-18 UNF	16	10.52 x 1.83
GE O 06 HJ 04	9/16"-18 UNF	7/16"-20 UNF	17	11.90 x 1.98
GE O 06 HJ 05	9/16"-18 UNF	1/2"-20 UNF	17	11.90 x 1.98
GE O 06 HJ	9/16"-18 UNF	9/16"-18 UNF	17	11.90 x 1.98
GE O 06 HJ 08	9/16"-18 UNF	3/4"-16 UNF	19	11.90 x 1.98
GE O 08 HJ 04	3/4"-16 UNF	7/16"-20 UNF	22	16.36 x 2.20
GE O 08 HJ 05	3/4"-16 UNF	1/2"-20 UNF	22	16.36 x 2.20
GE O 08 HJ 06	3/4"-16 UNF	9/16"-18 UNF	22	16.36 x 2.20
GE O 08 HJ	3/4"-16 UNF	3/4"-16 UNF	22	16.36 x 2.20
GE O 08 HJ 10	3/4"-16 UNF	7/8"-14 UNF	24	16.36 x 2.20
GE O 08 HJ 12	3/4"-16 UNF	1.1/16" -12 UN	29	16.36 x 2.20

GE O HJ (Continuation) Screw-in sockets

Identification	G1	G2	SW mm	OR
GE O 10 HJ 08	7/8"-14 UNF	3/4"-16 UNF	27	19.18 x 2.46
GE O 10 HJ 06	7/8"-14 UNF	9/16"-18 UNF	25	19.18 x 2.46
GE O 10 HJ	7/8"-14 UNF	7/8"-14 UNF	27	19.18 x 2.46
GE O 10 HJ 12	7/8"-14 UNF	1.1/16" -12 UN	27	19.18 x 2.46
GE O 10 HJ 16	7/8"-14 UNF	1.5/16" -12 UN	35	19.18 x 2.46
GE O 12 HJ 06	1.1/16" -12 UN	9/16"-18 UNF	32	23.47 x 2.95
GE O 12 HJ 08	1.1/16" -12 UN	3/4"-16 UNF	32	23.47 x 2.95
GE O 12 HJ 10	1.1/16" -12 UN	7/8"-14 UNF	32	23.47 x 2.95
GE O 12 HJ	1.1/16" -12 UN	1.1/16" -12 UN	32	23.47 x 2.95
GE O 12 HJ 16	1.1/16" -12 UN	1.5/16" -12 UN	36	23.47 x 2.95
GE O 14 HJ 12	1.3/16" -12 UN	1.1/16" -12 UN	35	26.59 x 2.95
GE O 14 HJ	1.3/16" -12 UN	1.3/16" -12 UN	35	26.59 x 2.95
GE O 16 HJ 10	1.5/16" -12 UN	7/8"-14 UNF	41	29.74 x 2.95
GE O 16 HJ 12	1.5/16" -12 UN	1.1/16" -12 UN	38	29.74 x 2.95
GE O 16 HJ	1.5/16" -12 UN	1.5/16" -12 UN	38	29.74 x 2.95
GE O 16 HJ 20	1.5/16" -12 UN	1.5/8" -12 UN	43	29.74 x 2.95
GE O 16 HJ 24	1.5/16" -12 UN	1.7/8" -12 UN	55	29.74 x 2.95
GE O 20 HJ 16	1.5/8" -12 UN	1.5/16" -12 UN	35	37.47 x 3.00
GE O 20 HJ	1.5/8" -12 UN	1.5/8" -12 UN	50	37.47 x 3.00
GE O 20 HJ 24	1.5/8" -12 UN	1.7/8" -12 UN	51	37.47 x 3.00
GE O 24 HJ 20	1.7/8" -12 UN	1.5/8" -12 UN	51	43.69 x 3.00
GE O 24 HJ	1.7/8" -12 UN	1.7/8" -12 UN	55	43.69 x 3.00
GE O 32 HJ	2.1/2" -12 UN	2.1/2" -12 UN	70	43.69 x 3.00

SV HJ — Bulkhead fitting socket

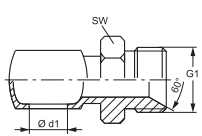


Connection 1: UN/UNF external threads
Connection 2: UN/UNF external threads
Design: Bulkhead fitting socket
Material: Steel
Product versions: SV HJ VA, Bulkhead fitting socket, Stainless steel

Sealing form 1: 74° outer cone
Sealing form 2: 74° outer cone
Construction: straight
Surface protection: electro galvanised

Identification	G1 + G2	SW mm	S1
SV HJ 04	7/16"-20 UNF	17	17
SV HJ 05	1/2"-20 UNF	19	19
SV HJ 06	9/16"-18 UNF	22	22
SV HJ 08	3/4"-16 UNF	24	24
SV HJ 10	7/8"-14 UNF	30	30
SV HJ 12	1.1/16" -12 UN	36	36
SV HJ 14	1.3/16" -12 UN	38	38
SV HJ 16	1.5/16" -12 UN	41	41
SV HJ 20	1.5/8" -12 UN	50	50
SV HJ 24	1.7/8" -12 UN	55	55
SV HJ 32	2.1/2" -12 UN	65	65

G B H — Connection sockets

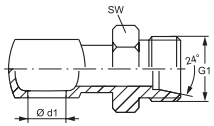


Connection 1: Metric banjos
Sealing form 2: 60° inner cone
Construction: straight
Surface protection: electro galvanised

Connection 2: metric cylindrical outer thread
Design: Connection sockets
Material: Steel

Identification	G1	Ø d1 mm	for hollow screw	SW mm
G B 02 H	M 10 x 1	8	M 8	14
G B 04 H	M 12 x 1.5	10	M 10	17
G B 04 H 06	M 14 x 1.5	10	M 10	19
G B 06 H	M 14 x 1.5	12	M 12	19
G B 08 H 06	M 14 x 1.5	14	M 14	19
G B 08 H	M 16 x 1.5	14	M 14	22
G B 10 H	M 18 x 1.5	16	M 16	24
G B 13 H	M 22 x 1.5	18	M 18	27
G B 16 H	M 26 x 1.5	22	M 22	27
G B 20 H	M 30 x 1.5	26	M 26	36
G B 25 H	M 38 x 1.5	30	M 30	41

G B HL — Connectors, banjo

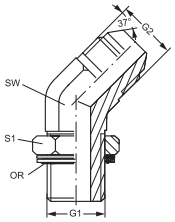


Connection 1: Metric banjos
Sealing form 2: 24° inner cone
Construction: straight
Surface protection: electro galvanised

Connection 2: metric cylindrical outer thread
Design: Connectors, ring thread piece
Material: Steel

Identification	External pipe Ø mm	G1	Ø d1 mm	for hollow screw	SW mm
GB 04 HL	6	M 12 x 1.5	10	M 10	17
GB 06 HL	8	M 14 x 1.5	12	M 12	19
GB 08 HL 06	8	M 14 x 1.5	14	M 14	19
GB 08 HL	10	M 16 x 1.5	14	M 14	22
GB 10 HL	12	M 18 x 1.5	16	M 16	24
GB 13 HL 10	12	M 18 x 1.5	18	M 18	24
GB 13 HL	15	M 22 x 1.5	18	M 18	27
GB 16 HL 13	15	M 22 x 1.5	22	M 22	27
GB 16 HL	18	M 26 x 1.5	22	M 22	32

W45 HROK HJ — Screw-in socket, angle 45°



Connection 1: BSP external thread, cylindrical
Connection 2: UN/UNF external threads
Design: Adjustable direction screw-in socket
Material: Steel

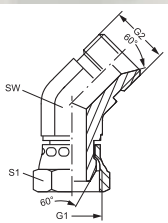
Sealing form 1: Thread socket with O-ring + spacer diaphragm ring
Sealing form 2: 74° outer cone
Construction: Angle 45°
Surface protection: electro galvanised

Identification	G1	G2	SW mm	S1	OR
W45 HROK 02 HJ 04	G 1/8" -28	7/16"-20 UNF	11	14	8.00 x 2.00
W45 HROK 02 HJ 05	G 1/8" -28	1/2"-20 UNF	13	14	8.00 x 2.00
W45 HROK 04 HJ	G 1/4" -19	7/16"-20 UNF	19	14	10.77 x 2.62
W45 HROK 04 HJ 05	G 1/4" -19	1/2"-20 UNF	14	19	10.77 x 2.62
W45 HROK 04 HJ 06	G 1/4" -19	9/16"-18 UNF	14	19	10.77 x 2.62
W45 HROK 04 HJ 08	G 1/4" -19	3/4"-16 UNF	19	19	10.77 x 2.62
W45 HROK 06 HJ 04	G 3/8" -19	7/16"-20 UNF	19	22	13.94 x 2.62
W45 HROK 06 HJ 05	G 3/8" -19	1/2"-20 UNF	19	22	13.94 x 2.62
W45 HROK 06 HJ	G 3/8" -19	9/16"-18 UNF	19	22	13.94 x 2.62
W45 HROK 06 HJ 08	G 3/8" -19	3/4"-16 UNF	19	22	13.94 x 2.62
W45 HROK 06 HJ 10	G 3/8" -19	7/8"-14 UNF	22	22	13.94 x 2.62
W45 HROK 08 HJ 04	G 1/2" -14	7/16"-20 UNF	22	27	17.86 x 2.62
W45 HROK 08 HJ 06	G 1/2" -14	9/16"-18 UNF	22	27	17.86 x 2.62
W45 HROK 08 HJ	G 1/2" -14	3/4"-16 UNF	22	27	17.86 x 2.62
W45 HROK 08 HJ 10	G 1/2" -14	7/8"-14 UNF	22	27	17.86 x 2.62
W45 HROK 08 HJ 12	G 1/2" -14	1.1/16" -12 UN	27	27	17.86 x 2.62
W45 HROK 10 HJ	G 5/8" -14	7/8"-14 UNF	22	27	19.70 x 2.62
W45 HROK 10 HJ 12	G 5/8" -14	1.1/16" -12 UN	27	36	19.70 x 2.62

W45 HROK HJ (Continuation) Screw-in socket, angle 45°

Identification	G1	G2	SW mm	S1	OR
W45 HROK 12 HJ 08	G 3/4" -14	3/4"-16 UNF	27	36	23.47 x 2.62
W45 HROK 12 HJ 10	G 3/4" -14	7/8"-14 UNF	27	36	23.47 x 2.62
W45 HROK 12 HJ	G 3/4" -14	1.1/16" -12 UN	27	36	23.47 x 2.62
W45 HROK 12 HJ 16	G 3/4" -14	1.5/16" -12 UN	33	36	23.47 x 2.62
W45 HROK 16 HJ 12	G 1" -11	1.1/16" -12 UN	33	41	29.74 x 3.53
W45 HROK 16 HJ	G 1" -11	1.5/16" -12 UN	33	41	23.47 x 3.53
W45 HROK 16 HJ 20	G 1" -11	1.5/8" -12 UN	41	41	29.74 x 3.53
W45 HROK 20 HJ 16	G 1.1/4" -11	1.5/16" -12 UN	33	50	37.69 x 3.53
W45 HROK 20 HJ	G 1.1/4" -11	1.5/8" -12 UN	41	50	37.96 x 3.53
W45 HROK 20 HJ 24	G 1.1/4" -11	1.7/8" -12 UN	48	50	37.69 x 3.53
W45 HROK 24 HJ	G 1.1/2" -11	1.7/8" -12 UN	48	55	44.04 x 3.53

W45 AB HB Connector, angle 45°

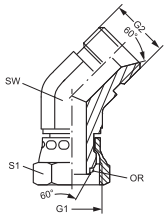


Connection 1: BSP nut thread
Connection 2: BSP cylindrical external threads
Design: Connectors
Material: Steel

Sealing form 1: 60° outer cone
Sealing form 2: 60° inner cone
Construction: Angle 45°
Surface protection: electro galvanised

Identification	G1 + G2	SW mm	S1
W45 AB 04 HB	G 1/4" -19	14	19
W45 AB 06 HB	G 3/8" -19	17	22
W45 AB 08 HB	G 1/2" -14	22	27
W45 AB 12 HB	G 3/4" -14	27	32
W45 AB 16 HB	G 1" -11	36	41
W45 AB 20 HB	G 1.1/4" -11	46	50
W45 AB 24 HB	G 1.1/2" -11	50	55
W45 AB 32 HB	G 2" -11	60	70

W45 AOB HB — Connector, angle 45°

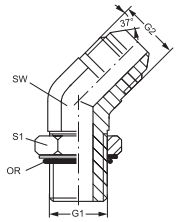


Connection 1: BSP nut thread
Connection 2: BSP cylindrical external threads
Design: Connectors
Material: Steel

Sealing form 1: 60° outer cone with O-ring
Sealing form 2: 60° inner cone
Construction: Angle 45°
Surface protection: electro galvanised

Identification	G1 + G2	SW mm	S1	OR
W45 AOB 02 HB	G 1/8" -28	11	14	4.5 x 1.5
W45 AOB 04 HB	G 1/4" -19	14	17	6.5 x 1.0
W45 AOB 06 HB	G 3/8" -19	19	22	8.1 x 1.6
W45 AOB 08 HB	G 1/2" -14	22	27	12.1 x 1.6
W45 AOB 10 HB	G 5/8" -14	25	27	13.0 x 1.6
W45 AOB 12 HB	G 3/4" -14	37	32	17.1 x 1.6
W45 AOB 16 HB	G 1" -11	33	41	22.1 x 1.6
W45 AOB 20 HB	G 1.1/4" -11	41	50	29.1 x 1.6
W45 AOB 24 HB	G 1.1/2" -11	50	60	35.1 x 1.6

W45 O HJ — Screw-in socket, angle 45°



Connection 1: UN/UNF external threads
Connection 2: UN/UNF external threads
Design: Adjustable direction screw-in socket
Material: Steel
Product versions: W45 O HJ VA, Screw-in socket, angle 45°, Stainless steel

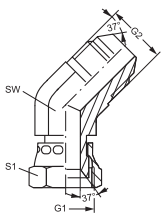
Sealing form 1: O-ring seal on screw-in socket
Sealing form 2: 74° outer cone
Construction: Angle 45°
Surface protection: electro galvanised

Identification	G1	G2	SW mm	S1	OR
W45 O 04 HJ	7/16"-20 UNF	7/16"-20 UNF	11	14	8.92 x 1.83
W45 O 05 HJ 04	1/2"-20 UNF	7/16"-20 UNF	13	16	10.52 x 1.83
W45 O 05 HJ	1/2"-20 UNF	1/2"-20 UNF	13	16	10.52 x 1.83
W45 O 06 HJ	9/16"-18 UNF	9/16"-18 UNF	14	17	11.90 x 1.98
W45 O 06 HJ 08	9/16"-18 UNF	3/4"-16 UNF	19	17	11.90 x 1.98
W45 O 08 HJ 06	3/4"-16 UNF	9/16"-18 UNF	19	22	16.36 x 2.20
W45 O 08 HJ	3/4"-16 UNF	3/4"-16 UNF	19	22	16.36 x 2.20
W45 O 08 HJ 10	3/4"-16 UNF	7/8"-14 UNF	22	22	16.36 x 2.20
W45 O 08 HJ 12	3/4"-16 UNF	1.1/16" -12 UN	22	27	16.36 x 2.20
W45 O 10 HJ 08	7/8"-14 UNF	3/4"-16 UNF	22	25	19.18 x 2.46
W45 O 10 HJ	7/8"-14 UNF	7/8"-14 UNF	22	27	19.18 x 2.46
W45 O 10 HJ 12	7/8"-14 UNF	1.1/16" -12 UN	27	25	19.18 x 2.46
W45 O 12 HJ 08	1.1/16" -12 UN	3/4"-16 UNF	22	32	23.47 x 2.95
W45 O 12 HJ 10	1.1/16" -12 UN	7/8"-14 UNF	32	22	23.47 x 2.95
W45 O 12 HJ	1.1/16" -12 UN	1.1/16" -12 UN	27	32	23.47 x 2.95
W45 O 12 HJ 16	1.1/16" -12 UN	1.5/16" -12 UN	33	32	23.47 x 2.95
W45 O 16 HJ 12	1.5/16" -12 UN	1.1/16" -12 UN	38	27	29.74 x 2.95

W45 O HJ (Continuation) Screw-in socket, angle 45°

Identification	G1	G2	SW mm	S1	OR
W45 O 16 HJ	1.5/16" -12 UN	1.5/16" -12 UN	33	38	29.74 x 2.95
W45 O 16 HJ 20	1.5/16" -12 UN	1.5/8" -12 UN	41	38	29.74 x 2.95
W45 O 20 HJ 16	1.5/8" -12 UN	1.5/16" -12 UN	33	48	37.47 x 3.00
W45 O 20 HJ	1.5/8" -12 UN	1.5/8" -12 UN	41	48	37.47 x 3.00
W45 O 24 HJ	1.7/8" -12 UN	1.7/8" -12 UN	48	54	43.69 x 3.00
W45 O 32 HJ	2.1/2" -12 UN	2.1/2" -12 UN	66	70	59.36 x 3.00

W45 AJ HJ Screw-on socket, angle 45°

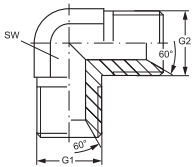


Connection 1: UN/UNF nut threads
Connection 2: UN/UNF external threads
Design: Screw-on socket
Material: Steel
Product versions: W45 AJ HJ VA, Screw-on socket, angle 45°, Stainless steel

Sealing form 1: 74° inner cone
Sealing form 2: 74° outer cone
Construction: Angle 45°
Surface protection: electro galvanised

Identification	Working pressure bar	G1	G2	SW mm	S1
W45 AJ 04 HJ	PN 350	7/16"-20 UNF	7/16"-20 UNF	12	14
W45 AJ 05 HJ	PN 350	1/2"-20 UNF	1/2"-20 UNF	14	16
W45 AJ 06 HJ	PN 250	9/16"-18 UNF	9/16"-18 UNF	14	19
W45 AJ 08 HJ	PN 250	3/4"-16 UNF	3/4"-16 UNF	19	22
W45 AJ 10 HJ	PN 200	7/8"-14 UNF	7/8"-14 UNF	22	27
W45 AJ 12 HJ	PN 200	1.1/16" -12 UN	1.1/16" -12 UN	27	32
W45 AJ 14 HJ	PN 160	1.3/16" -12 UN	1.3/16" -12 UN	32	36
W45 AJ 16 HJ	PN 160	1.5/16" -12 UN	1.5/16" -12 UN	33	41
W45 AJ 20 HJ	PN 125	1.5/8" -12 UN	1.5/8" -12 UN	41	50
W45 AJ 24 HJ	PN 100	1.7/8" -12 UN	1.7/8" -12 UN	48	60
W45 AJ 32 HJ	PN 80	2.1/2" -12 UN	2.1/2" -12 UN	65	75

W90 HB — Connector, angle 90°

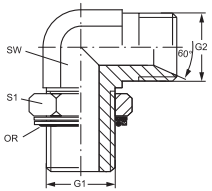


Connection 1: BSP external thread, cylindrical
Connection 2: BSP cylindrical external threads
Design: Connectors
Material: Steel
Product versions: W90 HB VA, Fitting socket, angle 90°, Stainless steel

Sealing form 1: 60° inner cone
Sealing form 2: 60° inner cone
Construction: Angle 90°
Surface protection: electro galvanised

Identification	G1	G2	SW mm
W90 HB 02	G 1/8" -28	G 1/8" -28	11
W90 HB 04 HB 02	G 1/4" -19	G 1/8" -28	14
W90 HB 04	G 1/4" -19	G 1/4" -19	14
W90 HB 06 HB 04	G 3/8" -19	G 1/4" -19	19
W90 HB 06	G 3/8" -19	G 3/8" -19	19
W90 HB 08 HB 06	G 1/2" -14	G 3/8" -19	22
W90 HB 08	G 1/2" -14	G 1/2" -14	22
W90 HB 10	G 5/8" -14	G 5/8" -14	22
W90 HB 12 HB 08	G 3/4" -14	G 1/2" -14	27
W90 HB 12	G 3/4" -14	G 3/4" -14	27
W90 HB 16 HB 12	G 1" -11	G 3/4" -14	33
W90 HB 16	G 1" -11	G 1" -11	33
W90 HB 20 HB 16	G 1.1/4" -11	G 1" -11	41
W90 HB 20	G 1.1/4" -11	G 1.1/4" -11	41
W90 HB 24	G 1.1/2" -11	G 1.1/2" -11	50
W90 HB 32	G 2" -11	G 2" -11	55

W90 HROK HB — Screw-in socket, angle 90°



Connection 1: BSP external thread, cylindrical
Connection 2: BSP cylindrical external threads
Design: Adjustable direction screw-in socket
Material: Steel

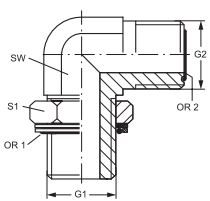
Sealing form 1: Thread socket with O-ring + spacer diaphragm ring
Sealing form 2: 60° inner cone
Construction: Angle 90°
Surface protection: electro galvanised

Identification	G1	G2	SW mm	S1	OR
W90 HROK 02 HB	G 1/8" -28	G 1/8" -28	11	14	7.97 x 1.88
W90 HROK 04 HB 02	G 1/4" -19	G 1/8" -28	14	19	10.77 x 2.62
W90 HROK 04 HB	G 1/4" -19	G 1/4" -19	14	19	10.77 x 2.62
W90 HROK 04 HB 06	G 1/4" -19	G 3/8" -19	14	19	10.77 x 2.62
W90 HROK 06 HB 04	G 3/8" -19	G 1/4" -19	19	22	13.94 x 2.62
W90 HROK 06 HB	G 3/8" -19	G 3/8" -19	19	22	13.94 x 2.62
W90 HROK 06 HB 08	G 3/8" -19	G 1/2" -14	19	22	13.94 x 2.62
W90 HROK 08 HB 06	G 1/2" -14	G 3/8" -19	22	27	17.86 x 2.62
W90 HROK 08 HB	G 1/2" -14	G 1/2" -14	22	27	17.86 x 2.62
W90 HROK 08 HB 10	G 1/2" -14	G 5/8" -14	22	27	17.86 x 2.62
W90 HROK 08 HB 12	G 1/2" -14	G 3/4" -14	27	27	17.86 x 2.62
W90 HROK 12 HB 08	G 3/4" -14	G 1/2" -14	27	35	23.47 x 2.62
W90 HROK 12 HB	G 3/4" -14	G 3/4" -14	27	36	23.47 x 2.62
W90 HROK 12 HB 16	G 3/4" -14	G 1" -11	33	36	23.47 x 2.62
W90 HROK 16 HB 12	G 1" -11	G 3/4" -14	33	41	29.74 x 3.53
W90 HROK 16 HB	G 1" -11	G 1" -11	33	41	29.74 x 3.53

W90 HROK HB (Continuation) Screw-in socket, angle 90°

Identification	G1	G2	SW mm	S1	OR
W90 HROK 20 HB 16	G 1.1/4" -11	G 1" -11	41	50	37.69 x 3.53
W90 HROK 20 HB	G 1.1/4" -11	G 1.1/4" -11	41	50	37.69 x 3.53
W90 HROK 24 HB	G 1.1/2" -11	G 1.1/2" -11	48	55	44.04 x 3.53

W90 HROK HJOF Screw-in socket, angle 90°

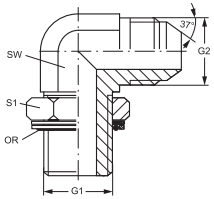


Connection 1: BSP external thread, cylindrical
Connection 2: ORFS external threads
Design: Adjustable direction screw-in socket
Material: Steel
Product versions: W90 HROK HJOF VA, Screw-in socket, angle 90°, Stainless steel

Sealing form 1: Thread socket with O-ring + spacer diaphragm ring
Sealing form 2: flat seal with O-ring
Construction: Angle 90°
Surface protection: electro galvanised

Identification	G1	G2	SW mm	S1	OR1	OR2
W90 HROK 02 HJOF 04	G 1/8" -28	9/16"-18 UNF	14	14	8.00 x 2.00	7.65 x 1.78
W90 HROK 04 HJOF	G 1/4" -19	9/16"-18 UNF	19	19	10.77 x 2.62	7.65 x 1.78
W90 HROK 04 HJOF 06	G 1/4" -19	11/16" -16 UN	19	19	10.77 x 2.62	9.25 x 1.78
W90 HROK 04 HJOF 08	G 1/4" -19	13/16" -16 UN	19	19	10.77 x 2.62	12.42 x 1.78
W90 HROK 06 HJOF 04	G 3/8" -19	9/16"-18 UNF	19	22	13.94 x 2.62	7.65 x 1.78
W90 HROK 06 HJOF	G 3/8" -19	11/16" -16 UN	19	22	13.94 x 2.62	9.25 x 1.78
W90 HROK 06 HJOF 08	G 3/8" -19	13/16" -16 UN	19	22	13.94 x 2.62	12.42 x 1.78
W90 HROK 06 HJOF 10	G 3/8" -19	1" -14 UNS	27	22	13.94 x 2.62	15.60 x 1.78
W90 HROK 08 HJOF 06	G 1/2" -14	11/16" -16 UN	27	27	17.86 x 2.62	9.25 x 1.78
W90 HROK 08 HJOF	G 1/2" -14	13/16" -16 UN	27	27	17.86 x 2.62	12.42 x 1.78
W90 HROK 08 HJOF 10	G 1/2" -14	1" -14 UNS	27	27	17.86 x 2.62	15.60 x 1.78
W90 HROK 08 HJOF 12	G 1/2" -14	1.3/16" -12 UN	30	27	17.86 x 2.62	18.77 x 1.78
W90 HROK 12 HJOF 08	G 3/4" -14	13/16" -16 UN	30	36	23.47 x 2.62	12.42 x 1.78
W90 HROK 12 HJOF 10	G 3/4" -14	1" -14 UNS	30	36	23.47 x 2.62	15.60 x 1.78
W90 HROK 12 HJOF	G 3/4" -14	1.3/16" -12 UN	30	36	23.47 x 2.62	18.77 x 1.78
W90 HROK 12 HJOF 16	G 3/4" -14	1.7/16" -12 UN	36	36	23.47 x 2.62	23.52 x 1.78
W90 HROK 16 HJOF 10	G 1" -11	1" -14 UNS	36	41	29.75 x 3.53	15.60 x 1.78
W90 HROK 16 HJOF 12	G 1" -11	1.3/16" -12 UN	36	41	29.75 x 3.53	18.77 x 1.78
W90 HROK 16 HJOF	G 1" -11	1.7/16" -12 UN	36	41	29.75 x 3.53	23.52 x 1.78
W90 HROK 16 HJOF 20	G 1" -11	1.11/16" -12 UN	41	41	29.75 x 3.53	29.87 x 1.78
W90 HROK 20 HJOF 16	G 1.1/4" -11	1.7/16" -12 UN	41	50	37.69 x 3.53	23.52 x 1.78
W90 HROK 20 HJOF	G 1.1/4" -11	1.11/16" -12 UN	41	50	37.69 x 3.53	29.87 x 1.78
W90 HROK 24 HJOF 20	G 1.1/2" -11	1.11/16" -12 UN	50	55	44.04 x 3.53	29.87 x 1.78
W90 HROK 24 HJOF	G 1.1/2" -11	2" -12 UN	50	55	44.04 x 3.53	37.82 x 1.78

W90 HROK HJ — Screw-in socket, angle 90°

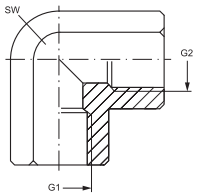


Connection 1: BSP external thread, cylindrical
Connection 2: UN/UNF external threads
Design: Adjustable direction screw-in socket
Material: Steel
Product versions: W90 HROK HJ VA, Screw-in socket, angle 90°, Stainless steel

Sealing form 1: Thread socket with O-ring + spacer diaphragm ring
Sealing form 2: 74° outer cone
Construction: Angle 90°
Surface protection: electro galvanised

Identification	G1	G2	SW mm	S1	OR
W90 HROK 02 HJ 04	G 1/8" -28	7/16"-20 UNF	12	14	7.97 x 1.88
W90 HROK 02 HJ 05	G 1/8" -28	1/2"-20 UNF	14	14	7.97 x 1.88
W90 HROK 04 HJ	G 1/4" -19	7/16"-20 UNF	14	19	10.77 x 2.62
W90 HROK 04 HJ 05	G 1/4" -19	1/2"-20 UNF	14	19	10.77 x 2.62
W90 HROK 04 HJ 06	G 1/4" -19	9/16"-18 UNF	14	19	10.77 x 2.62
W90 HROK 04 HJ 08	G 1/4" -19	3/4"-16 UNF	19	19	10.77 x 2.62
W90 HROK 06 HJ 04	G 3/8" -19	7/16"-20 UNF	19	22	13.94 x 2.62
W90 HROK 06 HJ 05	G 3/8" -19	1/2"-20 UNF	19	22	13.94 x 2.62
W90 HROK 06 HJ	G 3/8" -19	9/16"-18 UNF	19	22	13.94 x 2.62
W90 HROK 06 HJ 08	G 3/8" -19	3/4"-16 UNF	19	22	13.94 x 2.62
W90 HROK 06 HJ 10	G 3/8" -19	7/8"-14 UNF	22	22	13.94 x 2.62
W90 HROK 08 HJ 04	G 1/2" -14	7/16"-20 UNF	19	27	17.86 x 2.62
W90 HROK 08 HJ	G 1/2" -14	3/4"-16 UNF	22	27	17.86 x 2.62
W90 HROK 08 HJ 06	G 1/2" -14	9/16"-18 UNF	22	27	17.86 x 2.62
W90 HROK 08 HJ 10	G 1/2" -14	7/8"-14 UNF	22	27	17.86 x 2.62
W90 HROK 08 HJ 12	G 1/2" -14	1.1/16" -12 UN	27	27	17.86 x 2.62
W90 HROK 10 HJ	G 5/8" -14	7/8"-14 UNF	22	30	19.70 x 2.62
W90 HROK 12 HJ 08	G 3/4" -14	3/4"-16 UNF	27	36	23.47 x 2.62
W90 HROK 12 HJ 10	G 3/4" -14	7/8"-14 UNF	27	36	23.47 x 2.62
W90 HROK 12 HJ	G 3/4" -14	1.1/16" -12 UN	27	36	23.47 x 2.62
W90 HROK 12 HJ 14	G 3/4" -14	1.3/16" -12 UN	33	36	23.47 x 2.62
W90 HROK 12 HJ 16	G 3/4" -14	1.5/16" -12 UN	33	36	23.47 x 2.62
W90 HROK 16 HJ 12	G 1" -11	1.1/16" -12 UN	33	41	29.74 x 3.53
W90 HROK 16 HJ	G 1" -11	1.5/16" -12 UN	33	41	29.74 x 3.53
W90 HROK 16 HJ 20	G 1" -11	1.5/8" -12 UN	41	41	29.74 x 3.53
W90 HROK 20 HJ 16	G 1.1/4" -11	1.5/16" -12 UN	41	50	37.69 x 3.53
W90 HROK 20 HJ	G 1.1/4" -11	1.5/8" -12 UN	41	50	37.69 x 3.53
W90 HROK 20 HJ 24	G 1.1/4" -11	1.7/8" -12 UN	48	50	37.69 x 3.53
W90 HROK 24 HJ	G 1.1/2" -11	1.7/8" -12 UN	48	55	44.04 x 3.53

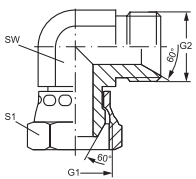
W90 IR — Connection socket, IGR, angle 90°



Connection 1: BSP cylindrical internal threads
Connection 2: BSP cylindrical internal threads
Design: Connection sockets
Material: Steel
Sealing form 1: flat sealing
Sealing form 2: Flat seal
Construction: Angle 90°
Surface protection: electro galvanised

Identification	G1 + G2	SW mm
W90 IR 02	G 1/8" -28	17
W90 IR 04	G 1/4" -19	19
W90 IR 06	G 3/8" -19	22
W90 IR 08	G 1/2" -14	27
W90 IR 12	G 3/4" -14	33
W90 IR 16	G 1" -11	41
W90 IR 20	G 1.1/4" -11	48
W90 IR 24	G 1.1/2" -11	64
W90 IR 32	G 2" -11	73

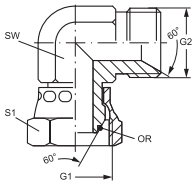
W90 AB HB — Connector, angle 90°



Connection 1: BSP nut thread
Connection 2: BSP cylindrical external threads
Design: Connectors
Material: Steel
Product versions: W90 AB HB VA, Screw-on socket, angle 90°, Stainless steel
Sealing form 1: 60° outer cone
Sealing form 2: 60° inner cone
Construction: Angle 90°
Surface protection: electro galvanised

Identification	G1 + G2	SW mm	S1
W90 AB 02 HB	G 1/8" -28	10	14
W90 AB 04 HB	G 1/4" -19	14	19
W90 AB 06 HB	G 3/8" -19	17	22
W90 AB 08 HB	G 1/2" -14	22	27
W90 AB 10 HB	G 5/8" -14	24	30
W90 AB 12 HB	G 3/4" -14	27	32
W90 AB 16 HB	G 1" -11	36	41
W90 AB 20 HB	G 1.1/4" -11	46	50
W90 AB 24 HB	G 1.1/2" -11	50	55
W90 AB 32 HB	G 2" -11	60	70

W90 AOB HB — Connector, angle 90°

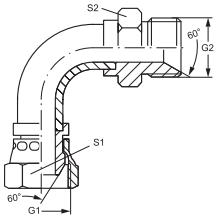


Connection 1: BSP nut thread
Connection 2: BSP cylindrical external threads
Design: Connectors
Material: Steel

Sealing form 1: 60° outer cone with O-ring
Sealing form 2: 60° inner cone
Construction: straight
Surface protection: electro galvanised

Identification	G1 + G2	SW mm	S1	OR
W90 AOB 02 HB	G 1/8" -28	11	14	4.5 x 1.5
W90 AOB 04 HB	G 1/4" -19	14	17	6.5 x 1.0
W90 AOB 06 HB	G 3/8" -19	19	22	8.1 x 1.6
W90 AOB 08 HB	G 1/2" -14	22	27	12.1 x 1.6
W90 AOB 10 HB	G 5/8" -14	25	27	13.1 x 1.6
W90 AOB 12 HB	G 3/4" -14	27	32	17.1 x 1.6
W90 AOB 16 HB	G 1" -11	33	41	22.1 x 1.6
W90 AOB 20 HB	G 1.1/4" -11	41	50	29.1 x 1.6
W90 AOB 24 HB	G 1.1/2" -11	50	60	35.1 x 1.6

W90 A H — Connection socket, angle 90°

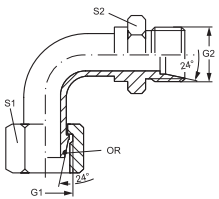


Connection 1: metric nut thread
Connection 2: metric cylindrical outer thread
Design: Connecting socket (short pipe bend)
Material: Steel

Sealing form 1: 60° sealing head
Sealing form 2: 60° inner cone
Construction: Angle 90°
Surface protection: electro galvanised

Identification	G1	G2	S1	S2
W90 A 06 H	M 14 x 1.5	M 14 x 1.5	14	19
W90 A 08 H	M 16 x 1.5	M 16 x 1.5	17	22
W90 A 10 H	M 18 x 1.5	M 18 x 1.5	19	24
W90 A 13 H	M 22 x 1.5	M 22 x 1.5	22	27
W90 A 16 H	M 26 x 1.5	M 26 x 1.5	27	32
W90 A 20 H	M 30 x 1.5	M 30 x 1.5	30	36
W90 A 25 H	M 38 x 1.5	M 38 x 1.5	41	46

WB90 AOL HL — Connection socket, angle 90°

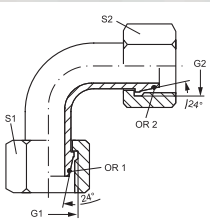


Connection 1: metric nut thread
Connection 2: metric cylindrical outer thread
Design: Connecting socket (short pipe bend)
Material: Steel

Sealing form 1: 24° outer cone with O-ring
Sealing form 2: 24° inner cone
Construction: Angle 90°
Surface protection: electro galvanised

Identification	Series	External pipe Ø mm	Calculation pressure bar	G1 + G2	S1	S2	OR
WB90 AOL 04 HL	L	6	315	M 12 x 1.5	14	14	4.0 x 1.5
WB90 AOL 06 HL	L	8	315	M 14 x 1.5	17	14	6.0 x 1.5
WB90 AOL 08 HL	L	10	315	M 16 x 1.5	19	17	7.5 x 1.5
WB90 AOL 10 HL	L	12	315	M 18 x 1.5	22	19	9.0 x 1.5
WB90 AOL 13 HL	L	15	315	M 22 x 1.5	27	22	12.0 x 2.0
WB90 AOL 16 HL	L	18	315	M 26 x 1.5	32	27	15.0 x 2.0
WB90 AOL 20 HL	L	22	160	M 30 x 2	36	36	20.0 x 2.0
WB90 AOL 25 HL	L	28	160	M 36 x 2	41	36	26.0 x 2.0
WB90 AOL 32 HL	L	35	160	M 42 x 2	50	46	32.0 x 2.5
WB90 AOL 40 HL	L	42	160	M 52 x 2	60	55	38.0 x 2.5

WB90 AOL — Connection socket, angle 90°

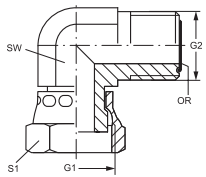


Connection 1: metric nut thread
Connection 2: metric nut thread
Design: Connecting socket (short pipe bend)
Material: Steel

Sealing form 1: 24° outer cone with O-ring
Sealing form 2: 24° outer cone with O-ring
Construction: Angle 90°
Surface protection: electro galvanised

Identification	Series	External pipe Ø mm	Calculation pressure bar	G1 + G2	S1	S2	OR1 + OR2
WB90 NW 04 AOL	L	6	315	M 12 x 1.5	14	14	4.0 x 1.5
WB90 NW 06 AOL	L	8	315	M 14 x 1.5	17	17	6.0 x 1.5
WB90 NW 08 AOL	L	10	315	M 16 x 1.5	19	19	7.5 x 1.5
WB90 NW 10 AOL	L	12	315	M 18 x 1.5	22	22	9.0 x 1.5
WB90 NW 13 AOL	L	15	315	M 22 x 1.5	27	27	12.0 x 2.0
WB90 NW 16 AOL	L	18	315	M 26 x 1.5	32	32	15.0 x 2.0
WB90 NW 20 AOL	L	22	160	M 30 x 2	36	36	20.0 x 2.0
WB90 NW 25 AOL	L	28	160	M 36 x 2	41	41	26.0 x 2.0
WB90 NW 32 AOL	L	35	160	M 45 x 2	50	50	32.0 x 2.5
WB90 NW 40 AOL	L	42	160	M 52 x 2	60	60	38.0 x 2.5

W90 AJF HJOF — Screw-on socket, angle 90°

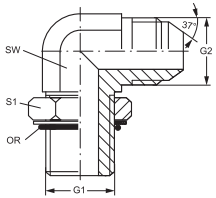


Connection 1: ORFS nut threads
Connection 2: ORFS external threads
Design: Screw-on socket
Material: Steel
Product versions: W90 AJF HJOF VA, Screw-on socket, angle 90°, Stainless steel

Sealing form 1: flat sealing
Sealing form 2: flat seal with O-ring
Construction: Angle 90°
Surface protection: electro galvanised

Identification	G1 + G2	SW mm	S1	OR
W90 AJF 04 HJOF	9/16"-18 UNF	14	17	7.65 x 1.78
W90 AJF 06 HJOF	11/16" -16 UN	19	22	9.25 x 1.78
W90 AJF 08 HJOF	13/16" -16 UN	19	24	12.42 x 1.78
W90 AJF 10 HJOF	1" -14 UNS	27	30	15.60 x 1.78
W90 AJF 12 HJOF	1.3/16" -12 UN	30	36	18.77 x 1.78
W90 AJF 16 HJOF	1.7/16" -12 UN	36	41	23.52 x 1.78
W90 AJF 20 HJOF	1.11/16" -12 UN	41	50	29.87 x 1.78
W90 AJF 24 HJOF	2" -12 UN	48	60	37.82 x 1.78

W90 O HJ — Screw-in socket, AGJ, angle 90°



Connection 1: UN/UNF external threads
Connection 2: UN/UNF external threads
Design: Adjustable direction screw-in socket
Material: Steel
Product versions: W90 O HJ VA, Screw-in socket, AGJ, angle 90°, Stainless steel

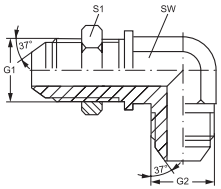
Sealing form 1: O-ring seal on screw-in socket
Sealing form 2: 74° outer cone
Construction: Angle 90°
Surface protection: electro galvanised

Identification	G1	G2	SW mm	S1	OR
W90 O 04 HJ	7/16"-20 UNF	7/16"-20 UNF	12	14	9.17 x 1.63
W90 O 04 HJ 05	7/16"-20 UNF	1/2"-20 UNF	12	14	9.17 x 1.63
W90 O 04 HJ 06	7/16"-20 UNF	9/16"-18 UNF	12	14	9.17 x 1.63
W90 O 05 HJ 04	1/2"-20 UNF	7/16"-20 UNF	13	17	10.52 x 1.83
W90 O 05 HJ	1/2"-20 UNF	1/2"-20 UNF	13	17	10.52 x 1.83
W90 O 05 HJ 06	1/2"-20 UNF	9/16"-18 UNF	13	17	10.52 x 1.83
W90 O 06 HJ 04	9/16"-18 UNF	7/16"-20 UNF	14	17	11.90 x 1.98
W90 O 06 HJ 05	9/16"-18 UNF	1/2"-20 UNF	14	17	11.90 x 1.98
W90 O 06 HJ	9/16"-18 UNF	9/16"-18 UNF	14	17	11.90 x 1.98
W90 O 06 HJ 08	9/16"-18 UNF	3/4"-16 UNF	14	17	11.90 x 1.98
W90 O 08 HJ	3/4"-16 UNF	3/4"-16 UNF	19	22	16.36 x 2.20
W90 O 08 HJ 06	3/4"-16 UNF	9/16"-18 UNF	19	22	16.36 x 2.20
W90 O 08 HJ 10	3/4"-16 UNF	7/8"-14 UNF	19	22	16.36 x 2.20
W90 O 08 HJ 12	3/4"-16 UNF	1.1/16" -12 UN	19	22	16.36 x 2.20
W90 O 10 HJ 08	7/8"-14 UNF	3/4"-16 UNF	22	27	19.18 x 2.46
W90 O 10 HJ 06	7/8"-14 UNF	9/16"-18 UNF	22	27	19.18 x 2.46
W90 O 10 HJ	7/8"-14 UNF	7/8"-14 UNF	22	27	19.18 x 2.46

W90 O HJ (Continuation) Screw-in socket, AGJ, angle 90°

Identification	G1	G2	SW mm	S1	OR
W90 O 10 HJ 12	7/8"-14 UNF	1.1/16" -12 UN	22	27	19.18 x 2.46
W90 O 12 HJ 08	1.1/16" -12 UN	3/4"-16 UNF	27	32	23.47 x 2.95
W90 O 12 HJ	1.1/16" -12 UN	1.1/16" -12 UN	27	32	23.47 x 2.95
W90 O 12 HJ 16	1.1/16" -12 UN	1.5/16" -12 UN	27	32	23.47 x 2.95
W90 O 12 HJ 10	1.1/16" -12 UN	7/8"-14 UNF	27	32	23.47 x 2.95
W90 O 16 HJ	1.5/16" -12 UN	1.5/16" -12 UN	33	41	29.74 x 2.95
W90 O 16 HJ 12	1.5/16" -12 UN	1.1/16" -12 UN	33	41	29.74 x 2.95
W90 O 16 HJ 20	1.5/16" -12 UN	1.5/8" -12 UN	33	41	29.74 x 2.95
W90 O 20 HJ 16	1.5/8" -12 UN	1.5/16" -12 UN	41	50	37.47 x 3.00
W90 O 20 HJ	1.5/8" -12 UN	1.5/8" -12 UN	41	50	37.47 x 3.00
W90 O 24 HJ	1.7/8" -12 UN	1.7/8" -12 UN	48	55	43.69 x 3.00
W90 O 32 HJ	2.1/2" -12 UN	2.1/2" -12 UN	65	70	59.36 x 3.00

SW 90 HJ Bulkhead fitting socket, angle 90°

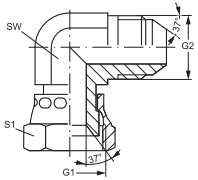


Connection 1: UN/UNF external threads
Connection 2: UN/UNF external threads
Design: Bulkhead fitting socket
Material: Steel
Product versions: SW 90 HJ VA, Bulkhead fitting socket, angle 90°, Stainless steel

Sealing form 1: 74° outer cone
Sealing form 2: 74° outer cone
Construction: Angle 90°
Surface protection: electro galvanised

Identification	G1 + G2	SW mm	S1
SW 90 HJ 04	7/16"-20 UNF	11	17
SW 90 HJ 05	1/2"-20 UNF	13	19
SW 90 HJ 06	9/16"-18 UNF	14	22
SW 90 HJ 08	3/4"-16 UNF	19	24
SW 90 HJ 10	7/8"-14 UNF	22	30
SW 90 HJ 12	1.1/16" -12 UN	27	36
SW 90 HJ 14	1.3/16" -12 UN	41	38
SW 90 HJ 16	1.5/16" -12 UN	41	41
SW 90 HJ 20	1.5/8" -12 UN	41	48
SW 90 HJ 24	1.7/8" -12 UN	55	55

W90 AJ HJ — Screw-on socket, angle 90°

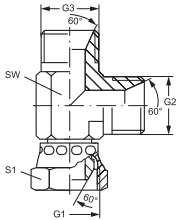


Connection 1: UN/UNF nut threads
Connection 2: UN/UNF external threads
Design: Screw-on socket
Material: Steel
Product versions: W90 AJ HJ VA, Screw-on socket, angle 90°, Stainless steel

Sealing form 1: 74° inner cone
Sealing form 2: 74° outer cone
Construction: Angle 90°
Surface protection: electro galvanised

Identification	G1 + G2	SW mm	S1
W90 AJ 04 HJ	7/16"-20 UNF	12	14
W90 AJ 05 HJ	1/2"-20 UNF	13	17
W90 AJ 06 HJ	9/16"-18 UNF	14	19
W90 AJ 08 HJ	3/4"-16 UNF	19	22
W90 AJ 10 HJ	7/8"-14 UNF	22	27
W90 AJ 12 HJ	1.1/16" -12 UN	27	32
W90 AJ 14 HJ	1.3/16" -12 UN	33	36
W90 AJ 16 HJ	1.5/16" -12 UN	33	41
W90 AJ 20 HJ	1.5/8" -12 UN	41	50
W90 AJ 24 HJ	1.7/8" -12 UN	48	60
W90 AJ 32 HJ	2.1/2" -12 UN	65	75

L AB HB — Screw-on socket, L shaped

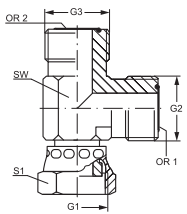


Connection 1: BSP nut thread
Connection 2 + 3: BSP cylindrical external threads
Design: Adjustable direction screw-on socket
Material: Steel
Product versions: L AB HB VA, Screw-on socket, L shaped, Stainless steel

Sealing form 1: 60° outer cone
Sealing form 2 + 3: 60° inner cone
Construction: L shaped
Surface protection: electro galvanised

Identification	G1	G2 + G3	SW mm	S1
L AB 04 HB	G 1/4" -19	G 1/4" -19	14	19
L AB 06 HB	G 3/8" -19	G 3/8" -19	17	22
L AB 08 HB	G 1/2" -14	G 1/2" -14	22	27
L AB 10 HB	G 5/8" -14	G 5/8" -14	24	30
L AB 12 HB	G 3/4" -14	G 3/4" -14	27	32
L AB 16 HB	G 1" -11	G 1" -11	36	41
L AB 20 HB	G 1.1/4" -11	G 1.1/4" -11	46	50
L AB 24 HB	G 1.1/2" -11	G 1.1/2" -11	50	55
L AB 32 HB	G 2" -11	G 2" -11	60	70

L AJF HJOF — Screw-on socket, L shaped

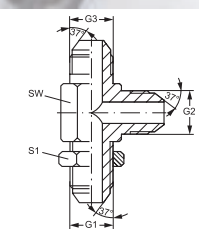


Connection 1: ORFS nut threads
Connection 2 + 3: ORFS external threads
Design: Adjustable direction screw-on socket
Material: Steel

Sealing form 1: flat sealing
Sealing form 2 + 3: flat seal with O-ring
Construction: L shaped
Surface protection: electro galvanised

Identification	G1	G2 + G3	SW mm	S1	OR1 + OR2
L AJF 04 HJOF	9/16"-18 UNF	9/16"-18 UNF	14	17	7.66 x 1.78
L AJF 06 HJOF	11/16" -16 UN	11/16" -16 UN	19	22	9.25 x 1.78
L AJF 08 HJOF	13/16" -16 UN	13/16" -16 UN	19	24	12.42 x 1.78
L AJF 10 HJOF	1" -14 UNS	1" -14 UNS	27	30	15.60 x 1.78
L AJF 12 HJOF	1.3/16" -12 UN	1.3/16" -12 UN	30	36	18.77 x 1.78
L AJF 16 HJOF	1.7/16" -12 UN	1.7/16" -12 UN	36	41	23.52 x 1.78
L AJF 20 HJOF	1.11/16" -12 UN	1.11/16" -12 UN	41	50	29.87 x 1.78
L AJF 24 HJOF	2" -12 UN	2" -12 UN	48	60	37.82 x 1.78

L SV HJ — Bulkhead fitting socket, L shape

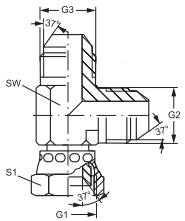


Connection 1 - 3: UN/UNF external threads
Design: Bulkhead fitting socket
Material: Steel

Sealing form 1 - 3: 74° outer cone
Construction: L shaped
Surface protection: electro galvanised

Identification	G1 - G3	SW mm	S1
L SV 04 HJ	7/16"-20 UNF	11	17
L SV 05 HJ	1/2"-20 UNF	14	19
L SV 06 HJ	9/16"-18 UNF	14	21
L SV 08 HJ	3/4"-16 UNF	19	25
L SV 10 HJ	7/8"-14 UNF	22	29
L SV 12 HJ	1.1/16" -12 UN	27	35

L AJ HJ — Screw-on socket, L shaped

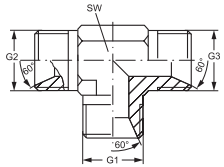


Connection 1: UN/UNF nut threads
Connection 2 + 3: UN/UNF external threads
Design: Adjustable direction screw-on socket
Material: Steel
Product versions: L AJ HJ VA, Screw-on socket, L shaped, Stainless steel

Sealing form 1: 74° inner cone
Sealing form 2 + 3: 74° outer cone
Construction: L shaped
Surface protection: electro galvanised

Identification	G1	G2 + G3	SW mm	S1
L AJ 04 HJ	7/16"-20 UNF	7/16"-20 UNF	12	14
L AJ 05 HJ	1/2"-20 UNF	1/2"-20 UNF	13	17
L AJ 06 HJ	9/16"-18 UNF	9/16"-18 UNF	14	19
L AJ 08 HJ	3/4"-16 UNF	3/4"-16 UNF	19	22
L AJ 10 HJ	7/8"-14 UNF	7/8"-14 UNF	22	17
L AJ 12 HJ	1.1/16" -12 UN	1.1/16" -12 UN	27	32
L AJ 14 HJ	1.3/16" -12 UN	1.3/16" -12 UN	33	36
L AJ 16 HJ	1.5/16" -12 UN	1.5/16" -12 UN	33	41
L AJ 20 HJ	1.5/8" -12 UN	1.5/8" -12 UN	41	50
L AJ 24 HJ	1.7/8" -12 UN	1.7/8" -12 UN	48	60

T HB — Connection socket, T shaped

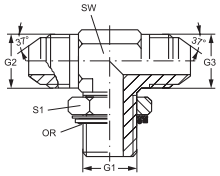


Connection 1 - 3: BSP cylindrical external threads
Design: Connection sockets
Material: Steel
Product versions: T HB VA, Connection socket, T shaped, Stainless steel

Sealing form 1 - 3: 60° inner cone
Construction: T shaped
Surface protection: electro galvanised

Identification	G1 - G3	SW mm
T HB 02	G 1/8" -28	11
T HB 04	G 1/4" -19	14
T HB 06	G 3/8" -19	19
T HB 08	G 1/2" -14	22
T HB 10	G 5/8" -14	22
T HB 12	G 3/4" -14	27
T HB 16	G 1" -11	33
T HB 20	G 1.1/4" -11	41
T HB 24	G 1.1/2" -11	48
T HB 32	G 2" -11	64

T HROK HJ — Screw-in socket, T shaped

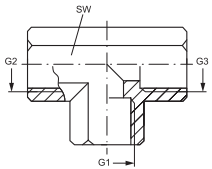


Connection 1: BSP external thread, cylindrical
Connection 2 + 3: UN/UNF external threads
Design: Adjustable direction screw-in socket
Material: Steel
Product versions: T HROK HJ VA, Screw-in socket, T shaped, Stainless steel

Sealing form 1: Thread socket with O-ring + spacer diaphragm ring
Sealing form 2 + 3: 74° outer cone
Construction: T shaped
Surface protection: electro galvanised

Identification	G1	G2 + G3	SW mm	S1	OR
T HROK 02 HJ 04	G 1/8" -28	7/16"-20 UNF	11	14	8.00 x 2.00
T HROK 02 HJ 05	G 1/8" -28	1/2"-20 UNF	14	14	8.00 x 2.00
T HROK 04 HJ	G 1/4" -19	7/16"-20 UNF	14	19	10.77 x 2.62
T HROK 04 HJ 05	G 1/4" -19	1/2"-20 UNF	14	14	10.77 x 2.62
T HROK 04 HJ 06	G 1/4" -19	9/16"-18 UNF	14	19	10.77 x 2.62
T HROK 04 HJ 08	G 1/4" -19	3/4"-16 UNF	19	19	10.77 x 2.62
T HROK 06 HJ 04	G 3/8" -19	7/16"-20 UNF	19	22	13.94 x 2.62
T HROK 06 HJ 05	G 3/8" -19	1/2"-20 UNF	19	22	13.94 x 2.62
T HROK 06 HJ	G 3/8" -19	9/16"-18 UNF	19	22	13.94 x 2.62
T HROK 06 HJ 08	G 3/8" -19	3/4"-16 UNF	22	22	13.94 x 2.62
T HROK 06 HJ 10	G 3/8" -19	7/8"-14 UNF	22	22	13.94 x 2.62
T HROK 08 HJ 04	G 1/2" -14	7/16"-20 UNF	22	27	17.86 x 2.62
T HROK 08 HJ 06	G 1/2" -14	9/16"-18 UNF	22	27	17.86 x 2.62
T HROK 08 HJ	G 1/2" -14	3/4"-16 UNF	22	27	17.86 x 2.62
T HROK 08 HJ 10	G 1/2" -14	7/8"-14 UNF	22	27	17.86 x 2.62
T HROK 08 HJ 12	G 1/2" -14	1.1/16" -12 UN	27	27	17.86 x 2.62
T HROK 12 HJ 08	G 3/4" -14	3/4"-16 UNF	27	36	23.47 x 2.62
T HROK 12 HJ 10	G 3/4" -14	7/8"-14 UNF	27	36	23.47 x 2.62
T HROK 12 HJ	G 3/4" -14	1.1/16" -12 UN	27	36	23.47 x 2.62
T HROK 12 HJ 16	G 3/4" -14	1.5/16" -12 UN	33	36	23.47 x 2.62
T HROK 16 HJ 12	G 1" -11	1.1/16" -12 UN	33	41	29.74 x 3.53
T HROK 16 HJ	G 1" -11	1.5/16" -12 UN	33	41	29.74 x 3.53
T HROK 16 HJ 20	G 1" -11	1.5/8" -12 UN	41	41	29.74 x 3.53
T HROK 20 HJ 16	G 1.1/4" -11	1.5/16" -12 UN	41	50	37.69 x 3.53
T HROK 20 HJ	G 1.1/4" -11	1.5/8" -12 UN	41	50	37.69 x 3.53
T HROK 20 HJ 24	G 1.1/4" -11	1.7/8" -12 UN	48	50	37.69 x 3.53
T HROK 24 HJ	G 1.1/2" -11	1.7/8" -12 UN	48	60	44.04 x 3.53

T IR — Screw-on socket, T shaped

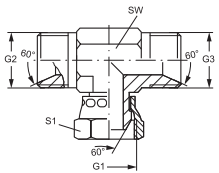


Connection 1 - 3: BSP cylindrical internal threads
Design: Screw-on socket
Material: Steel

Sealing form 1 - 3: Shape A
Construction: T shaped
Surface protection: electro galvanised

Identification	G1 - G3	SW mm
T IR 02	G 1/8" -28	14
T IR 04	G 1/4" -19	19
T IR 06	G 3/8" -19	22
T IR 08	G 1/2" -14	27
T IR 12	G 3/4" -14	33
T IR 16	G 1" -11	41
T IR 20	G 1.1/4" -11	50
T IR 24	G 1.1/2" -11	60
T IR 32	G 2" -11	70

T AB HB — Screw-on socket, T shaped

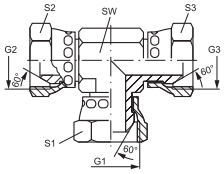


Connection 1: BSP nut thread
Connection 2 + 3: BSP cylindrical external threads
Design: Adjustable direction screw-on socket
Material: Steel
Product versions: T AB HB VA, Screw-on socket, T shaped, Stainless steel

Sealing form 1: 60° outer cone
Sealing form 2 + 3: 60° inner cone
Construction: T shaped
Surface protection: electro galvanised

Identification	G1	G2 + G3	SW mm	S1
T AB 04 HB	G 1/4" -19	G 1/4" -19	14	19
T AB 06 HB	G 3/8" -19	G 3/8" -19	17	22
T AB 08 HB	G 1/2" -14	G 1/2" -14	22	27
T AB 10 HB	G 5/8" -14	G 5/8" -14	24	30
T AB 12 HB	G 3/4" -14	G 3/4" -14	27	32
T AB 16 HB	G 1" -11	G 1" -11	36	41
T AB 20 HB	G 1.1/4" -11	G 1.1/4" -11	46	50
T AB 24 HB	G 1.1/2" -11	G 1.1/2" -11	50	55

T AB — Screw-on socket, T shaped

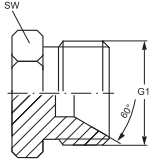


Connection 1 - 3: BSP nut thread
Design: Adjustable direction screw-on socket
Material: Steel
Product versions: T AB VA, Screw-on socket, T shaped, Stainless steel

Sealing form 1 - 3: 60° outer cone
Construction: T shaped
Surface protection: electro galvanised

Identification	G1 - G3	SW mm	S1 - S3 mm
T AB 02	G 1/8" -28	11	14
T AB 04	G 1/4" -19	14	19
T AB 06	G 3/8" -19	19	22
T AB 08	G 1/2" -14	22	27
T AB 10	G 5/8" -14	22	30
T AB 12	G 3/4" -14	27	32
T AB 16	G 1" -11	33	41
T AB 20	G 1.1/4" -11	41	50
T AB 24	G 1.1/2" -11	48	60
T AB 32	G 2" -11	64	70

VERSCHLUSS HB — Blanking socket

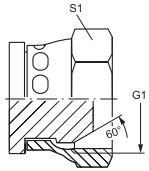


Connection 1: BSP external thread, cylindrical
Design: Blanking socket
Material: Steel
Product versions: VERSCHLUSS HB VA, Blanking socket, Stainless steel

Sealing form 1: 60° inner cone
Construction: straight
Surface protection: electro galvanised

Identification	G1	SW mm
VERSCHLUSS HB 02	G 1/8" -28	14
VERSCHLUSS HB 04	G 1/4" -19	19
VERSCHLUSS HB 06	G 3/8" -19	22
VERSCHLUSS HB 08	G 1/2" -14	27
VERSCHLUSS HB 10	G 5/8" -14	30
VERSCHLUSS HB 12	G 3/4" -14	32
VERSCHLUSS HB 16	G 1" -11	41
VERSCHLUSS HB 20	G 1.1/4" -11	50
VERSCHLUSS HB 24	G 1.1/2" -11	55
VERSCHLUSS HB 32	G 2" -11	70

VERSCHLUSS AB — Blanking nut

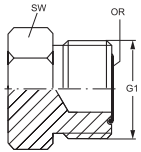


Connection 1: BSP nut thread
Design: Blanking nut
Material: Steel
Product versions: VERSCHLUSS AB VA, Blanking nut, Stainless steel

Sealing form 1: 60° outer cone
Construction: straight
Surface protection: electro galvanised

Identification	G1	S1
VERSCHLUSS AB 02	G 1/8" -28	14
VERSCHLUSS AB 04	G 1/4" -19	19
VERSCHLUSS AB 06	G 3/8" -19	22
VERSCHLUSS AB 08	G 1/2" -14	27
VERSCHLUSS AB 10	G 5/8" -14	30
VERSCHLUSS AB 12	G 3/4" -14	32
VERSCHLUSS AB 16	G 1" -11	38
VERSCHLUSS AB 20	G 1.1/4" -11	50
VERSCHLUSS AB 24	G 1.1/2" -11	55
VERSCHLUSS AB 32	G 2" -11	70

VERSCHLUSS HJOF — Blanking socket

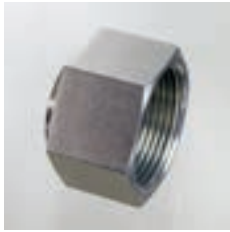


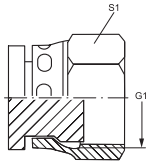
Connection 1: ORFS external threads
Design: Blanking socket
Surface protection: electro galvanised

Sealing form 1: flat seal with O-ring
Material: Steel

Identification	G1	i mm	L1 mm	SW mm	OR
VERSCHLUSS HJOF 04	9/16"-18 UNF	10,0	16,5	17	7.65 x 1.78
VERSCHLUSS HJOF 06	11/16" -16 UN	11,0	19,0	19	9.25 x 1.78
VERSCHLUSS HJOF 08	13/16" -16 UN	13,0	22,0	22	12.42 x 1.78
VERSCHLUSS HJOF 10	1" -14 UNS	15,5	26,0	27	15.60 x 1.78
VERSCHLUSS HJOF 12	1.3/16" -12 UN	17,0	27,5	32	18.77 x 1.78
VERSCHLUSS HJOF 16	1.7/16" -12 UN	17,5	28,0	41	23.52 x 1.78
VERSCHLUSS HJOF 20	1.11/16" -12 UN	17,5	28,0	46	29.87 x 1.78
VERSCHLUSS HJOF 24	2" -12 UN	17,5	28,0	55	37.82 x 1.78

VERSCHLUSS AJF — Blanking nut

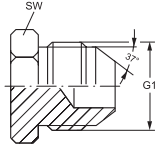




Connection 1: ORFS nut threads
Design: Blanking nut
Material: Steel
Sealing form 1: flat sealing
Construction: straight
Surface protection: electro galvanised

Identification	G1	S1
VERSCHLUSS AJF 04	9/16"-18 UNF	17
VERSCHLUSS AJF 06	11/16" -16 UN	22
VERSCHLUSS AJF 08	13/16" -16 UN	24
VERSCHLUSS AJF 10	1" -14 UNS	30
VERSCHLUSS AJF 12	1.3/16" -12 UN	36
VERSCHLUSS AJF 16	1.7/16" -12 UN	41
VERSCHLUSS AJF 20	1.11/16" -12 UN	50
VERSCHLUSS AJF 24	2" -12 UN	60
VERSCHLUSS AJF 32	2.1/2" -12 UN	75

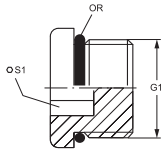
VERSCHLUSS HJ — Blanking socket



Connection 1: UN/UNF external threads
Design: Blanking socket
Surface protection: electro galvanised
Product versions: VERSCHLUSS HJ VA, Blanking socket, Stainless steel
Sealing form 1: 74° outer cone
Material: Steel

Identification	G1	SW mm
VERSCHLUSS HJ 04	7/16"-20 UNF	12
VERSCHLUSS HJ 05	1/2"-20 UNF	14
VERSCHLUSS HJ 06	9/16"-18 UNF	19
VERSCHLUSS HJ 08	3/4"-16 UNF	19
VERSCHLUSS HJ 10	7/8"-14 UNF	24
VERSCHLUSS HJ 12	1.1/16" -12 UN	27
VERSCHLUSS HJ 14	1.3/16" -12 UN	32
VERSCHLUSS HJ 16	1.5/16" -12 UN	36
VERSCHLUSS HJ 20	1.5/8" -12 UN	46
VERSCHLUSS HJ 24	1.7/8" -12 UN	50
VERSCHLUSS HJ 32	2.1/2" -12 UN	65

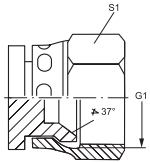
VERSCHLUSS O IS — Blanking socket, with hexagon socket



Connection 1: UN/UNF external threads
Design: Blanking socket, with hexagon socket
Material: Steel
Sealing form 1: O-ring seal
Construction: straight
Surface protection: electro galvanised

Identification	G1	S1	OR
VERSCHLUSS O 02 IS	5/16"-24 UNF	3	6.07 x 1.63
VERSCHLUSS O 03 IS	3/8"-24 UNF	4	7.65 x 1.78
VERSCHLUSS O 04 IS	7/16"-20 UNF	5	8.92 x 1.83
VERSCHLUSS O 05 IS	1/2"-20 UNF	5	10.52 x 1.83
VERSCHLUSS O 06 IS	9/16"-18 UNF	6	11.90 x 1.98
VERSCHLUSS O 08 IS	3/4"-16 UNF	8	16.36 x 2.20
VERSCHLUSS O 10 IS	7/8"-14 UNF	10	19.18 x 2.46
VERSCHLUSS O 12 IS	1.1/16" -12 UN	14	23.47 x 2.95
VERSCHLUSS O 14 IS	1.3/16" -12 UN	14	26.59 x 2.95
VERSCHLUSS O 16 IS	1.5/16" -12 UN	17	29.74 x 2.95
VERSCHLUSS O 20 IS	1.5/8" -12 UN	22	37.47 x 3.00
VERSCHLUSS O 24 IS	1.7/8" -12 UN	22	43.69 x 3.00
VERSCHLUSS O 32 IS	2.1/2" -12 UN	22	59.36 x 3.00

VERSCHLUSS AJ — Blanking nut



Connection 1: UN/UNF nut threads
Design: Blanking nut
Material: Steel
Product versions: VERSCHLUSS AJ VA, Blanking nut, Stainless steel
Sealing form 1: 74° inner cone
Construction: straight
Surface protection: electro galvanised

Identification	G1	S1
VERSCHLUSS AJ 04	7/16"-20 UNF	14
VERSCHLUSS AJ 05	1/2"-20 UNF	17
VERSCHLUSS AJ 06	9/16"-18 UNF	19
VERSCHLUSS AJ 08	3/4"-16 UNF	22
VERSCHLUSS AJ 10	7/8"-14 UNF	27
VERSCHLUSS AJ 12	1.1/16" -12 UN	32
VERSCHLUSS AJ 14	1.3/16" -12 UN	35
VERSCHLUSS AJ 16	1.5/16" -12 UN	41
VERSCHLUSS AJ 20	1.5/8" -12 UN	50
VERSCHLUSS AJ 24	1.7/8" -12 UN	60
VERSCHLUSS AJ 32	2.1/2" -12 UN	75

WEO SB G — WEO socket

Connection 1: WEO socket
Connection 2: BSP cylindrical external threads
Material: Steel

Sealing form 1: O-ring seal
Sealing form 2: Shape A

Identification	Size	Working pressure bar	G1	Ø D1 mm	i mm	L1 mm	S1
WEO 10 SB G1/4	1/4"	PN 350	G 1/4" -19	10	12	38	19
WEO 13 SB G3/8	3/8"	PN 350	G 3/8" -19	13	12	41	22
WEO 16 SB G1/2	1/2"	PN 350	G 1/2" -14	16	14	43	27
WEO 23 SB G3/4	3/4"	PN 350	G 3/4" -14	23	16	56	36
WEO 30 SB G1	1"	PN 250	G 1" -11	30	18	67	41

WEO SB G ED — WEO socket

Connection 1: WEO socket
Connection 2: BSP cylindrical external threads
Material: Steel
Spare parts: WD, Soft seal for ED fittings

Sealing form 1: O-ring seal
Sealing form 2: Shape E

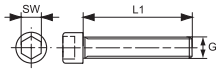
Identification	Size	Working pressure bar	G1	Ø D1 mm	i mm	L1 mm	S1
WEO 10 SB G1/4 ED	1/4"	PN 350	G 1/4" -19	10	12	38	19
WEO 13 SB G3/8 ED	3/8"	PN 350	G 3/8" -19	13	12	41	22
WEO 16 SB G1/2 ED	1/2"	PN 350	G 1/2" -14	16	14	43	27

AFS SCHR M — Metric screw set, hexagon socket

Design: Screw set
Included in scope of supply: 4 screws + 4 lock washers
Surface protection: black oiled

Standard: DIN 912 (ISO 4762)
Material: Steel 10.9

Identification	G1	L1 mm	SW mm
AFS 80 SCHRM	M 8 x 1.25	30	6
AFS 100 SCHRM	M 10 x 1.5	35	8
AFS 104 SCHRM	M 10 x 1.5	40	8
AFS 106 SCHRM	M 12 x 1.75	45	10
AFS 112 SCHRM	M 16 x 2	50	14
AFS 404 SCHRM	M 14 x 2	45	12
AFS 406 SCHRM	M 20 x 2.5	70	17

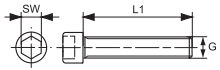


AFS SCHR U — UNC screw set, hexagon socket

Design: Screw set
Included in scope of supply: 4 screws + 4 lock washers
Surface protection: black oiled

Standard: ASA B 18.3
Material: Steel
Steel 10.9

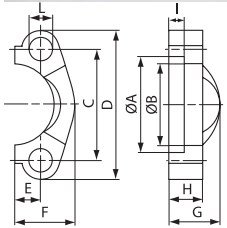
Identification	G1	L1 mm	SW
AFS 80 SCHRU	5/16" x 1.1/4" UNC	31,8	7/32"
AFS 100 SCHRU	3/8" x 1.1/2" UNC	38,1	5/16"
AFS 104 SCHRU	7/16" x 1.1/2" UNC	38,1	5/16"
AFS 106 SCHRU	1/2" x 1.3/4" UNC	44,5	3/8"
AFS 112 SCHRU	5/8" x 2" UNC	50,8	1/2"
AFS 403 SCHRU	7/16" x 1.3/4" UNC	44,5	5/16"
AFS 406 SCHRU	3/4" x 2.1/2" UNC	63,5	9/16"



FH (3000 PSI / 6000 PSI) — SAE flange half

Standard: SAE J 518 C
ISO 6162
Design: SAE flange half
Included in scope of supply: flange only
Surface protection: electro galvanised
Product versions: SFH (3000 PSI / 6000 PSI) VA, SAE flange half, Stainless steel

Construction: straight
Mounting: Screw bore hole
Material: Steel ST 52.3 (FE 510)



Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M metr.	M unc
FH 3001	3000 PSI	350	350	1/2"	31,0	24,3	38,1	54	8,7	22,8	19	13	6,2	8,7	M 8 x 25	5/16" x 1.1/4"
FH 3002	3000 PSI	350	350	3/4"	38,9	32,1	47,6	65	11,1	25,9	22	14	6,2	10,7	M 10 x 30	3/8" x 1.1/4"
FH 3003	3000 PSI	315	250	1"	45,2	38,5	52,4	70	13,1	29,2	24	16	7,5	10,7	M 10 x 30	3/8" x 1.1/4"
FH 3004	3000 PSI	250	200	1.1/4"	51,6	43,7	58,7	79	15,1	36,3	22	16	7,5	12,0	M 10 x 30	7/16" x 1.1/2"
FH 3014	3000 PSI	250	200	1.1/4"	51,6	43,7	58,7	79	15,1	36,3	22	16	7,5	10,7	M 10 x 30	-
FH 3044	3000 PSI	250	200	1.1/4"	51,6	43,7	58,7	79	15,1	36,3	22	16	7,5	12,7	M 12 x 35	-
FH 3005	3000 PSI	200	200	1.1/2"	61,1	50,8	69,9	94	17,9	41,1	25	16	7,5	13,5	M 12 x 35	1/2" x 1.1/2"
FH 3006	3000 PSI	200	160	2"	72,2	62,7	77,8	102	21,4	48,2	26	16	9,0	13,5	M 12 x 35	1/2" x 1.1/2"
FH 3007	3000 PSI	160	100	2.1/2"	84,9	74,9	88,9	114	25,4	54,1	38	19	9,0	13,5	M 12 x 40	1/2" x 1.1/2"
FH 3008	3000 PSI	160	100	3"	102,4	90,9	106,4	135	31,0	65,3	41	22	9,0	17,0	M 16 x 50	5/8" x 2"
FH 3009	3000 PSI	35	35	3.1/2"	115,1	102,4	120,7	152	34,9	69,5	28	22	10,7	17,0	M 16 x 50	5/8" x 2"
FH 3010	3000 PSI	35	35	4"	127,8	115,1	130,2	162	38,9	76,0	35	25	10,7	17,0	M 16 x 50	5/8" x 2"
FH 3011	3000 PSI	35	35	5"	153,2	140,5	152,4	184	46,0	90,0	41	28	10,7	17,0	M 16 x 55	5/8" x 2"
FH 6001	6000 PSI	400	350	1/2"	32,5	24,6	40,5	56	9,1	23,6	22	16	7,2	8,7	M 8 x 30	5/16" x 1.1/4"
FH 6002	6000 PSI	400	350	3/4"	42,1	32,5	50,8	71	11,9	30,0	28	19	8,3	10,7	M 10 x 35	3/8" x 1.1/2"

PN = Nominal pressure PB = Max. operating pressure Series: LL = Very light L = Light S = Heavy Ø = External pipe diameter

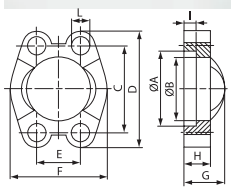
FH (3000 PSI / 6000 PSI) (Continuation) SAE flange half

Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M metr.	M unc
FH 6003	6000 PSI	400	350	1"	48,4	38,9	57,2	81	13,9	34,8	33	24	9,0	13,0	M 12 x 45	-
FH 6013	6000 PSI	400	350	1"	48,4	38,9	57,2	81	13,9	34,8	33	24	9,0	12,0	-	7/16" x 1.1/4"
FH 6004	6000 PSI	400	350	1.1/4"	54,8	44,5	66,7	95	15,9	38,6	38	27	9,8	14,7	M 14 x 45	-
FH 6044	6000 PSI	400	350	1.1/4"	54,8	44,5	66,7	95	15,9	38,6	38	27	9,8	13,5	-	1/2" x 1.3/4"
FH 6005	6000 PSI	400	350	1.1/2"	64,3	51,6	79,4	113	18,3	47,5	43	30	12,1	17,0	M 16 x 55	5/8" x 2"
FH 6006	6000 PSI	400	350	2"	80,2	67,6	96,8	133	22,2	56,9	52	37	12,1	21,0	M 20 x 70	3/4" x 2.1/2"

PN = Nominal pressure PB = Max. operating pressure Series: LL = Very light L = Light S = Heavy Ø = External pipe diameter

Recommended screws are listed in the columns M (metr) and M (unc).The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).

VF (3000 / 6000 PSI) SAE full flange



Standard: SAE J 518 C
ISO 6162
Design: SAE full flange
Included in scope of supply: flange only
Surface protection: electro galvanised

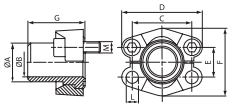
Construction: straight
Mounting: Screw bore hole
Material: Steel ST 52.3 (FE 510)

Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M metr.	M unc
VF 3001	3000 PSI	350	350	1/2"	31,0	24,3	38,1	54	17,5	45,6	19	13	6,2	8,7	M 8 x 25	5/16" x 1.1/4"
VF 3002	3000 PSI	350	350	3/4"	38,9	32,1	47,6	65	22,2	51,8	22	14	6,2	10,7	M 10 x 30	3/8" x 1.1/4"
VF 3003	3000 PSI	315	250	1"	45,2	38,5	52,4	70	26,2	58,4	24	16	7,5	10,7	M 10 x 30	3/8" x 1.1/4"
VF 3004	3000 PSI	250	200	1.1/4"	51,6	43,7	58,7	79	30,2	72,6	22	16	7,5	12,0	M 10 x 30	7/16" x 1.1/2"
VF 3004-6000	3000 PSI	400	350	1.1/4"	51,6	43,7	58,7	80	30,2	73,0	33	24	7,5	12,5	M 12 x 45	-
VF 3005	3000 PSI	200	200	1.1/2"	61,1	50,8	69,9	94	35,7	82,2	25	16	7,5	13,5	M 12 x 35	1/2" x 1.1/2"
VF 3005-6000	3000 PSI	400	350	1.1/2"	61,1	50,8	69,9	95	35,7	83,0	37	27	7,5	13,5	M 12 x 50	-
VF 3006	3000 PSI	200	160	2"	72,2	62,7	77,8	102	42,9	96,4	26	16	9,0	13,5	M 12 x 35	1/2" x 1.1/2"
VF 3006-6000	3000 PSI	400	350	2"	72,2	62,7	77,8	103	42,9	97,0	43	30	9,0	13,5	M 12 x 50	-
VF 3007	3000 PSI	160	100	2.1/2"	84,9	74,9	88,9	114	50,8	108,2	38	19	9,0	13,5	M 12 x 40	1/2" x 1.1/2"
VF 3008	3000 PSI	160	100	3"	102,4	90,9	106,4	135	61,9	130,6	41	22	9,0	17,0	M 16 x 50	5/8" x 2"
VF 3009	3000 PSI	35	35	3.1/2"	115,1	102,4	120,7	152	69,9	139,0	28	22	10,7	17,0	M 16 x 50	5/8" x 2"
VF 3010	3000 PSI	35	35	4"	127,8	115,1	130,2	162	77,8	152,0	35	25	10,7	17,0	M 16 x 50	5/8" x 2"
VF 3011	3000 PSI	35	35	5"	153,2	140,5	152,4	184	92,1	180,0	41	28	10,7	17,0	M 16 x 55	5/8" x 2"
VF 6001	6000 PSI	400	350	1/2"	32,5	24,6	40,5	56	18,2	47,2	22	16	7,2	8,7	M 8 x 30	5/16" x 1.1/4"
VF 6002	6000 PSI	400	350	3/4"	42,1	32,5	50,8	71	23,8	60,0	28	19	8,3	10,7	M 10 x 35	3/8" x 1.1/2"
VF 6003	6000 PSI	400	350	1"	48,4	38,9	57,2	81	27,8	69,9	33	24	9,0	13,0	M 12 x 45	-
VF 6003-12	6000 PSI	400	350	1"	48,4	38,9	57,2	81	27,8	69,9	33	24	9,0	12,0	-	7/16" x 1.3/4"
VF 6004	6000 PSI	400	350	1.1/4"	54,8	44,5	66,7	95	31,8	77,2	38	27	9,8	14,7	M 14 x 45	1/2" x 1.3/4"
VF 6005	6000 PSI	400	350	1.1/2"	64,3	51,6	79,4	113	36,5	95,0	43	30	12,1	17,0	M 16 x 55	5/8" x 2"
VF 6006	6000 PSI	400	350	2"	80,2	67,6	96,8	133	44,5	113,8	52	37	12,1	21,0	M 20 x 70	3/4" x 2.1/2"

PN = Nominal pressure PB = Max. operating pressure

Recommended screws are listed in the columns M (metr) and M (unc).The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).

SFS (3000 PSI) SAE stub end



Pressure series: 3000 psi
Construction: straight
Included in scope of supply: short stub end only

Product versions: SFS M (3000 PSI), with 2 flange halves, screw set and O-ring
SFS U (3000 PSI), with 2 flange halves, screw set and O-ring

Standard: SAE J 518 C
ISO 6162
Design: SAE stub end
Material: Steel ST 52.3 (FE 510)

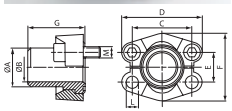
Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	Pipe	A mm	Ø B mm	C mm	D mm	E mm	F mm	G mm	L mm	M metr.	M unc
SFS 3001 S 16	350	350	1/2"	16 x 2	16,0	12,0	38,1	54	17,5	45,6	41	8,5	M 8 x 30	5/16" x 1.1/4"
SFS 3001-21.3	350	350	1/2"	21.3 x 4.7	22,0	15,5	38,1	54	17,5	45,6	41	8,5	M 8 x 30	5/16" x 1.1/4"
SFS 3002-25	350	350	3/4"	25 x 3	27,0	18,9	47,6	65	22,2	51,8	50	10,5	M 10 x 30	3/8" x 1.1/4"
SFS 3002-26.9	350	350	3/4"	26.9 x 3.9	27,0	18,9	47,6	65	22,2	51,8	50	10,5	M 10 x 30	3/8" x 1.1/4"
SFS 3003-28	315	250	1"	28 x 3	28,0	22,0	52,4	70	26,2	58,4	50	10,5	M 10 x 35	3/8" x 1.1/4"
SFS 3003-30	315	250	1"	30 x 4	30,0	22,0	52,4	70	26,2	58,4	50	10,5	M 10 x 35	3/8" x 1.1/4"
SFS 3003-33.7	315	250	1"	33.7 x 4.5	35,0	24,7	52,4	70	26,2	58,4	50	10,5	M 10 x 35	3/8" x 1.1/4"
SFS 3003-38	315	250	1"	38 x 5	38,0	28,0	52,4	70	26,2	58,4	50	10,5	M 10 x 35	3/8" x 1.1/4"
SFS 3004-38	250	200	1.1/4"	38 x 5	38,0	28,0	58,7	79	30,2	72,6	55	*1	*2	7/16" x 1.1/2"
SFS 3004-42.4	250	200	1.1/4"	42.4 x 6.3	43,0	29,7	58,7	79	30,2	72,6	55	*1	*2	7/16" x 1.1/2"
SFS 3005-38	200	200	1.1/2"	38 x 4	38,0	30,0	69,9	94	35,7	82,2	57	13,5	M 12 x 35	1/2" x 1.1/2"
SFS 3005-42	200	200	1.1/2"	42 x 5	42,0	32,0	69,9	94	35,7	82,2	57	13,5	M 12 x 35	1/2" x 1.1/2"
SFS 3005-45	200	200	1.1/2"	45 x 5	45,0	35,0	69,9	94	35,7	82,2	57	13,5	M 12 x 35	1/2" x 1.1/2"
SFS 3005-48.3	200	200	1.1/2"	48.3 x 7.1	49,0	34,0	69,9	94	35,7	82,2	57	13,5	M 12 x 35	1/2" x 1.1/2"
SFS 3006-55	200	160	2"	55 x 5	55,0	45,0	77,8	102	42,9	96,4	57	13,5	M 12 x 35	1/2" x 1.1/2"
SFS 3006-60.3	200	160	2"	60.3 x 8	60,3	44,0	77,8	102	42,9	96,4	57	13,5	M 12 x 35	1/2" x 1.1/2"
SFS 3007-65	160	100	2.1/2"	65 x 6	65,0	53,0	88,9	114	50,8	108,2	58	13,5	M 12 x 40	1/2" x 1.3/4"
SFS 3007-70	160	100	2.1/2"	70 x 7.5	70,0	55,0	88,9	114	50,8	108,2	58	13,5	M 12 x 40	1/2" x 1.3/4"
SFS 3007-76.1	160	100	2.1/2"	76.1 x 7.1	74,0	62,0	88,9	114	50,8	108,2	58	13,5	M 12 x 40	1/2" x 1.3/4"
SFS 3008-80	138	100	3"	80 x 6	80,0	68,0	106,4	135	61,9	130,6	60	16,7	M 16 x 45	5/8" x 2"
SFS 3008-88.9	138	100	3"	88.9 x 8	90,0	73,0	106,4	135	61,9	130,6	60	16,7	M 16 x 45	5/8" x 2"
SFS 3009-100	35	35	3.1/2"	100 x 6	100,0	88,0	120,7	152	69,9	139,0	60	17,0	M 16 x 45	5/8" x 2"
SFS 3009-88.9	35	35	3.1/2"	88.9 x 8	90,0	73,0	120,7	152	69,9	139,0	60	17,0	M 16 x 45	5/8" x 2"
SFS 3010-110	35	35	4"	110 x 6	110,0	98,0	130,2	162	77,8	152,0	60	17,0	M 16 x 50	5/8" x 2"
SFS 3010-114.3	35	35	4"	114.3 x 8.8	115,0	96,7	130,2	162	77,8	152,0	60	17,0	M 16 x 50	5/8" x 2"
SFS 3011-133	35	35	5"	133 x 6.5	133,0	120,0	152,4	184	92,1	180,0	60	17,0	M 16 x 50	5/8" x 2"
SFS 3011-139.7	35	35	5"	139.7 x 10	140,0	120,0	152,4	184	92,1	180,0	60	17,0	M 16 x 50	5/8" x 2"

PN = Nominal pressure PB = Max. operating pressure

*1) = Choice of 10.5 or 12.5

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).Recommended screws are listed in the columns M (metr) and M (unc).

SFS (6000 PSI) SAE stub end



Pressure series: 6000 psi
Construction: straight
Included in scope of supply: short stub end only

Product versions: SFS M (6000 PSI), with 2 flange halves, screw set and O-ring
SFS U (6000 PSI), with 2 flange halves, screw set and O-ring

Standard: SAE J 518 C
ISO 6162
Design: SAE stub end
Material: Steel ST 52.3 (FE 510)

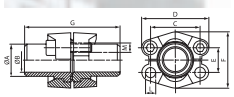
Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	Pipe	A mm	Ø B mm	C mm	D mm	E mm	F mm	G mm	L mm	M metr.	M unc
SFS 6001-16	400	350	1/2"	16 x 2	16,0	12,0	40,5	56	18,2	47,2	34	8,5	M 8 x 30	5/16" x 1.1/4"
SFS 6001-21.3	400	350	1/2"	21.3 x 4.5	21,3	11,9	40,5	56	18,2	47,2	34	8,5	M 8 x 30	5/16" x 1.1/4"
SFS 6002-20	400	350	3/4"	20 x 2.5	20,0	15,0	50,8	71	23,8	60,0	38	10,5	M 10 x 35	3/8" x 1.1/2"
SFS 6002-25	400	350	3/4"	25 x 3.5	25,0	18,0	50,8	71	23,8	60,0	38	10,5	M 10 x 35	3/8" x 1.1/2"
SFS 6002-26.9	400	350	3/4"	26.9 x 5.6	26,9	15,7	50,8	71	23,8	60,0	38	10,5	M 10 x 35	3/8" x 1.1/2"
SFS 6003-30	400	350	1"	30 x 4	30,0	22,0	57,2	81	27,8	69,6	40	*1	M 12 x 45	7/16" x 1.3/4"
SFS 6003-33.7	400	350	1"	33.7 x 7.1	35,0	19,0	57,2	81	27,8	69,6	40	*1	M 12 x 45	7/16" x 1.3/4"
SFS 6003-38	400	350	1"	38 x 5	38,0	28,0	57,2	81	27,8	69,6	40	*1	M 12 x 45	7/16" x 1.3/4"
SFS 6004-38	400	350	1.1/4"	38 x 5.5	38,0	27,0	66,7	95	31,8	77,2	45	*2	M 14 x 50	1/2" x 1.3/4"
SFS 6004-42.4	400	350	1.1/4"	42.4 x 6.3	42,4	35,8	66,7	95	31,8	77,2	45	14,5	M 14 x 50	1/2" x 1.3/4"
SFS 6005-45	400	350	1.1/2"	45 x 6.5	45,0	32,0	79,4	113	36,5	95,0	50	16,7	M 16 x 55	5/8" x 2"
SFS 6005-48.3	400	350	1.1/2"	48.3 x 8.8	48,3	30,7	79,4	113	36,5	95,0	50	17,0	M 16 x 55	5/8" x 2"
SFS 6006-65	400	350	2"	65 x 8	65,0	46,0	96,8	133	44,5	113,8	58	21,0	M 20 x 65	3/4" x 2.1/2"

PN = Nominal pressure PB = Max. operating pressure

*1) = Choice of 12.0 or 12.5

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).Recommended screws are listed in the columns M (metr) and M (unc).

DSFS (3000 PSI) SAE stub end flange connector



Pressure series: 3000 psi
Construction: straight
Mounting: with metric screw set
Material: Steel ST 52.3 (FE 510)

Standard: SAE J 518 C
ISO 6162
Design: SAE stub end flange connector
Included in scope of supply: with 2 flange halves, screw set and O-ring
Surface protection: electro galvanised

Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	Pipe	A mm	Ø B mm	C mm	D mm	E mm	F mm	G mm	L mm	M metr.	M unc
DSFS 3001-16	350	350	1/2"	16 x 2	16,0	12,0	38,1	54	17,5	45,6	82	8,5	M 8 x 30	5/16" x 1.1/4"
DSFS 3001-21.3	350	350	1/2"	21.3 x 4.7	22,0	15,5	38,1	54	17,5	45,6	82	8,5	M 8 x 30	5/16" x 1.1/4"
DSFS 3002-25	350	350	3/4"	25 x 3	27,0	18,9	47,6	65	22,2	51,8	100	10,5	M 10 x 30	3/8" x 1.1/4"
DSFS 3002-26.9	350	350	3/4"	26.9 x 3.9	27,0	18,9	47,6	65	22,2	51,8	100	10,5	M 10 x 30	3/8" x 1.1/4"
DSFS 3003-28	315	250	1"	28 x 3	28,0	22,0	52,4	70	26,2	58,4	100	10,5	M 10 x 35	3/8" x 1.1/4"
DSFS 3003-30	315	250	1"	30 x 4	30,0	22,0	52,4	70	26,2	58,4	100	10,5	M 10 x 35	3/8" x 1.1/4"
DSFS 3003-33.7	315	250	1"	33.7 x 4.5	34,0	24,7	52,4	70	26,2	58,4	100	10,5	M 10 x 35	3/8" x 1.1/4"
DSFS 3003-38	315	250	1"	38 x 5	38,0	28,0	52,4	70	26,2	58,4	100	10,5	M 10 x 35	3/8" x 1.1/4"
DSFS 3004-38	250	200	1.1/4"	38 x 5	38,0	28,0	58,7	79	30,2	72,6	110	11,0	*1	7/16" x 1.1/2"
DSFS 3004-42.4	250	200	1.1/4"	42.4 x 6.3	43,0	29,7	58,7	79	30,2	72,6	110	11,0	*1	7/16" x 1.1/2"
DSFS 3005-38	200	200	1.1/2"	38 x 4	38,0	30,0	69,9	94	35,7	82,2	114	13,5	M 12 x 35	1/2" x 1.1/2"

PN = Nominal pressure PB = Max. operating pressure

*1) = Choice of M 10 x 30 or M 12 x 35

DSFS (3000 PSI) (Continuation) SAE stub end flange connector

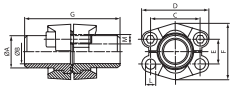
Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	Pipe	A mm	Ø B mm	C mm	D mm	E mm	F mm	G mm	L mm	M metr.	M unc
DSFS 3005-42	200	200	1.1/2"	42 x 5	42,0	32,0	69,9	94	35,7	82,2	114	13,5	M 12 x 35	1/2" x 1.1/2"
DSFS 3005-45	200	200	1.1/2"	45 x 5	45,0	35,0	69,9	94	35,7	82,2	114	13,5	M 12 x 35	1/2" x 1.1/2"
DSFS 3005-48.3	200	200	1.1/2"	48.3 x 7.1	49,0	34,0	69,9	94	35,7	82,2	114	13,5	M 12 x 35	1/2" x 1.1/2"
DSFS 3006-55	200	160	2"	55 x 5	55,0	45,0	77,8	102	42,9	96,4	114	13,5	M 12 x 35	1/2" x 1.1/2"
DSFS 3006-60.3	200	160	2"	60.3 x 8	60,3	44,0	77,8	102	42,9	96,4	114	13,5	M 12 x 35	1/2" x 1.1/2"
DSFS 3007-65	160	100	2"	65 x 6	65,0	53,0	88,9	114	50,8	108,2	116	13,5	M 12 x 40	1/2" x 1.3/4"
DSFS 3007-70	160	100	2.1/2"	70 x 7.5	70,0	55,0	88,9	114	50,8	108,2	116	13,5	M 12 x 40	1/2" x 1.3/4"
DSFS 3007-76.1	160	100	2.1/2"	76.1 x 7.1	74,0	62,0	88,9	114	50,8	108,2	116	13,5	M 12 x 40	1/2" x 1.3/4"
DSFS 3008-80	138	100	2.1/2"	80 x 6	80,0	68,0	106,4	135	61,9	130,6	120	16,7	M 16 x 45	5/8" x 2"
DSFS 3008-88.9	138	100	3"	88.9 x 8	90,0	73,0	106,4	135	61,9	130,6	120	16,7	M 16 x 45	5/8" x 2"
DSFS 3009-100	35	35	3.1/2"	100 x 6	100,0	88,0	120,7	152	69,9	139,0	120	17,0	M 16 x 45	5/8" x 2"
DSFS 3009-88.9	35	35	3"	88.9 x 8	90,0	73,0	120,7	152	69,9	139,0	120	17,0	M 16 x 45	5/8" x 2"
DSFS 3010-110	35	35	3.1/2"	110 x 6	110,0	98,0	130,2	162	77,8	152,0	120	17,0	M 16 x 50	5/8" x 2"
DSFS 3010-114.3	35	35	4"	114.3 x 8.8	115,0	96,7	130,2	162	77,8	152,0	120	17,0	M 16 x 50	5/8" x 2"
DSFS 3011-133	35	35	5"	133 x 6.5	133,0	120,0	152,4	184	92,1	180,0	120	17,0	M 16 x 50	5/8" x 2"
DSFS 3011-139.7	35	35	5"	139.7 x 10	140,0	120,0	152,4	184	92,1	180,0	120	17,0	M 16 x 50	5/8" x 2"

PN = Nominal pressure PB = Max. operating pressure

*1) = Choice of M 10 x 30 or M 12 x 35

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).

DSFS (6000 PSI) SAE stub end flange connector



Pressure series: 3000 psi
Construction: straight
Mounting: with metric screw set
Material: Steel ST 52.3 (FE 510)

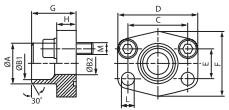
Standard: SAE J 518 C
ISO 6162
Design: SAE stub end flange connector
Included in scope of supply: with 2 flange halves, screw set and O-ring
Surface protection: black oiled

Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	Pipe	A mm	Ø B mm	C mm	D mm	E mm	F mm	G mm	L mm	M metr.	M unc
DSFS 6001-16	400	350	1/2"	16 x 2	16,0	12,0	40,5	56	18,2	47,2	68	8,5	M 8 x 30	5/16" x 1.1/4"
DSFS 6001-21.3	400	350	1/2"	21.3 x 4.5	21,3	11,9	40,5	56	18,2	47,2	68	8,5	M 8 x 30	5/16" x 1.1/4"
DSFS 6002-25	400	350	3/4"	25 x 3.5	25,0	18,0	50,8	71	23,8	60,0	76	10,5	M 10 x 35	3/8" x 1.1/2"
DSFS 6002-26.9	400	350	3/4"	26.9 x 5.6	26,9	15,7	50,8	71	23,8	60,0	76	10,5	M 10 x 35	3/8" x 1.1/2"
DSFS 6003-30	400	350	1"	30 x 4	30,0	22,0	57,2	81	27,8	69,6	80	13,5	M 12 x 45	7/16" x 1.3/4"
DSFS 6003-33.7	400	350	1"	33.7 x 7.1	34,0	19,0	57,2	81	27,8	69,6	80	13,5	M 12 x 45	7/16" x 1.3/4"
DSFS 6003-38	400	350	1"	38 x 5	38,0	28,0	57,2	81	27,8	69,6	80	13,5	M 12 x 45	7/16" x 1.3/4"
DSFS 6004-30	400	350	1.1/4"	30 x 4	30,0	22,0	66,7	95	31,8	77,2	90	14,5	M 14 x 50	1/2" x 1.3/4"
DSFS 6004-38	400	350	1.1/4"	38 x 5.5	38,0	27,0	66,7	95	31,8	77,2	90	14,5	M 14 x 50	1/2" x 1.3/4"
DSFS 6004-42.4	400	350	1.1/4"	42.4 x 6.3	42,4	29,8	66,7	95	31,8	77,2	90	14,5	M 14 x 50	1/2" x 1.3/4"
DSFS 6005-45	400	350	1.1/2"	45 x 6.5	45,0	32,0	79,4	113	36,5	95,0	100	16,7	M 16 x 55	5/8" x 2"
DSFS 6005-48.3	400	350	1.1/2"	48.3 x 8.8	50,0	30,7	79,4	113	36,5	95,0	100	16,7	M 16 x 55	5/8" x 2"
DSFS 6006-60.3	400	350	2"	60.3 x 13.4	60,3	33,7	96,8	133	44,5	113,8	116	21,0	M 20 x 65	3/4" x 2.1/2"
DSFS 6006-65	400	350	2"	65 x 8	65,0	46,0	96,8	133	44,5	113,8	116	21,0	M 20 x 65	3/4" x 2.1/2"

PN = Nominal pressure PB = Max. operating pressure

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).

AFS SRE (3000 / 6000 PSI) SAE stub end



Standard: SAE J 518 C
ISO 6162
Design: SAE stub end
Included in scope of supply: flange only
Surface protection: black oiled
Product versions: AFS SRE M (3000 / 6000 PSI), with metric screw set and O-ring
AFS SRE U (3000 / 6000 PSI), with UNC screw set and O-ring

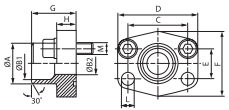
Construction: straight
Mounting: Screw bore hole
Material: Steel ST 52.3

Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	Pipe	A mm	B1 mm	B2 mm	G mm	C mm	D mm	E mm	F mm	H mm	L mm
AFS 80 SRE 20	3000 PSI	350	350	1/2"	20 x 3	20	14,0	14	35,0	38,1	54	17,5	46	16,0	9,0
AFS 80 SRE 22	3000 PSI	350	350	1/2"	22 x 3	22	16,0	13	35,0	38,1	54	17,5	46	16,0	9,0
AFS 100 SRE 25	3000 PSI	350	350	3/4"	25 x 3	25	19,0	19	36,0	47,6	65	22,2	50	18,0	11,0
AFS 100 SRE 28	3000 PSI	350	350	3/4"	28 x 3	28	21,5	19	36,0	47,6	65	22,2	50	18,0	11,0
AFS 102 SRE 30	3000 PSI	315	250	1"	30 x 4	30	22,0	22	38,0	52,4	70	26,2	55	18,0	11,0
AFS 102 SRE 35	3000 PSI	315	250	1"	35 x 4	35	27,0	25	38,0	52,4	70	26,2	55	18,0	11,0
AFS 104 SRE 38	3000 PSI	250	200	1.1/4"	38 x 4	38	30,0	30	41,0	58,7	79	30,2	68	21,0	11,5
AFS 104 SRE 42	3000 PSI	250	200	1.1/4"	42 x 3	43	36,0	31	41,0	58,7	79	30,2	68	21,0	11,5
AFS 106 SRE 38	3000 PSI	200	200	1.1/2"	38 x 4	38	30,0	30	44,5	69,9	93	35,7	78	24,5	13,5
AFS 106 SRE 42	3000 PSI	200	200	1.1/2"	42 x 3	42	36,0	36	44,5	69,9	93	35,7	78	24,5	13,5
AFS 106 SRE 48.3	3000 PSI	200	200	1.1/2"	48.3 x 4.5	49	38,0	38	44,5	69,9	93	35,7	78	24,5	13,5
AFS 108 SRE 60	3000 PSI	200	160	2"	60.3 x 5.6	61	49,0	49	45,0	77,8	102	42,9	90	25,0	13,5
AFS 110 SRE 76	3000 PSI	160	100	2.1/2"	76.1 x 7.1	77	62,0	62	50,0	88,9	114	50,8	105	25,0	13,5
AFS 112 SRE 76	3000 PSI	160	100	3"	76.1 x 7.1	77	62,0	62	51,0	106,4	134	61,9	124	26,0	17,5
AFS 401 SRE 20	6000 PSI	400	350	1/2"	20 x 3	20	14,0	14	34,0	40,5	54	18,2	46	16,0	9,0
AFS 402 SRE 20	6000 PSI	400	350	3/4"	20 x 3	20	14,0	14	35,0	50,8	71	23,8	55	21,0	11,0
AFS 402 SRE 25	6000 PSI	400	350	3/4"	25 x 4	25	17,0	17	35,0	50,8	71	23,8	55	21,0	11,0
AFS 403 SRE 25	6000 PSI	400	350	1"	25 x 4	25	17,0	17	42,0	57,2	81	27,8	65	25,0	13,0
AFS 403 SRE 30	6000 PSI	400	350	1"	30 x 4	30	22,0	22	42,0	57,2	81	27,8	65	25,0	13,0
AFS 404 SRE 30	6000 PSI	400	350	1.1/4"	30 x 4	30	22,0	22	44,0	66,7	95	31,8	78	25,0	15,0
AFS 404 SRE 38	6000 PSI	400	350	1.1/4"	38 x 6	38	26,0	26	44,0	66,7	95	31,8	78	25,0	15,0
AFS 405 SRE 38	6000 PSI	400	350	1.1/2"	38 x 6	38	26,0	26	56,0	49,4	112	36,5	94	28,0	17,0
AFS 405 SRE 48	6000 PSI	400	350	1.1/2"	48.3 x 8	49	32,0	32	56,0	79,4	112	36,5	94	28,0	17,0
AFS 405 SRE 60	6000 PSI	400	350	1.1/2"	60.3 x 10	61	40,0	40	56,0	79,4	112	36,5	94	27,0	17,0
AFS 406 SRE 60	6000 PSI	400	350	2"	60.3 x 10	61	40,0	40	65,0	96,8	134	44,5	114	37,0	21,0
AFS 406 SRE 76	6000 PSI	400	350	2"	76.1 x 12.5	76	50,0	48	80,0	96,8	134	44,5	122	33,0	21,0

PN = Nominal pressure PB = Max. operating pressure

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).

AFS STRE (3000 PSI) SAE stub end



Pressure series: 3000 psi
Supplementary design information: ND 40
Design: SAE stub end
Included in scope of supply: flange only
Surface protection: black oiled
Product versions: AFS STRE M (3000 PSI), with metric screw set and O-ring
AFS STRE U (3000 PSI), with UNC screw set and O-ring

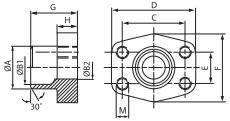
Standard: SAE J 518 C
ISO 6162
Construction: straight
Mounting: Screw bore hole
Material: Steel ST 52.3

Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	Pipe	A mm	B1 mm	B2 mm	G mm	C mm	D mm	E mm	F mm	H mm	L mm
AFS 80 STRE 21.3	350	350	1/2"	21.3 x 2.6	22	16,0	13	35,0	38,1	54	17,5	46	16,0	9,0
AFS 100 STRE 26.9	350	350	3/4"	26.9 x 2.6	28	21,5	19	36,0	47,6	65	50,0	50	18,0	11,0
AFS 102 STRE 33.7	315	250	1"	33.7 x 3.2	35	27,0	25	38,0	52,4	70	26,2	55	18,0	11,0
AFS 104 STRE 42.2	250	200	1.1/4"	42.4 x 3.2	43	36,0	31	41,0	58,7	79	30,2	68	21,0	11,5
AFS 106 STRE 48.3	200	200	1.1/2"	48.3 x 3.2	49	42,0	38	44,5	69,9	93	35,7	78	24,5	13,5
AFS 108 STRE 48.3	200	160	2"	48.3 x 3.2	49	42,0	42	45,0	77,8	102	42,9	90	25,0	13,5
AFS 108 STRE 60.3	200	160	2"	60.3 x 3.6	61	53,0	49	45,0	77,8	102	42,9	90	25,0	13,5
AFS 110 STRE 60.3	160	100	2.1/2"	60.3 x 3.6	61	53,0	53	50,0	88,9	114	50,8	105	25,0	13,5
AFS 110 STRE 76.1	160	100	2.1/2"	76.1 x 3.6	77	70,0	62	50,0	88,9	114	50,8	105	25,0	13,5
AFS 112 STRE 88.9	138	100	3"	88.9 x 3.6	90	82,0	74	51,0	106,4	134	61,9	124	26,0	17,5
AFS 114 STRE 76.1	35	35	3.1/2"	76.1 x 3.6	77	70,0	70	48,0	120,7	152	69,9	136	26,0	17,5
AFS 114 STRE 88.9	35	35	3.1/2"	88.9 x 3.6	90	82,0	82	48,0	120,7	152	69,9	136	26,0	17,5
AFS 116 STRE 114.3	35	35	4"	114 x 3.6	115	107,0	102	48,0	130,2	162	77,8	146	26,0	17,5
AFS 116 STRE 88.9	35	35	4"	88.9 x 3.6	90	82,0	82	48,0	130,2	162	77,8	146	26,0	17,5
AFS 118 STRE 139.7 *	35	35	5"	139.7 x 4	131	120,0	131	28,0	152,4	190	92,1	170	28,0	17,5

PN = Nominal pressure PB = Max. operating pressure *) AFS 118 STRE 139.7: Design as socket weld flat flange.

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).

GFS SRE (3000 / 6000 PSI) SAE welded on counter flange



Standard: SAE J 518 C
ISO 6162
Design: SAE welded on counter flange
Material: Steel ST 52.3

Construction: straight
Mounting: Inner thread for metric screws
Surface protection: black oiled

Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	Pipe	A mm	B1 mm	B2 mm	C mm	D mm	E mm	F mm	G mm	H mm	M metr.
GFS 80 SRE 20	350	350	1/2"	20 x 3	20	14,0	14	38,1	54	17,5	46	35,0	16,0	M 8
GFS 80 SRE 22	350	350	1/2"	22 x 3	22	16,0	13	38,1	54	17,5	46	35,0	16,0	M 8
GFS 100 SRE 25	350	350	3/4"	25 x 3	25	19,0	19	47,6	65	22,2	50	36,0	18,0	M 10
GFS 100 SRE 28	350	350	3/4"	28 x 3	28	21,5	19	47,6	65	22,2	50	36,0	18,0	M 10
GFS 102 SRE 30	315	250	1"	30 x 4	30	22,0	22	52,4	70	26,2	55	38,0	18,0	M 10
GFS 102 SRE 35	315	250	1"	35 x 4	35	27,0	25	52,4	70	26,2	55	38,0	18,0	M 10
GFS 104 SRE 38	250	200	1.1/4"	38 x 4	38	30,0	30	58,7	79	30,2	68	41,0	21,0	M 10
GFS 104 SRE 42	250	200	1.1/4"	42 x 3	43	36,0	31	58,7	79	30,2	68	41,0	21,0	M 10
GFS 106 SRE 38	200	200	1.1/2"	38 x 4	38	30,0	30	69,9	93	35,7	78	44,5	24,5	M 12
GFS 106 SRE 42	200	200	1.1/2"	42 x 3	42	36,0	36	69,9	93	35,7	78	44,5	24,5	M 12
GFS 106 SRE 48	200	200	1.1/2"	48.3 x 4.5	49	38,0	38	69,9	93	35,7	78	44,5	24,5	M 12

PN = Nominal pressure PB = Max. operating pressure

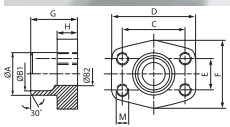
GFS SRE (3000 / 6000 PSI) (Continuation) SAE welded on counter flange

Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	Pipe	A mm	B1 mm	B2 mm	C mm	D mm	E mm	F mm	G mm	H mm	M metr.
GFS 108 SRE 60	200	160	2"	60.3 x 5.6	61	49,0	49	77,8	102	42,9	90	45,0	25,0	M 12
GFS 110 SRE 76	160	100	2.1/2"	76.1 x 7.1	77	62,0	62	88,9	114	50,8	105	50,0	25,0	M 12
GFS 112 SRE 76	138	100	3"	76.1 x 7.1	77	62,0	62	106,4	134	61,9	125	51,0	26,0	M 16
GFS 401 SRE 20	400	350	1/2"	20 x 3	20	14,0	14	40,5	54	18,2	46	34,0	16,0	M 8
GFS 402 SRE 20	400	350	3/4"	20 x 3	20	14,0	14	50,8	71	23,8	55	35,0	21,0	M 10
GFS 402 SRE 25	400	350	3/4"	25 x 4	25	17,0	17	50,8	71	23,8	55	35,0	21,0	M 10
GFS 403 SRE 25	400	350	1"	25 x 4	25	17,0	17	57,2	81	27,8	65	42,0	25,0	M 12
GFS 403 SRE 30	400	350	1"	30 x 4	30	22,0	22	57,2	81	27,8	65	42,0	25,0	M 12
GFS 404 SRE 30	400	350	1.1/4"	30 x 4	30	22,0	22	66,7	95	31,8	78	44,0	25,0	M 14
GFS 404 SRE 38	400	350	1.1/4"	38 x 6	38	26,0	26	66,7	95	31,8	78	44,0	25,0	M 14
GFS 405 SRE 38	400	350	1.1/2"	38 x 6	38	26,0	26	79,4	112	36,5	94	56,0	28,0	M 16
GFS 405 SRE 48	400	350	1.1/2"	48.3 x 8	49	32,0	32	79,4	112	36,5	94	56,0	28,0	M 16
GFS 405 SRE 60	400	350	1.1/2"	60.3 x 10	61	40,0	40	79,4	112	36,5	94	56,0	28,0	M 16
GFS 406 SRE 60	400	350	2"	60.3 x 10	61	40,0	40	96,8	134	44,5	114	65,0	33,0	M 20
GFS 406 SRE 76	400	350	2"	76.1 x 12.5	76	48,0	48	96,8	134	44,5	114	80,0	33,0	M 20

PN = Nominal pressure PB = Max. operating pressure

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).

GFS STRE (3000 PSI) SAE welded on counter flange



Pressure series: 3000 psi
Supplementary design information: ND 40
Design: SAE welded on counter flange
Material: Steel ST 52.3

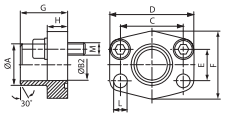
Standard: SAE J 518 C
ISO 6162
Construction: straight
Mounting: Inner thread for metric screws
Surface protection: black oiled

Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	Pipe	A mm	B1 mm	B2 mm	C mm	D mm	E mm	F mm	G mm	H mm	M metr.
GFS 80 STRE 21.3	350	350	1/2"	21.3 x 2.6	22,0	16,0	13	38,1	54	17,5	46	35,0	16,0	M 8
GFS 100 STRE 26.9	350	350	3/4"	26.9 x 2.6	28,0	21,5	19	47,6	65	22,2	50	35,0	18,0	M 10
GFS 102 STRE 33.7	315	250	1"	33.7 x 3.2	35,0	27,0	25	52,4	70	26,2	55	38,0	18,0	M 10
GFS 104 STRE 42.4	250	200	1.1/4"	42.4 x 3.2	43,0	36,0	31	58,7	79	30,2	68	41,0	21,0	M 10
GFS 106 STRE 48.3	200	200	1.1/2"	48.3 x 3.2	49,0	42,0	38	69,9	93	35,7	78	44,5	24,5	M 12
GFS 108 STRE 48.3	200	160	2"	48.3 x 3.2	49,0	42,0	42	77,8	102	42,9	90	45,0	25,0	M 12
GFS 108 STRE 60.3	200	160	2"	60.3 x 3.6	61,0	53,0	49	77,8	102	42,9	90	45,0	25,0	M 12
GFS 110 STRE 60.3	160	100	2.1/2"	60.3 x 3.6	61,0	53,0	53	88,9	114	50,8	105	50,0	25,0	M 12
GFS 110 STRE 76.1	160	100	2.1/2"	76.1 x 3.6	77,0	70,0	62	88,9	114	50,8	105	50,0	25,0	M 12
GFS 112 STRE 88.9	138	100	3"	88.9 x 3.6	90,0	82,0	74	106,4	134	61,9	124	51,0	26,0	M 16
GFS 114 STRE 76.1	35	35	3.1/2"	76.1 x 3.6	77,0	70,0	70	120,7	152	69,9	136	48,0	26,0	M 16
GFS 114 STRE 88.9	35	35	3.1/2"	88.9 x 3.6	90,0	82,0	82	120,7	152	69,9	136	48,0	26,0	M 16
GFS 116 STRE 114	35	35	4"	114.3 x 3.6	115,0	107,0	102	130,2	162	77,8	146	48,0	26,0	M 16
GFS 116 STRE 88.9	35	35	4"	88.9 x 3.6	90,0	82,0	82	130,2	162	77,8	146	48,0	26,0	M 16
GFS 118 STRE 139	35	35	5"	139.7 x 4	140,2	131,0	120	152,4	184	92,1	180	50,0	28,0	M 16

PN = Nominal pressure PB = Max. operating pressure

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).

AFS ST (3000 / 6000 PSI) SAE welded on flange - imperial



Standard: SAE J 518 C
ISO 6162
Design: SAE welded on flange - imperial
Included in scope of supply: flange only
Surface protection: black oiled
Product versions: AFS ST M (3000 / 6000 PSI), with metric screw set and O-ring
AFS ST U (3000 / 6000 PSI), with UNC screw set and O-ring

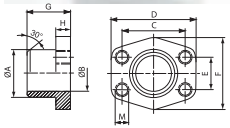
Construction: straight
Mounting: Screw bore hole
Material: Steel ST 52.3

Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A mm	Ø B mm	C mm	D mm	E mm	F mm	G mm	H mm	L mm	M metr.	M unc
AFS 80 ST	3000 PSI	350	350	1/2"	21,6	13	38,1	54	17,5	46	36	16	9,0	M 8 x 30	5/16" x 1.1/4"
AFS 80 ST 038	3000 PSI	350	350	1/2"	17,5	13	38,1	54	17,5	46	36	16	9,0	M 8 x 30	5/16" x 1.1/4"
AFS 100 ST	3000 PSI	350	350	3/4"	28,0	19	47,6	65	22,2	50	36	18	11,0	M 10 x 35	3/8" x 1.1/2"
AFS 102 ST	3000 PSI	315	250	1"	34,0	25	52,4	70	26,2	55	38	18	11,0	M 10 x 35	3/8" x 1.1/2"
AFS 104 ST	3000 PSI	250	200	1.1/4"	42,8	32	58,7	79	30,2	68	41	21	11,5	M 10 x 40	7/16" x 1.1/2"
AFS 106 ST	3000 PSI	200	200	1.1/2"	48,6	38	69,9	93	35,7	78	44	25	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 108 ST	3000 PSI	200	160	2"	61,0	51	77,8	102	42,9	90	45	25	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 110 ST	3000 PSI	160	100	2.1/2"	77,0	63	88,9	114	50,8	105	50	25	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 112 ST	3000 PSI	138	100	3"	92,0	73	106,4	134	61,9	124	50	27	17,5	M 16 x 50	5/8" x 2"
AFS 114 ST	3000 PSI	35	35	3.1/2"	103,0	89	120,7	152	69,9	136	48	27	17,5	M 16 x 50	5/8" x 2"
AFS 116 ST	3000 PSI	35	35	4"	115,1	99	130,2	162	77,8	146	48	27	17,5	M 16 x 50	5/8" x 2"
AFS 401 ST 012	6000 PSI	400	350	1/2"	21,5	13	40,5	54	18,2	46	36	16	9,0	M 8 x 30	5/16" x 1.1/4"
AFS 401 ST 038	6000 PSI	400	350	1/2"	17,5	13	40,5	54	18,2	46	36	16	9,0	M 8 x 30	5/16" x 1.1/4"
AFS 402 ST	6000 PSI	400	350	3/4"	28,0	19	50,8	71	23,8	55	35	21	11,0	M 10 x 35	3/8" x 1.1/2"
AFS 403 ST	6000 PSI	400	350	1"	34,0	25	57,2	79	27,8	68	41	21	13,0	M 12 x 45	7/16" x 1.3/4"
AFS 404 ST	6000 PSI	375	350	1.1/4"	42,8	32	66,7	93	31,8	78	44	25	15,0	M 14 x 45	1/2" x 1.3/4"
AFS 405 ST	6000 PSI	250	250	1.1/2"	48,6	38	79,4	112	36,5	94	55	30	17,0	M 16 x 50	5/8" x 2"
AFS 406 ST	6000 PSI	250	250	2"	61,0	51	96,8	134	44,5	114	65	37	21,0	M 20 x 65	3/4" x 2.1/2"

PN = Nominal pressure PB = Max. operating pressure

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).Recommended screws are listed in the columns M (metr) and M (unc).

GFS ST M (3000 / 6000 PSI) SAE welded on counter flange



Standard: SAE J 518 C
ISO 6162
Construction: straight
Mounting: Inner thread for metric screws
Surface protection: black oiled
Product versions: GFS ST U (3000 / 6000 PSI), Steel ST 52.3

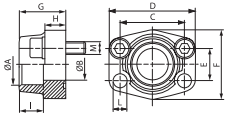
Supplementary design information: for imperial pipes
Design: SAE welded on counter flange
Material: Steel ST 52.3

Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A mm	Ø B mm	C mm	D mm	E mm	F mm	G mm	H mm	M metr.
GFS 80 ST M	3000 PSI	350	350	1/2"	21,5	13	38,1	54	17,5	46	36	16	M 8
GFS 80 ST 038 M	3000 PSI	350	350	1/2"	17,5	13	38,1	54	17,5	46	36	16	M 8
GFS 100 ST M	3000 PSI	350	350	3/4"	28,0	19	47,6	65	22,2	50	36	18	M 10
GFS 102 ST M	3000 PSI	315	250	1"	35,0	25	52,4	70	26,2	55	38	18	M 10
GFS 104 ST M	3000 PSI	250	200	1.1/4"	42,8	32	58,7	79	30,2	68	41	21	M 10
GFS 106 ST M	3000 PSI	200	200	1.1/2"	48,6	38	69,9	93	35,7	78	44	25	M 12
GFS 108 ST M	3000 PSI	200	160	2"	61,0	51	77,8	102	42,9	90	45	25	M 12
GFS 110 ST M	3000 PSI	160	100	2.1/2"	77,0	63	88,9	114	50,8	105	50	25	M 12
GFS 112 ST M	3000 PSI	138	100	3"	92,0	73	106,4	134	61,9	124	50	27	M 16
GFS 114 ST M	3000 PSI	35	35	3.1/2"	103,0	89	120,7	152	69,9	136	48	27	M 16
GFS 116 ST M	3000 PSI	35	35	4"	115,1	99	130,2	162	77,8	146	48	27	M 16
GFS 401 ST 012 M	6000 PSI	400	350	1/2"	21,5	13	40,5	54	18,2	46	36	16	M 8
GFS 401 ST 038 M	6000 PSI	400	350	1/2"	17,5	13	40,5	54	18,2	46	36	16	M 8
GFS 402 ST M	6000 PSI	400	350	3/4"	28,0	19	50,8	71	23,8	55	35	21	M 10
GFS 403 ST M	6000 PSI	400	350	1"	35,0	25	57,2	79	27,8	68	41	21	M 12
GFS 404 ST M	6000 PSI	375	350	1.1/4"	42,8	32	66,7	93	31,8	78	44	25	M 14
GFS 405 ST M	6000 PSI	250	250	1.1/2"	48,6	38	79,4	112	36,5	94	55	30	M 16
GFS 406 ST M	6000 PSI	250	250	2"	61,0	51	96,8	134	44,5	114	65	37	M 20

PN = Nominal pressure PB = Max. operating pressure

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).

AFS S (3000 / 6000 PSI) SAE socket weld flange



Standard: SAE J 518 C
ISO 6162
Design: SAE socket weld flange
Included in scope of supply: flange only
Surface protection: black oiled
Product versions: AFS S M (3000 / 6000 PSI), with metric screw set and O-ring
AFS S U (3000 / 6000 PSI), with UNC screw set and O-ring

Construction: straight
Mounting: Screw bore hole
Material: Steel ST 52.3 (FE 510)

Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A mm	Ø B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M metr.	M unc
AFS 80 S	3000 PSI	350	350	1/2"	21,6	13	38,1	54	17,5	46	36	16	19	9,0	M 8 x 30	5/16" x 1.1/4"
AFS 80 S 3/8	3000 PSI	350	350	1/2"	17,5	13	38,1	54	17,5	46	36	16	19	9,0	M 8 x 30	5/16" x 1.1/4"
AFS 80 S A20	3000 PSI	350	350	1/2"	20,3	13	38,1	54	17,5	46	36	16	19	9,0	M 8 x 30	5/16" x 1.1/4"
AFS 100 S	3000 PSI	350	350	3/4"	27,2	19	47,6	65	22,2	50	36	18	19	11,0	M 10 x 35	3/8" x 1.1/2"
AFS 100 S A25	3000 PSI	350	350	3/4"	25,3	19	47,6	65	22,2	50	36	18	19	11,0	M 10 x 35	3/8" x 1.1/2"

PN = Nominal pressure PB = Max. operating pressure

*1) = 15.0 for metric screws; 13.5 for UNC screws

AFS S (3000 / 6000 PSI) (Continuation) SAE socket weld flange

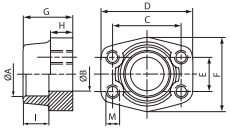
Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A mm	Ø B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M metr.	M unc
AFS 102 S	3000 PSI	315	250	1"	34,0	25	52,4	70	26,2	55	38	18	19	11,0	M 10 x 35	3/8" x 1.1/2"
AFS 102 S A30	3000 PSI	315	250	1"	30,3	25	52,4	70	26,2	55	38	18	19	11,0	M 10 x 35	3/8" x 1.1/2"
AFS 104 S	3000 PSI	250	200	1.1/4"	42,8	32	58,7	79	30,2	68	41	21	22	11,5	M 10 x 40	7/16" x 1.1/2"
AFS 104 S A38	3000 PSI	250	200	1.1/4"	38,3	32	58,7	79	30,2	68	41	21	22	11,5	M 10 x 40	7/16" x 1.1/2"
AFS 106 S	3000 PSI	200	200	1.1/2"	48,6	38	69,9	93	35,7	78	45	25	24	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 106 S A50	3000 PSI	200	200	1.1/2"	50,5	38	69,9	93	35,7	78	45	25	24	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 108 S	3000 PSI	200	160	2"	61,0	51	77,8	102	42,9	90	45	25	26	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 110 S	3000 PSI	160	100	2.1/2"	76,6	63	88,9	114	50,8	105	50	25	30	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 112 S	3000 PSI	138	100	3"	90,5	73	106,4	134	61,9	124	50	27	34	17,5	M 16 x 50	5/8" x 2"
AFS 114 S	3000 PSI	35	35	3.1/2"	103,0	89	120,7	152	69,9	136	48	27	34	17,5	M 16 x 50	5/8" x 2"
AFS 116 S	3000 PSI	35	35	4"	115,1	99	130,2	162	77,8	146	48	27	34	17,5	M 16 x 50	5/8" x 2"
AFS 401 S	6000 PSI	400	350	1/2"	21,6	13	40,5	54	18,2	46	36	16	19	9,0	M 8 x 30	5/16" x 1.1/4"
AFS 401 S 3/8	6000 PSI	400	350	1/2"	17,5	13	40,5	54	18,2	46	36	16	19	9,0	M 8 x 30	5/16" x 1.1/4"
AFS 401 S A20	6000 PSI	400	350	1/2"	20,3	13	40,5	54	18,2	46	36	16	19	9,0	M 8 x 30	5/16" x 1.1/4"
AFS 402 S	6000 PSI	400	350	3/4"	27,2	19	50,8	71	23,8	55	35	21	22	11,0	M 10 x 35	3/8" x 1.1/2"
AFS 402 S A25	6000 PSI	400	350	3/4"	25,3	19	50,8	71	23,8	55	35	21	22	11,0	M 10 x 35	3/8" x 1.1/2"
AFS 403 S	6000 PSI	400	350	1"	34,0	25	57,2	81	27,8	65	42	25	22	13,0	M 12 x 45	7/16" x 1.3/4"
AFS 403 S A30	6000 PSI	400	350	1"	30,3	25	57,2	81	27,8	65	42	25	22	13,0	M 12 x 45	7/16" x 1.3/4"
AFS 404 S	6000 PSI	400	350	1.1/4"	42,8	32	66,7	95	31,8	78	45	27	25	*1	M 14 x 45	1/2" x 1.3/4"
AFS 404 S A38	6000 PSI	400	350	1.1/4"	38,3	32	66,7	95	31,8	78	45	27	25	*1	M 14 x 45	1/2" x 1.3/4"
AFS 405 S	6000 PSI	400	350	1.1/2"	48,6	38	79,4	112	36,5	94	50	30	28	17,5	M 16 x 50	5/8" x 2"
AFS 405 S A50	6000 PSI	400	350	1.1/2"	50,5	38	79,4	112	36,5	94	50	30	28	17,5	M 16 x 50	5/8" x 2"
AFS 406 S	6000 PSI	400	350	2"	61,0	51	96,8	134	44,5	114	65	37	24	21,0	M 20 x 65	3/4" x 2.1/2"

PN = Nominal pressure PB = Max. operating pressure

*1) = 15.0 for metric screws; 13.5 for UNC screws

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).Recommended screws are listed in the columns M (metr) and M (unc).

GFS S M (3000 / 6000 PSI) SAE socket weld counter flange



Standard: SAE J 518 C
ISO 6162
Design: SAE socket weld counter flange
Included in scope of supply: flange only
Surface protection: black oiled
Product versions: GFS S U (3000 / 6000 PSI), flange only

Construction: straight
Mounting: Inner thread for metric screws
Material: Steel ST 52.3 (FE 510)

Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A mm	Ø B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	M metr.
GFS 80 S	3000 PSI	350	350	1/2"	21,6	13	38,1	54	17,5	46	36	16	19	M 8
GFS 80 S 3/8	3000 PSI	350	350	1/2"	17,5	13	38,1	54	17,5	46	36	16	19	M 8
GFS 80 S A20	3000 PSI	350	350	1/2"	20,3	13	38,1	54	17,5	46	36	16	19	M 8
GFS 100 S	3000 PSI	350	350	3/4"	27,2	19	47,6	65	22,2	50	36	18	19	M 10
GFS 100 S A25	3000 PSI	350	350	3/4"	25,3	19	47,6	65	22,2	50	36	18	19	M 10
GFS 102 S	3000 PSI	315	250	1"	35,0	25	52,4	70	26,2	55	38	18	19	M 10
GFS 102 S A30	3000 PSI	315	250	1"	30,3	25	52,4	70	26,2	55	38	18	19	M 10

PN = Nominal pressure PB = Max. operating pressure

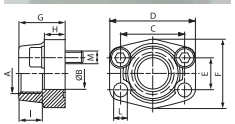
GFS S M (3000 / 6000 PSI) (Continuation) SAE socket weld counter flange

Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A mm	Ø B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	M metr.
GFS 104 S	3000 PSI	250	200	1.1/4"	42,8	32	58,7	79	30,2	68	41	21	22	M 10
GFS 104 S A38	3000 PSI	250	200	1.1/4"	38,3	32	58,7	79	30,2	68	41	21	22	M 10
GFS 106 S	3000 PSI	200	200	1.1/2"	48,6	38	69,9	93	35,7	78	45	25	24	M 12
GFS 106 S A50	3000 PSI	200	200	1.1/2"	50,5	38	69,9	93	35,7	78	45	25	24	M 12
GFS 108 S	3000 PSI	200	160	2"	61,0	51	77,8	102	42,9	90	45	25	26	M 12
GFS 110 S	3000 PSI	160	100	2.1/2"	76,6	63	88,9	114	50,8	105	50	25	30	M 12
GFS 112 S	3000 PSI	138	100	3"	90,5	73	106,4	134	61,9	124	50	27	34	M 16
GFS 114 S	3000 PSI	35	35	3.1/2"	103,0	89	120,7	152	69,9	136	48	27	34	M 16
GFS 116 S	3000 PSI	35	35	4"	115,1	99	130,2	162	77,8	146	48	27	34	M 16
GFS 401 S	6000 PSI	400	350	1/2"	21,6	13	40,5	54	18,2	46	36	16	19	M 8
GFS 401 S 3/8	6000 PSI	400	350	1/2"	17,5	13	40,5	54	18,2	46	36	16	19	M 8
GFS 401 S A20	6000 PSI	400	350	1/2"	20,3	13	40,5	54	18,2	46	36	16	19	M 8
GFS 402 S	6000 PSI	400	350	3/4"	27,2	19	50,8	71	23,8	55	35	21	22	M 10
GFS 402 S A25	6000 PSI	400	350	3/4"	25,3	19	50,8	71	23,8	55	35	21	22	M 10
GFS 403 S	6000 PSI	400	350	1"	35,0	25	57,2	81	27,8	65	42	25	22	M 12
GFS 403 S A30	6000 PSI	400	350	1"	30,3	25	57,2	81	27,8	65	42	25	22	M 12
GFS 404 S	6000 PSI	400	350	1.1/4"	42,8	32	66,7	95	31,8	78	45	27	25	M 14
GFS 404 S A38	6000 PSI	400	350	1.1/4"	38,3	32	66,7	95	31,8	78	45	27	25	M 14
GFS 405 S	6000 PSI	400	350	1.1/2"	48,6	38	79,4	112	36,5	94	50	30	28	M 16
GFS 405 S A50	6000 PSI	400	350	1.1/2"	50,5	38	79,4	112	36,5	94	50	30	28	M 16
GFS 406 S	6000 PSI	400	350	2"	61,0	51	96,8	134	44,5	114	65	37	24	M 20

PN = Nominal pressure PB = Max. operating pressure

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).

AFS G (3000 PSI) SAE screw-in flange, BSP



Pressure series: 3000 psi
Construction: straight
Mounting: Screw bore hole
Material: Steel ST 52.3 (FE 510)

Standard: SAE J 518 C
ISO 6162
Design: SAE screw-in flange
Included in scope of supply: flange only
Surface protection: black oiled

Product versions: AFS G M (3000 PSI), with metric screw set and O-ring
AFS G U (3000 PSI), with UNC screw set and O-ring

Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A	Ø B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M metr.	M unc
AFS 80 G 3/8	350	350	1/2"	G 3/8" -19	13	38,1	54	17,5	46	36	16	19	9,0	M 8 x 30	5/16" x 1.1/4"
AFS 80 G 1/2	350	350	1/2"	G 1/2" -14	13	38,1	54	17,5	46	36	16	19	9,0	M 8 x 30	5/16" x 1.1/4"
AFS 100 G 1/2	350	350	3/4"	G 1/2" -14	13	47,6	65	22,2	50	36	18	19	11,0	M 10 x 35	3/8" x 1.1/2"
AFS 100 G 3/4	350	350	3/4"	G 3/4" -14	19	47,6	65	22,2	50	36	18	19	11,0	M 10 x 35	3/8" x 1.1/2"
AFS 102 G 1/2	315	250	1"	G 1/2" -14	13	52,4	70	26,2	55	38	18	22	11,0	M 10 x 35	3/8" x 1.1/2"
AFS 102 G 3/4	315	250	1"	G 3/4" -14	19	52,4	70	26,2	55	35	21	19	11,0	M 10 x 35	3/8" x 1.1/2"
AFS 102 G 1	315	250	1"	G 1" -11	25	52,4	70	26,2	55	38	18	22	11,0	M 10 x 35	3/8" x 1.1/2"
AFS 104 G 3/4	250	200	1.1/4"	G 3/4" -14	19	58,7	79	30,2	68	41	21	22	11,5	M 10 x 40	7/16" x 1.1/2"
AFS 104 G 1 M 10	250	200	1.1/4"	G 1" -11	25	58,7	81	30,2	65	42	25	22	11,5	M 10 x 40	

PN = Nominal pressure PB = Max. operating pressure

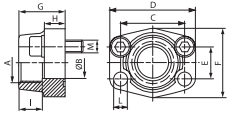
AFS G (3000 PSI) (Continuation) SAE screw-in flange, BSP

Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A	Ø B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M metr.	M unc
AFS 104 G 1 M 12	250	200	1.1/4"	G 1" -11	25	58,7	81	30,2	65	42	25	22	13,0	M 12 x 40	
AFS 104 G 1 1/4 M 10	250	200	1.1/4"	G 1.1/4" -11	32	58,7	79	30,2	68	41	21	22	11,5	M 10 x 40	
AFS 104 G 1 1/4 M 12	250	200	1.1/4"	G 1.1/4" -11	32	58,7	79	30,2	68	41	21	22	13,0	M 12 x 40	
AFS 106 G 3/4	200	200	1.1/2"	G 3/4" -14	19	69,9	93	35,7	78	45	25	24	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 106 G 1	200	200	1.1/2"	G 1" -11	25	69,9	93	35,7	78	45	25	24	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 106 G 1 1/4	200	200	1.1/2"	G 1.1/4" -11	32	69,9	95	35,7	78	45	27	24	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 106 G 1 1/2	200	200	1.1/2"	G 1.1/2" -11	38	69,9	93	35,7	78	45	25	24	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 108 G 1	200	160	2"	G 1" -11	25	77,8	102	42,9	90	45	25	26	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 108 G 1 1/4	200	160	2"	G 1.1/4" -11	32	77,8	102	42,9	90	45	25	24	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 108 G 1 1/2	200	160	2"	G 1.1/2" -11	38	77,8	102	42,9	90	45	25	26	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 108 G 2	200	160	2"	G 2" -11	51	77,8	102	42,9	90	45	25	30	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 110 G 1 1/2	160	100	2.1/2"	G 1.1/2" -11	38	88,9	114	50,8	105	50	25	30	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 110 G 2	160	100	2.1/2"	G 2" -11	51	88,9	114	50,8	105	50	25	30	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 110 G 2 1/2	160	100	2.1/2"	G 2.1/2" -11	63	88,9	114	50,8	105	50	25	30	13,5	M 12 x 45	1/2" x 1.3/4"
AFS 112 G 2 1/2	138	100	3"	G 2.1/2" -11	63	106,4	134	61,9	124	50	27	30	17,5	M 16 x 50	5/8" x 2"
AFS 112 G 3	138	100	3"	G 3" -11	73	106,4	134	61,9	124	50	27	34	17,5	M 16 x 50	5/8" x 2"
AFS 114 G 3	35	35	3.1/2"	G 3" -11	73	120,7	152	69,9	136	48	27	34	17,5	M 16 x 50	5/8" x 2"
AFS 114 G 3 1/2	35	35	3.1/2"	G 3.1/2" -11	89	120,7	152	69,9	136	48	27	34	17,5	M 16 x 50	5/8" x 2"
AFS 116 G 3 1/2	35	35	4"	G 3.1/2" -11	89	130,2	162	77,8	146	48	27	34	17,5	M 16 x 50	5/8" x 2"
AFS 116 G 4	35	35	4"	G 4" -11	99	130,2	162	77,8	146	48	27	34	17,5	M 16 x 50	5/8" x 2"

PN = Nominal pressure PB = Max. operating pressure

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).Recommended screws are listed in the columns M (metr) and M (unc).

AFS G (6000 PSI) SAE screw-in flange, BSP



Pressure series: 6000 psi
Construction: straight
Mounting: Screw bore hole
Material: Steel ST 52.3 (FE 510)

Standard: SAE J 518 C
ISO 6162
Design: SAE screw-in flange
Included in scope of supply: flange only
Surface protection: black oiled

Product versions: AFS G M (6000 PSI), with metric screw set and O-ring
AFS G U (6000 PSI), with UNC screw set and O-ring

Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A	Ø B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M metr.	M unc
AFS 401 G 1/2	400	350	1/2"	G 1/2" -14	13	40,5	54	18,2	46	36	16	19	9	M 8 x 30	5/16" x 1.1/4"
AFS 401 G 3/8	400	350	1/2"	G 3/8" -19	13	40,5	54	18,2	46	36	16	19	9	M 8 x 30	5/16" x 1.1/4"
AFS 402 G 1/2	400	350	3/4"	G 1/2" -14	13	50,8	71	23,8	55	35	21	22	11	M 10 x 35	3/8" x 1.1/2"
AFS 402 G 3/4	400	350	3/4"	G 3/4" -14	19	50,8	71	23,8	55	35	21	22	11	M 10 x 35	3/8" x 1.1/2"
AFS 403 G 3/4	400	350	1"	G 3/4" -14	19	57,2	81	27,8	65	42	25	24	13	M 12 x 45	7/16" x 1.3/4"
AFS 403 G 1	400	350	1"	G 1" -11	25	57,2	81	27,8	65	42	25	24	13	M 12 x 45	7/16" x 1.3/4"
AFS 404 G 1	400	350	1.1/4"	G 1" -11	25	66,7	95	31,8	78	45	27	25	*1	M 14 x 45	1/2" x 1.3/4"
AFS 404 G 1 1/4	400	350	1.1/4"	G 1.1/4" -11	32	66,7	95	31,8	78	45	27	25	*1	M 14 x 45	1/2" x 1.3/4"
AFS 405 G 1 1/4	400	350	1.1/2"	G 1.1/4" -11	32	79,4	112	36,5	94	50	30	28	17	M 16 x 50	5/8" x 2"

PN = Nominal pressure PB = Max. operating pressure

*1) = 15.0 for metric screws; 13.5 for UNC screws

AFS G (6000 PSI) (Continuation) SAE screw-in flange, BSP

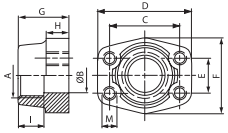
Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A	Ø B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M metr.	M unc
AFS 405 G 1 1/2	400	350	1.1/2"	G 1.1/2" -11	38	79,4	112	36,5	94	50	30	28	17	M 16 x 50	5/8" x 2"
AFS 406 G 1 1/2	400	350	2"	G 1.1/2" -11	38	96,8	134	44,5	114	65	37	30	21	M 20 x 65	3/4" x 2.1/2"
AFS 406 G 2	400	350	2"	G 2" -11	51	96,8	134	44,5	114	65	37	30	21	M 20 x 65	3/4" x 2.1/2"

PN = Nominal pressure PB = Max. operating pressure

*1) = 15.0 for metric screws; 13.5 for UNC screws

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).Recommended screws are listed in the columns M (metr) and M (unc).

GFS G M (3000 / 6000 PSI) SAE screw-in counter flange, BSP



Standard: SAE J 518 C
ISO 6162
Design: SAE screw-in counter flange
Included in scope of supply: flange only
Surface protection: black oiled
Product versions: GFS G U (3000 / 6000 PSI), flange only

Construction: straight
Mounting: Inner thread for metric screws
Material: Steel ST 52.3

Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A	Ø B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	M metr.
GFS 80 G	3000 PSI	350	350	1/2"	G 1/2" -14	13	38,1	54	17,5	46	36	16	19	M 8
GFS 80 G 3/8	3000 PSI	350	350	1/2"	G 3/8" -19	13	38,1	54	17,5	46	36	16	19	M 8
GFS 100 G	3000 PSI	350	350	3/4"	G 3/4" -14	19	47,6	65	22,2	50	36	18	19	M 10
GFS 100 G 1/2	3000 PSI	350	350	3/4"	G 1/2" -14	13	47,6	65	22,2	50	36	18	19	M 10
GFS 102 G	3000 PSI	315	250	1"	G 1" -11	25	52,4	70	26,2	55	38	18	22	M 10
GFS 102 G 3/4	3000 PSI	315	250	1"	G 3/4" -14	19	52,4	70	26,2	55	35	21	19	M 10
GFS 104 G	3000 PSI	250	200	1.1/4"	G 1.1/4" -11	32	58,7	79	30,2	68	41	21	22	M 10
GFS 104 G 1	3000 PSI	250	200	1.1/4"	G 1" -11	25	58,7	81	30,2	65	42	25	22	M 10
GFS 106 G	3000 PSI	200	200	1.1/2"	G 1.1/2" -11	38	69,9	93	35,7	78	45	25	24	M 12
GFS 106 G 1 1/4	3000 PSI	200	200	1.1/2"	G 1.1/4" -11	32	69,9	95	35,7	78	45	27	24	M 12
GFS 108 G	3000 PSI	200	160	2"	G 2" -11	51	77,8	102	42,9	90	45	25	30	M 12
GFS 108 G 1 1/2	3000 PSI	200	160	2"	G 1.1/2" -11	38	77,8	102	42,9	90	45	25	26	M 12
GFS 110 G	3000 PSI	160	100	2.1/2"	G 2.1/2" -11	63	88,9	114	50,8	105	50	25	30	M 12
GFS 110 G 2	3000 PSI	160	100	2.1/2"	G 2" -11	51	88,9	114	50,8	105	50	25	30	M 12
GFS 112 G	3000 PSI	138	100	3"	G 3" -11	73	106,4	134	61,9	124	50	27	34	M 16
GFS 112 G 2 1/2	3000 PSI	138	100	3"	G 2.1/2" -11	63	106,4	134	61,9	124	50	27	30	M 16
GFS 114 G	3000 PSI	35	35	3.1/2"	G 3.1/2" -11	89	120,7	152	69,9	136	48	27	34	M 16
GFS 114 G 3	3000 PSI	35	35	3.1/2"	G 3" -11	73	120,7	152	69,9	136	48	27	34	M 16
GFS 116 G	3000 PSI	35	35	4"	G 3" -11	99	130,2	162	77,8	146	48	27	34	M 16
GFS 116 G 3 1/2	3000 PSI	35	35	4"	G 3.1/2" -11	89	130,2	162	77,8	146	48	27	34	M 16
GFS 401 G	6000 PSI	400	350	1/2"	G 1/2" -14	13	40,5	54	18,2	46	36	16	19	M 8
GFS 401 G 3/8	6000 PSI	400	350	1/2"	G 3/8" -19	13	40,5	54	18,2	46	36	16	19	M 8
GFS 402 G	6000 PSI	400	350	3/4"	G 3/4" -14	19	50,8	71	23,8	55	35	21	22	M 10
GFS 402 G 1/2	6000 PSI	400	350	3/4"	G 1/2" -14	13	50,8	71	23,8	55	35	21	22	M 10
GFS 403 G	6000 PSI	400	350	1"	G 1" -11	25	57,2	81	27,8	65	42	25	24	M 12
GFS 403 G 3/4	6000 PSI	400	350	1"	G 3/4" -14	19	57,2	81	27,8	65	42	25	24	M 12
GFS 404 G	6000 PSI	400	350	1.1/4"	G 1.1/4" -11	32	66,7	95	31,8	78	45	27	25	M 14

PN = Nominal pressure PB = Max. operating pressure

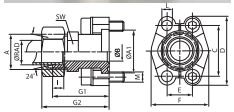
GFS G M (3000 / 6000 PSI) (Continuation) SAE screw-in counter flange, BSP

Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A	Ø B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	M metr.
GFS 404 G 1	6000 PSI	400	350	1.1/4"	G 1" -11	25	66,7	95	31,8	78	45	27	25	M 14
GFS 405 G	6000 PSI	400	350	1.1/2"	G 1.1/2" -11	38	79,4	112	36,5	94	50	30	28	M 16
GFS 405 G 1 1/4	6000 PSI	400	350	1.1/2"	G 1.1/4" -11	32	79,4	112	36,5	94	50	30	28	M 16
GFS 406 G	6000 PSI	400	350	2"	G 2" -11	51	96,8	134	44,5	114	65	37	30	M 20
GFS 406 G 1 1/2	6000 PSI	400	350	2"	G 1.1/2" -11	38	96,8	134	44,5	114	65	37	30	M 20

PN = Nominal pressure PB = Max. operating pressure

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).

SFCE (3000 / 6000 PSI) SAE external thread flange



Standard: DIN 3901/3902
Design: SAE external thread flange
Material: Steel 9SMnPb28K / C15
Construction: straight
Included in scope of supply: connecting piece only
Surface protection: electro galvanised
Product versions: SFCE M (3000 / 6000 PSI), with 2 flange halves, screw set, O-ring, nut and cutting ring
SFCE U (3000 / 6000 PSI), with 2 flange halves, screw set, O-ring, nut and cutting ring

Identification	Pressure series	Series	Ø pipe external diameter mm	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A	A1 mm	Ø B mm	C mm	D mm	E mm	F mm	G1 mm	G2 mm	I mm
SFCE 3001 L 15	3000 PSI	L	15	315	315	1/2"	M 22 x 1.5	30,2	16/20	38,1	54	17,5	45,6	48,2	56	7,0
SFCE 3002 L 18	3000 PSI	L	18	315	315	3/4"	M 26 x 1.5	38,1	15/20	47,6	65	22,2	51,8	53,2	62	7,5
SFCE 3002 L 22	3000 PSI	L	22	160	160	3/4"	M 30 x 2	38,1	19	47,6	65	22,2	51,8	53,2	62	7,5
SFCE 3002 L 28	3000 PSI	L	28	160	160	3/4"	M 36 x 2	38,1	19	47,6	65	22,2	51,8	53,2	62	7,5
SFCE 3003 L 28	3000 PSI	L	28	160	160	1"	M 36 x 2	44,4	24	52,4	70	26,2	58,4	54,2	65	7,5
SFCE 3004 L 28	3000 PSI	L	28	160	160	1.1/4"	M 36 x 2	50,8	22	58,7	79	30,2	72,6	58,6	67	7,5
SFCE 3004 L 35	3000 PSI	L	35	160	160	1.1/4"	M 45 x 2	50,8	30/32	58,7	79	30,2	72,6	58,2	69	10,5
SFCE 3005 L 42	3000 PSI	L	42	160	160	1.1/2"	M 52 x 2	60,3	36	69,9	94	35,7	82,2	64,2	76	11,0
SFCE 3001 S 16	3000 PSI	S	16	350	350	1/2"	M 24 x 1.5	30,2	13	38,1	54	17,5	45,6	50,2	60	8,5
SFCE 3002 S 20	3000 PSI	S	20	350	350	3/4"	M 30 x 2	38,1	16/20	47,6	65	22,2	51,8	57,2	68	10,5
SFCE 3002 S 25	3000 PSI	S	25	350	350	3/4"	M 36 x 2	38,1	17	47,6	65	22,2	51,8	57,2	69	12,0
SFCE 3003 S 25	3000 PSI	S	25	315	250	1"	M 36 x 2	44,4	20	52,4	70	26,2	58,4	58,2	70	12,0
SFCE 3003 S 30	3000 PSI	S	30	315	250	1"	M 42 x 2	44,4	24	52,4	70	26,2	58,4	63,2	76	13,5
SFCE 3004 S 25	3000 PSI	S	25	250	200	1.1/4"	M 36 x 2	50,8	20/27	58,7	79	30,2	72,6	60,2	72	12,0
SFCE 3004 S 30	3000 PSI	S	30	250	200	1.1/4"	M 42 x 2	50,8	25/28	58,7	79	30,2	72,6	62,2	75	13,5
SFCE 3004 S 38	3000 PSI	S	38	250	200	1.1/4"	M 52 x 2	50,8	28	58,7	79	30,2	72,6	66,6	81	16,0
SFCE 3005 S 38	3000 PSI	S	38	200	200	1.1/2"	M 52 x 2	60,3	32	69,9	94	35,7	82,2	70,2	85	16,0
SFCE 6001 S 16	6000 PSI	S	16	400	350	1/2"	M 24 x 1.5	31,7	12	40,5	56	18,2	47,2	53,2	63	8,5
SFCE 6002 S 16	6000 PSI	S	16	400	350	3/4"	M 24 x 1.5	41,3	12	50,8	71	23,8	60,0	59,2	69	8,5
SFCE 6002 S 20	6000 PSI	S	20	400	350	3/4"	M 30 x 2	41,3	16	50,8	71	23,8	60,0	61,2	72	10,5
SFCE 6002 S 25	6000 PSI	S	25	400	350	3/4"	M 36 x 2	41,3	17	50,8	71	23,8	60,0	63,2	75	12,0
SFCE 6002 S 30	6000 PSI	S	30	400	350	3/4"	M 42 x 2	41,3	18	50,8	71	23,8	60,0	64,0	77	13,5
SFCE 6003 S 25	6000 PSI	S	25	400	350	1"	M 36 x 2	47,6	20	57,2	81	27,8	69,6	72,2	84	12,0
SFCE 6003 S 30	6000 PSI	S	30	400	350	1"	M 42 x 2	47,6	24	57,2	81	27,8	69,6	74,0	87	13,5
SFCE 6004 S 30	6000 PSI	S	30	400	350	1.1/4"	M 42 x 2	54,0	25/30	66,7	95	31,8	77,2	79,2	92	13,5

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø RAD = External pipe diameter

*1) = Choice of 10.5, 12.0 or 12.5

SFCE (3000 / 6000 PSI) (Continuation) SAE external thread flange

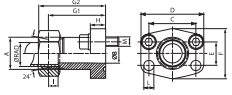
Identification	Pressure series	Series	Ø pipe external diameter mm	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A	A1 mm	Ø B mm	C mm	D mm	E mm	F mm	G1 mm	G2 mm	I mm
SFCE 6004 S 38	6000 PSI	S	38	350	350	1.1/4"	M 52 x 2	54,0	30	66,7	95	31,8	77,2	83,2	98	16,0
SFCE 6005 S 38	6000 PSI	S	38	350	350	1.1/2"	M 52 x 2	63,5	30	79,4	113	36,5	95,0	89,2	104	16,0

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø RAD = External pipe diameter

*1) = Choice of 10.5, 12.0 or 12.5

In accordance with SAE J 518 C, the specified nominal pressure is defined by the flange or based on the pipe to be welded on.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).Recommended screws are listed in the columns M (metr) and M (unc).

AFG M (3000 / 6000 PSI) SAE external thread flange



Standard: DIN 3901/3902
Design: SAE external thread flange
Included in scope of supply: flange only
Surface protection: black oiled
Product versions: AFG M M (3000 / 6000 PSI), with metric screw set and O-ring
AFG M U (3000 / 6000 PSI), with UNC screw set and O-ring

Construction: straight
Mounting: Screw bore hole
Material: Steel ST 52.3

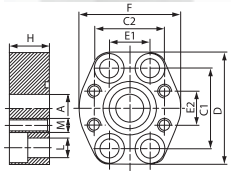
Identification	Pressure series	Series	Ø pipe external diameter mm	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A	Ø B mm	C mm	D mm	E mm	F mm	G1 mm	G2 mm	H mm	I mm
AFG 80 M/L 15	3000 PSI	L	15	315	315	1/2"	M 22 x 1.5	12	38,1	54	17,5	46	52	60	13	7,0
AFG 100 M/L 22	3000 PSI	L	22	160	160	3/4"	M 30 x 2	19	47,6	65	22,2	50	60	69	14	7,5
AFG 100 M/S 20	3000 PSI	S	20	345	345	3/4"	M 30 x 2	16	47,6	65	22,2	50	60	73	14	10,5
AFG 102 M/L 22	3000 PSI	L	22	160	160	1"	M 30 x 2	19	52,4	70	26,2	55	63	72	16	7,5
AFG 102 M/L 28	3000 PSI	L	28	160	160	1"	M 36 x 2	24	52,4	70	26,2	55	63	72	16	7,5
AFG 102 M/S 20	3000 PSI	S	20	315	250	1"	M 30 x 2	16	52,4	70	26,2	55	63	76	16	10,5
AFG 102 M/S 25	3000 PSI	S	25	315	250	1"	M 36 x 2	20	52,4	70	26,2	55	63	75	16	12,0
AFG 104 M/L 28	3000 PSI	L	28	160	160	1.1/4"	M 36 x 2	24	58,7	79	30,2	68	65	74	14	7,5
AFG 104 M/L 35	3000 PSI	L	35	160	160	1.1/4"	M 45 x 2	29	58,7	79	30,2	68	65	76	14	10,5
AFG 104 M/S 30	3000 PSI	S	30	250	250	1.1/4"	M 42 x 2	25	58,7	79	30,2	68	65	78	14	13,5
AFG 106 M/L 42	3000 PSI	L	42	160	160	1.1/2"	M 52 x 2	36	69,9	94	35,7	78	70	82	16	11,0
AFG 106 M/S 38	3000 PSI	S	38	200	200	1.1/2"	M 52 x 2	32	69,9	94	35,7	78	70	85	16	16,0
AFG 401 M/S 16	6000 PSI	S	16	400	350	1/2"	M 24 x 1.5	12	40,5	56	18,2	48	60	70	16	8,5
AFG 402 M/S 25	6000 PSI	S	25	400	350	3/4"	M 36 x 2	19	50,8	71	23,8	60	73	85	19	12,0
AFG 403 M/S 30	6000 PSI	S	30	400	350	1"	M 42 x 2	25	57,2	81	27,8	70	82	95	24	13,5
AFG 404 M/S 30	6000 PSI	S	30	400	350	1.1/4"	M 42 x 2	25	66,7	95	31,8	78	92	106	27	13,5
AFG 404 M/S 38	6000 PSI	S	38	400	350	1.1/4"	M 52 x 2	29	66,7	95	31,8	78	92	107	27	16,0
AFG 405 M/S 38	6000 PSI	S	38	400	350	1.1/2"	M 52 x 2	32	79,4	113	36,5	95	96	111	30	16,0

PN = Nominal pressure PB = Max. operating pressure Ø = External pipe diameter Series: LL = Very light L = Light S = Heavy

*1) = 15.0 for metric screws; 13.5 for UNC screws

In accordance with SAE J 518 C, the specified nominal pressure is defined by the flange or based on the pipe to be welded on.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).Recommended screws are listed in the columns M (metr) and M (unc).

GAF (6000 PSI) SAE reduction



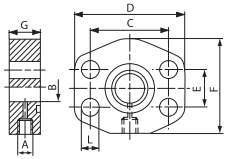
Pressure series: 6000 psi
Construction: straight
Included in scope of supply: flange only
Surface protection: black oiled

Standard: SAE J 518 C
ISO 6162
Design: SAE reduction
Material: Steel ST 52.3 (FE 510)

Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A mm	C1 mm	C2 mm	D mm	E1 mm	E2 mm	F mm	H mm	L mm	M metr.	Screws
GAF 602-602	400	350	3/4" x 3/4"	19	50,8	50,8	70	23,8	23,8	70	28	11	M 10	M 10 x 35
GAF 603-602	400	350	1" x 3/4"	19	57,2	50,8	80	27,8	23,8	70	30	13	M 10	M 12 x 40
GAF 603-603	400	350	1" x 1"	25	57,2	57,2	80	27,8	27,8	75	36	13	M 12	M 12 x 45
GAF 604-603	400	350	1.1/4" x 1"	23	68,7	57,2	100	31,8	27,8	83	25	15	M 12	M 14 x 40
GAF 604-604	400	350	1.1/4" x 1.1/4"	31	68,7	68,7	100	31,8	31,8	90	35	15	M 14	M 14 x 50
GAF 605-604	400	350	1.1/2" x 1.1/4"	32	79,4	68,7	113	36,5	31,8	95	48	17	M 14	M 16 x 55
GAF 605-605	400	350	1.1/2" x 1.1/2"	38	79,4	79,4	113	36,5	36,5	105	50	17	M 16	M 16 x 55

PN = Nominal pressure PB = Max. operating pressure
The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).Recommended screws are listed in the columns M (metr) and M (unc).

AGL (3000 PSI / 6000 PSI) SAE adapter flange with measuring connection



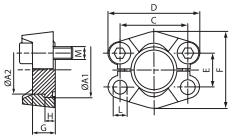
Standard: SAE J 518 C
ISO 6162
Design: SAE adapter flange with measuring connection
Material: Steel ST 52.3 (FE 510)

Construction: straight
Mounting: Screw bore hole
Surface protection: black oiled

Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A	G mm	Ø B mm	C mm	D mm	E mm	F mm	L mm
AGL 80	3000 PSI	350	350	1/2"	G 1/4" -19	24	12	38,1	55	17,5	38	9,0
AGL 100	3000 PSI	350	350	3/4"	G 1/4" -19	24	19	47,6	65	22,3	50	11,0
AGL 102	3000 PSI	315	250	1"	G 1/4" -19	24	24	52,4	70	26,2	50	11,0
AGL 104	3000 PSI	250	200	1.1/4"	G 1/4" -19	23	32	58,7	81	30,2	70	12,5
AGL 106	3000 PSI	200	200	1.1/2"	G 1/4" -19	24	38	69,9	95	35,7	78	13,5
AGL 108	3000 PSI	200	160	2"	G 1/4" -19	24	50	77,8	102	42,9	90	13,5
AGL 401	6000 PSI	400	350	1/2"	G 1/4" -19	24	12	40,5	55	18,2	38	9,0
AGL 402	6000 PSI	400	350	3/4"	G 1/4" -19	24	19	50,8	70	23,8	50	11,0
AGL 403	6000 PSI	400	350	1"	G 1/4" -19	23	24	57,2	81	27,8	70	13,0
AGL 404	6000 PSI	400	350	1.1/4"	G 1/4" -19	24	32	66,7	95	31,8	78	15,0
AGL 405	6000 PSI	400	350	1.1/2"	G 1/4" -19	24	38	79,4	112	36,5	94	17,0
AGL 406	6000 PSI	400	350	2"	G 1/4" -19	24	51	96,8	134	44,5	114	21,0

PN = Nominal pressure PB = Max. operating pressure
The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).

BL (3000 PSI) SAE blind plate



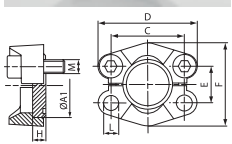
Pressure series: 3000 psi
Construction: straight
Included in scope of supply: blind plate only
Surface protection: electro galvanised

Standard: SAE J 518 C
ISO 6162
Design: SAE blind plate
Material: Steel 9SMnPb28K / C15

Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A1 mm	A2 mm	G mm	C mm	D mm	E mm	F mm	H mm	L mm	M metr.	M unc
BL 3001	350	350	1/2"	30,2	24,0	16	38,1	54	17,5	46	6,8	8,7	M 8 x 25	5/16" x 1.1/4"
BL 3002	350	350	3/4"	38,1	31,8	17	47,6	65	22,3	52	6,8	10,7	M 10 x 30	3/8" x 1.1/4"
BL 3003	315	250	1"	44,5	38,0	17	52,4	70	26,2	59	8,0	10,7	M 10 x 30	3/8" x 1.1/4"
BL 3004	250	200	1.1/4"	50,8	43,0	17	58,7	79	30,2	73	8,0	*1	*2	7/16" x 1.1/2"
BL 3005	200	200	1.1/2"	60,3	50,0	19	69,9	94	35,7	83	8,0	13,5	M 12 x 35	1/2" x 1.1/2"
BL 3006	200	160	2"	71,4	62,0	19	77,8	102	42,9	97	9,6	13,5	M 12 x 35	1/2" x 1.1/2"

PN = Nominal pressure PB = Max. operating pressure
*1) = Choice of 10.75 or 12.0 or 12.75
The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).Recommended screws are listed in the columns M (metr) and M (unc).

BL (6000 PSI) SAE blind plate



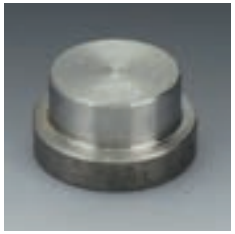
Pressure series: 6000 psi
Construction: straight
Included in scope of supply: blind plate only
Surface protection: electro galvanised

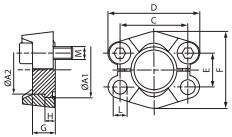
Standard: SAE J 518 C
ISO 6162
Design: SAE blind plate
Material: Steel 9SMnPb28K / C15

Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A1 mm	G mm	C mm	D mm	E mm	F mm	H mm	L mm	M metr.	M unc
BL 6001	250	250	1/2"	31,8	14	40,5	56	18,2	48	7,8	8,7	M 8 x 30	5/16" x 1.1/4"
BL 6002	250	250	3/4"	41,3	15	50,8	71	23,8	60	8,8	10,5	M 10 x 35	3/8" x 1.1/2"
BL 6003	250	250	1"	47,6	16	57,2	81	27,8	70	9,5	*1	M 12 x 45	7/16" x 1.3/4"
BL 6004	250	250	1.1/4"	54,0	16	66,6	95	31,8	78	10,4	*2	M 14 x 45	1/2" x 1.3/4"
BL 6005	250	250	1.1/2"	63,5	19	79,3	113	36,5	95	12,6	17,0	M 16 x 55	5/8" x 2"
BL 6006	250	250	2"	79,4	30	96,8	133	44,5	114	12,6	21,0	M 20 x 70	3/4" x 2.1/2"

PN = Nominal pressure PB = Max. operating pressure
*1) = Choice of 12.0 or 12.5
The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).Recommended screws are listed in the columns M (metr) and M (unc).

BS (6000 PSI) SAE blind plate





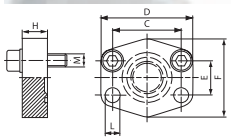
Pressure series: 6000 psi
Construction: straight
Included in scope of supply: blind plate only
Surface protection: electro galvanised

Standard: SAE J 518 C
ISO 6162
Design: SAE blind plate
Material: Steel 9SMnPb28K / C15

Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A1 mm	A2 mm	G mm	C mm	D mm	E mm	F mm	H mm	L mm
BS 6001	400	350	1/2"	31,8	24,0	14	40,5	56	18,2	48	7,8	8,7
BS 6002	400	350	3/4"	41,3	31,8	15	50,8	71	23,8	60	8,8	10,7
BS 6003	400	350	1"	47,6	38,0	16	57,2	81	27,8	70	9,5	*1
BS 6004	400	350	1.1/4"	54,0	44,0	16	66,6	95	31,8	78	10,3	*2
BS 6005	400	350	1.1/2"	63,5	50,8	19	79,3	113	36,5	95	12,6	17,0
BS 6006	400	350	2"	79,4	67,0	30	96,8	133	44,5	114	12,6	21,0

PN = Nominal pressure PB = Max. operating pressure
*1) = Choice of 12.0 or 12.5
The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).Recommended screws are listed in the columns M (metr) and M (unc).

AFC (3000 / 6000 PSI) SAE sealing flange



Standard: SAE J 518 C
ISO 6162
Design: SAE sealing flange
Included in scope of supply: flange only
Surface protection: black oiled
Product versions: AFC U (3000 / 6000 PSI), with UNC screw set and O-ring
AFC M (3000 / 6000 PSI), with metric screw set and O-ring

Construction: straight
Mounting: Screw bore hole
Material: Steel S355J2G3 (1.0570)

Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	C mm	D mm	E mm	F mm	H mm	L mm	M metr.	M unc
AFC 80	3000 PSI	350	350	1/2"	38,1	56	17,5	48	16	9,0	M 8 x 30	5/16" x 1.1/4"
AFC 100	3000 PSI	350	350	3/4"	47,6	65	22,2	50	16	11,0	M 10 x 35	3/8" x 1.1/2"
AFC 102	3000 PSI	315	250	1"	52,4	70	26,2	60	19	11,0	M 10 x 35	3/8" x 1.1/2"
AFC 104	3000 PSI	250	200	1.1/4"	58,7	79	30,2	68	18	11,5	M 10 x 40	7/16" x 1.1/2"
AFC 106	3000 PSI	200	200	1.1/2"	69,9	93	35,7	78	20	13,5	M 12 x 45	7/16" x 1.1/2"
AFC 108	3000 PSI	200	160	2"	77,8	102	42,9	90	20	13,5	M 12 x 45	7/16" x 1.1/2"
AFC 110	3000 PSI	160	100	2.1/2"	88,9	114	50,8	105	20	13,5	M 12 x 45	7/16" x 1.1/2"
AFC 112	3000 PSI	138	100	3"	106,4	134	61,9	124	24	17,5	M 16 x 50	5/8" x 2"
AFC 114	3000 PSI	35	35	3.1/2"	120,7	152	69,9	136	22	17,5	M 16 x 50	5/8" x 2"
AFC 116	3000 PSI	35	35	4"	130,2	162	77,8	146	25	17,5	M 16 x 50	5/8" x 2"
AFC 118	3000 PSI	35	35	5"	152,4	190	92,1	170	28	17,5	M 16 x 50	5/8" x 2"
AFC 401	6000 PSI	400	350	1/2"	40,5	56	18,2	48	16	9,0	M 8 x 30	5/16" x 1.1/4"
AFC 402	6000 PSI	400	350	3/4"	50,8	71	23,8	60	19	11,0	M 10 x 35	3/8" x 1.1/2"
AFC 403	6000 PSI	400	350	1"	57,2	81	27,8	70	24	13,0	M 12 x 45	7/16" x 1.1/2"
AFC 404	6000 PSI	400	350	1.1/4"	66,7	95	31,8	78	27	*1	M 14 x 45	1/2" x 1.3/4"

PN = Nominal pressure PB = Max. operating pressure
*1) = 15.0 for metric screws; 13.5 for UNC screws

AFC (3000 / 6000 PSI) (Continuation) SAE sealing flange

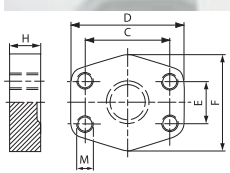
Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	C mm	D mm	E mm	F mm	H mm	L mm	M metr.	M unc
AFC 405	6000 PSI	400	350	1.1/2"	79,4	112	36,5	94	30	17,0	M 16 x 50	5/8" x 2"
AFC 406	6000 PSI	400	350	2"	96,8	134	44,5	114	28	21,0	M 20 x 65	3/4" x 2.1/2"

PN = Nominal pressure PB = Max. operating pressure

*1) = 15.0 for metric screws; 13.5 for UNC screws

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).Recommended screws are listed in the columns M (metr) and M (unc).

GFC (3000 / 6000 PSI) SAE sealing counter flange



Standard: SAE J 518 C
ISO 6162
Design: SAE sealing counter flange
Material: Steel ST 52.3 (FE 510)

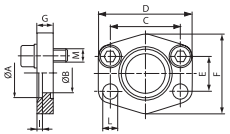
Construction: straight
Mounting: Inner thread for metric screws
Surface protection: black oiled

Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	C mm	D mm	E mm	F mm	H mm	M metr.
GFC 80	3000 PSI	350	350	1/2"	38,1	56	17,5	48	16	M 8
GFC 100	3000 PSI	350	350	3/4"	47,6	65	22,2	50	16	M 10
GFC 102	3000 PSI	315	250	1"	52,4	70	26,2	60	19	M 10
GFC 104	3000 PSI	250	200	1.1/4"	58,7	79	30,2	68	18	M 10
GFC 106	3000 PSI	200	200	1.1/2"	69,9	93	35,7	78	20	M 12
GFC 108	3000 PSI	200	160	2"	77,8	102	42,9	90	20	M 12
GFC 110	3000 PSI	160	100	2.1/2"	88,9	114	50,8	105	20	M 12
GFC 112	3000 PSI	138	100	3"	106,4	134	61,9	124	24	M 16
GFC 114	3000 PSI	35	35	3.1/2"	120,7	152	69,9	136	22	M 16
GFC 116	3000 PSI	35	35	4"	130,2	162	77,8	146	25	M 16
GFC 118	3000 PSI	35	35	5"	152,4	190	92,1	170	28	M 16
GFC 401	6000 PSI	400	350	1/2"	40,5	56	18,2	48	16	M 8
GFC 402	6000 PSI	400	350	3/4"	50,8	71	23,8	60	19	M 10
GFC 403	6000 PSI	400	350	1"	57,2	81	27,8	70	24	M 12
GFC 404	6000 PSI	400	350	1.1/4"	66,7	95	31,8	78	27	M 14
GFC 405	6000 PSI	400	350	1.1/2"	79,4	112	36,5	94	30	M 16
GFC 406	6000 PSI	400	350	2"	96,8	134	44,5	114	28	M 20

PN = Nominal pressure PB = Max. operating pressure

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).

AFC S (3000 PSI) SAE socket weld flange, ND 40



Pressure series: 3000 psi
Supplementary design information: ND 40
Design: SAE socket weld flange
Included in scope of supply: flange only
Surface protection: black oiled
Product versions: AFC S M (3000 PSI), with metric screw set and O-ring

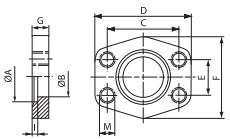
Standard: SAE J 518 C
ISO 6162
Construction: straight
Mounting: Screw bore hole
Material: Steel S355J2G3 (1.0570)

Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	Pipe	A mm	Ø B mm	C mm	D mm	E mm	F mm	G mm	I mm	L mm	M metr.
AFC 80 S	40	40	1/2"	22 x 2	22,5	15	38,1	56	17,5	46	10	3	9,0	M 8 x 25
AFC 100 S	40	40	3/4"	28 x 2	28,5	20	47,6	65	22,2	50	12	4	11,0	M 10 x 30
AFC 102 S	40	40	1"	35 x 2	35,5	29	52,4	70	26,2	55	12	4	11,0	M 10 x 30
AFC 104 S	40	40	1.1/4"	42 x 2	42,5	34	58,7	79	30,2	68	12	4	11,5	M 10 x 30
AFC 106 S	40	40	1.1/2"	48.3 x 3.25	49,0	42	69,9	93	35,7	78	15	4	13,5	M 12 x 35
AFC 108 S	40	40	2"	60.3 x 3.65	61,0	53	77,8	102	42,9	90	15	4	13,5	M 12 x 35
AFC 110 S	40	40	2.1/2"	76.1 x 3.65	77,0	64	88,9	114	50,8	105	15	4	13,5	M 12 x 35
AFC 112 S	40	40	3"	88.9 x 4.05	90,0	80	106,4	134	61,9	124	20	5	17,5	M 16 x 40
AFC 114 S	35	35	3.1/2"	101.6 x 4.5	103,0	93	120,7	152	69,9	136	20	5	17,5	M 16 x 40
AFC 116 S	35	35	4"	114.3 x 4.5	116,0	105	130,2	162	77,8	146	25	6	17,5	M 16 x 45
AFC 118 S	35	35	5"	139.7 x 4.85	141,0	126	152,4	190	92,1	170	28	8	17,5	M 16 x 45

PN = Nominal pressure PB = Max. operating pressure

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).Recommended screws are listed in the columns M (metr) and M (unc).

GFC S (3000 PSI) SAE socket weld counter flange, ND 40



Pressure series: 3000 psi
Supplementary design information: ND 40
Design: SAE socket weld counter flange
Material: Steel ST 52.3 (FE 510)

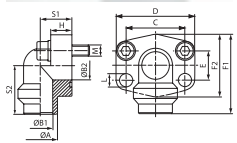
Standard: SAE J 518 C
ISO 6162
Construction: straight
Mounting: Inner thread for metric screws
Surface protection: black oiled

Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	Pipe	A mm	Ø B mm	C mm	D mm	E mm	F mm	G mm	I mm	M metr.
GFC 80 S	40	40	1/2"	22 x 2	22,5	15	38,1	56	17,5	46	10	3	M 8
GFC 100 S	40	40	3/4"	28 x 2	28,5	20	47,6	65	22,2	50	12	4	M 10
GFC 102 S	40	40	1"	35 x 2	35,5	29	52,4	70	26,2	55	12	4	M 10
GFC 104 S	40	40	1.1/4"	42 x 2	42,5	34	58,7	79	30,2	68	12	4	M 10
GFC 106 S	40	40	1.1/2"	48.3 x 3.25	42,0	42	69,9	93	35,7	78	15	4	M 12
GFC 108 S	40	40	2"	60.3 x 3.65	61,0	53	77,8	102	42,9	90	15	4	M 12
GFC 110 S	40	40	2.1/2"	76.1 x 3.65	77,0	64	88,9	114	50,8	105	15	4	M 12
GFC 112 S	40	40	3"	88.9 x 4.05	90,0	80	106,4	134	61,9	124	20	5	M 16
GFC 114 S	35	35	3.1/2"	101.6 x 4.5	103,0	93	120,7	152	69,9	136	20	5	M 16
GFC 116 S	35	35	4"	114.3 x 4.5	116,0	105	130,2	162	77,8	146	25	6	M 16
GFC 118 S	35	35	5"	139.7 x 4.85	141,0	126	152,4	190	92,1	170	28	8	M 16

PN = Nominal pressure PB = Max. operating pressure

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).

AFS 90 SRE (3000 / 6000 PSI) SAE welded on flange, angle 90°



Standard: SAE J 518 C
ISO 6162
Design: SAE welded on flange
Included in scope of supply: flange only
Surface protection: black oiled
Product versions: AFS 90 SRE M (3000 / 6000 PSI), with metric screw set and O-ring
AFS 90 SRE U (3000 / 6000 PSI), with UNC screw set and O-ring

Construction: Angle 90°
Mounting: Screw bore hole
Material: Steel ST 52.3 (FE 510)

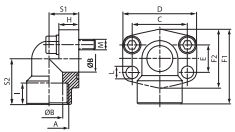
Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	Pipe	A mm	B1 mm	B2 mm	C mm	D mm	E mm	F1 mm	F2 mm	H mm	S1 mm	S2 mm
AFS 80/90 SRE 20	3000 PSI	250	250	1/2"	20 x 3	20	14	13	38,1	54,0	17,5	60	48	16,0	20	37
AFS 80/90 SRE 22	3000 PSI	160	160	1/2"	22 x 2	22	18	13	38,1	54,0	17,5	60	48	16,0	20	37
AFS 80/90 SRE 25	3000 PSI	250	250	1/2"	25 x 3	25	19	13	38,1	54,0	17,5	60	48	16,0	20	37
AFS 80/90 SRE 28	3000 PSI	160	160	1/2"	28 x 3	28	22	13	38,1	54,0	17,5	60	48	16,0	20	37
AFS 100/90 SRE 25	3000 PSI	250	250	3/4"	25 x 3	25	19	19	47,6	65,0	22,2	63	50	18,0	24	38
AFS 100/90 SRE 28	3000 PSI	160	160	3/4"	28 x 3	28	22	19	47,6	65,0	22,2	63	50	18,0	24	38
AFS 100/90 SRE 30	3000 PSI	250	250	3/4"	30 x 4	30	22	19	47,6	65,0	22,2	63	50	18,0	24	38
AFS 100/90 SRE 35	3000 PSI	160	160	3/4"	35 x 4	35	27	19	47,6	65,0	22,2	63	50	18,0	24	38
AFS 102/90 SRE 30	3000 PSI	250	250	1"	30 x 4	30	22	25	52,4	70,0	26,2	70	60	19,0	28	43
AFS 102/90 SRE 35	3000 PSI	160	160	1"	35 x 4	35	27	25	52,4	70,0	26,2	70	60	19,0	28	43
AFS 102/90 SRE 38	3000 PSI	250	250	1"	38 x 4	38	30	25	52,4	70,0	26,2	70	60	19,0	28	43
AFS 102/90 SRE 42	3000 PSI	160	160	1"	42 x 3	42	36	25	52,4	70,0	26,2	70	60	19,0	28	43
AFS 104/90 SRE 38	3000 PSI	250	200	1.1/4"	38 x 4	38	30	32	58,7	79,0	30,2	85	68	21,0	34	51
AFS 104/90 SRE 42	3000 PSI	160	160	1.1/4"	42 x 3	42	36	32	58,7	79,0	30,2	85	68	21,0	34	51
AFS 104/90 SRE 48	3000 PSI	160	160	1.1/4"	48.3 x 4.5	49	39	32	58,7	79,0	30,2	85	68	21,0	34	51
AFS 106/90 SRE 38	3000 PSI	210	200	1.1/2"	38 x 4	38	38	38	69,9	93,0	35,7	95	78	25,0	38	55
AFS 106/90 SRE 42	3000 PSI	160	160	1.1/2"	42 x 3	42	36	38	69,9	93,0	35,7	95	78	25,0	38	55
AFS 106/90 SRE 48	3000 PSI	160	160	1.1/2"	48.3 x 4.5	49	39	38	69,9	93,0	35,7	95	78	25,0	38	55
AFS 108/90 SRE 60	3000 PSI	200	160	2"	60.3 x 5.6	61	51	45	77,8	110,0	42,9	110	90	25,0	42	65
AFS 108/90 SRE 76	3000 PSI	200	160	2"	76.1 x 7.1	77	51	45	77,8	110,0	42,9	110	90	25,0	42	65
AFS 401/90 SRE 20	6000 PSI	315	315	1/2"	20 x 3	20	14	13	40,5	56,4	18,2	60	48	16,0	20	37
AFS 401/90 SRE 25	6000 PSI	315	315	1/2"	25 x 4	25	17	13	40,5	56,4	18,2	60	48	16,0	20	37
AFS 402/90 SRE 25	6000 PSI	315	315	3/4"	25 x 4	25	17	19	50,8	71,3	23,8	70	60	19,0	28	43
AFS 402/90 SRE 30	6000 PSI	315	315	3/4"	30 x 4	30	22	19	50,8	71,3	23,8	70	60	19,0	28	43
AFS 403/90 SRE 30	6000 PSI	315	315	1"	30 x 4	30	22	25	57,2	81,0	27,8	85	70	21,0	34	51
AFS 403/90 SRE 38	6000 PSI	315	315	1"	38 x 5	38	28	25	57,2	81,0	27,8	85	70	21,0	34	51
AFS 404/90 SRE 38	6000 PSI	315	315	1.1/4"	38 x 5	38	28	32	66,7	95,2	31,8	95	78	25,0	38	56
AFS 404/90 SRE 48	6000 PSI	315	315	1.1/4"	48.3 x 8	49	32	32	66,7	95,2	31,8	95	78	25,0	38	56
AFS 405/90 SRE 38	6000 PSI	315	315	1.1/2"	38 x 5	38	28	38	79,4	112,8	36,5	110	94	25,0	42	65
AFS 405/90 SRE 48	6000 PSI	315	315	1.1/2"	48.3 x 8	49	32	38	79,4	112,8	36,5	110	94	25,0	42	65
AFS 405/90 SRE 60	6000 PSI	315	315	1.1/2"	60.3 x 10	61	40	38	79,4	112,8	36,5	110	94	25,0	42	65
AFS 406/90 SRE 60	6000 PSI	315	315	2"	60.3 x 10	61	40	51	96,8	136,0	44,5	133	108	35,0	45	75
AFS 406/90 SRE 76	6000 PSI	315	315	2"	76.1 x 12.5	74	50	51	96,8	134,0	44,5	150	106	76,5	60	92

PN = Nominal pressure PB = Max. operating pressure

*1) = 14.5 for metric screws; 13.5 for UNC screws

The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.

AFS 90 G (3000 / 6000 PSI) SAE screw-in flange, BSP, angle 90



Standard: SAE J 518 C
ISO 6162
Design: SAE screw-in flange
Included in scope of supply: flange only
Surface protection: black oiled
Product versions: AFS 90 G M (3000 / 6000 PSI), with metric screw set and O-ring
AFS 90 G U (3000 / 6000 PSI), with UNC screw set and O-ring

Construction: Angle 90°
Mounting: Screw bore hole
Material: Steel ST 52.3 (FE 510)

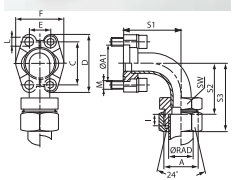
Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A	Ø B mm	C mm	D mm	E mm	F1 mm	F2 mm	H mm	I mm	S1 mm	S2 mm	L mm
AFS 80/90 G	3000 PSI	350	350	1/2"	G 1/2" -14	13	38,1	54	17,5	60	48	16	19	20	37	9,0
AFS 80/90 G 038	3000 PSI	350	350	1/2"	G 3/8" -19	13	38,1	54	17,5	60	48	16	19	20	37	9,0
AFS 100/90 G	3000 PSI	350	350	3/4"	G 3/4" -14	19	47,6	65	22,2	63	52	18	19	24	38	11,0
AFS 102/90 G	3000 PSI	315	250	1"	G 1" -11	25	52,4	70	26,2	70	60	19	20	28	43	11,0
AFS 104/90 G	3000 PSI	250	200	1.1/4"	G 1.1/4" -11	32	58,7	79	30,2	85	73	21	22	34	51	11,5
AFS 106/90 G	3000 PSI	200	200	1.1/2"	G 1.1/2" -11	38	69,9	93	35,7	95	83	25	25	38	56	13,5
AFS 108/90 G	3000 PSI	200	160	2"	G 2" -11	51	77,8	110	42,9	110	94	25	28	42	65	13,5
AFS 401/90 G 012	6000 PSI	400	350	1/2"	G 1/2" -14	13	40,5	54	18,2	60	46	16	19	20	37	9,0
AFS 401/90 G 038	6000 PSI	400	350	1/2"	G 3/8" -19	13	40,5	54	18,2	60	46	16	19	20	37	9,0
AFS 402/90 G	6000 PSI	400	350	3/4"	G 3/4" -14	19	50,8	70	23,8	70	56	19	20	28	43	11,0
AFS 403/90 G	6000 PSI	400	350	1"	G 1" -11	25	57,2	79	27,8	85	72	21	22	34	51	13,0
AFS 404/90 G	6000 PSI	400	350	1.1/4"	G 1.1/4" -11	32	66,7	93	31,8	95	75	25	25	38	56	*1
AFS 405/90 G	6000 PSI	400	350	1.1/2"	G 1.1/2" -11	38	79,4	110	36,5	110	94	25	28	42	65	17,0
AFS 406/90 G	6000 PSI	400	350	2"	G 2" -11	51	96,8	134	44,5	132	107	35	33	45	75	21,0

PN = Nominal pressure PB = Max. operating pressure

*1) = 15.0 for metric screws; 13.5 for UNC screws

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).Recommended screws are listed in the columns M (metr) and M (unc).

SFCE 90 (3000 / 6000 PSI) SAE flange adapter, soldered



Standard: DIN 3901/3902
Construction: Angle 90°
Included in scope of supply: connecting piece only
Surface protection: electro galvanised
Product versions: SFCE 90 M (3000 / 6000 PSI), with 2 flange halves, screw set and O-ring
SFCE 90 U (3000 / 6000 PSI), with 2 flange halves, screw set and O-ring

Supplementary design information: soldered
Design: SAE flange adapter
Material: Steel 9SMnPb28K / ST 37

Identification	Pressure series	Series	Ø pipe external diameter mm	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A	A1 mm	C mm	D mm	E mm	F mm	I mm	S1 mm	S2 mm	S3 mm
SFCE 3001-90 L 15	3000 PSI	L	15	315	315	1/2"	M 22 x 1.5	30,2	38,1	54	17,5	45,6	7,0	40	43,0	58
SFCE 3001-90 S 16	3000 PSI	L	16	350	350	1/2"	M 24 x 1.5	30,2	38,1	54	17,5	45,6	7,5	40	42,5	60
SFCE 3002-90 L 22	3000 PSI	L	22	160	160	3/4"	M 30 x 2	38,1	47,6	65	22,2	51,8	7,5	59	63,5	80
SFCE 3003-90 L 28	3000 PSI	L	28	160	160	1"	M 36 x 2	44,4	52,4	70	26,2	58,4	7,5	68	75,5	80
SFCE 3003-90 S 25	3000 PSI	L	25	315	250	1"	M 36 x 2	44,4	52,4	70	26,2	58,4	12,0	68	71,0	95
SFCE 3003-90 S 30	3000 PSI	L	30	315	250	1"	M 42 x 2	44,4	52,4	70	26,2	58,4	13,5	68	69,5	96
SFCE 3004-90 L 35	3000 PSI	L	35	160	160	1.1/4"	M 45 x 2	50,8	58,7	79	30,2	72,6	10,5	86	94,5	116
SFCE 3005-90 L 42	3000 PSI	L	42	160	160	1.1/2"	M 52 x 2	60,3	69,9	94	35,7	82,6	11,0	98	104,0	127

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø RAD = External pipe diameter

*1) = Choice of 10.5, 12.0 or 12.5

SFCE 90 (3000 / 6000 PSI) (Continuation) SAE flange adapter, soldered

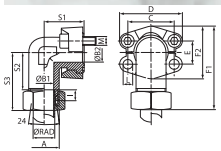
Identification	Pressure series	Series	Ø pipe external diameter	Pressure (PB) 10.9	Pressure (PB) 8.8	Size	A	A1	C	D	E	F	I	S1	S2	S3
			mm	bar	bar			mm	mm	mm	mm	mm	mm	mm	mm	mm
SFCE 3005-90 S 38	3000 PSI	L	38	210	200	1.1/2"	M 52 x 2	60,3	69,9	94	35,7	82,6	16,0	98	99,0	130
SFCE 6002-90 S 25	6000 PSI	S	25	400	350	3/4"	M 36 x 2	41,3	50,8	71	23,8	60,0	12,0	62	59,0	83
SFCE 6002-90 S 30	6000 PSI	S	30	400	350	3/4"	M 42 x 2	41,3	50,8	71	23,8	60,0	13,5	62	57,5	84
SFCE 6003-90 S 25	6000 PSI	S	25	400	350	1"	M 36 x 2	47,6	57,2	81	27,8	69,6	12,0	74	73,0	97
SFCE 6003-90 S 30	6000 PSI	S	30	400	350	1"	M 42 x 2	47,6	57,2	81	27,8	69,6	13,5	74	71,5	98
SFCE 6004-90 S 38	6000 PSI	S	38	315	315	1.1/4"	M 52 x 2	54,0	66,7	95	31,8	77,2	16,0	96	91,0	122
SFCE 6005-90 S 38	6000 PSI	S	38	315	315	1.1/2"	M 52 x 2	63,5	79,4	113	36,5	95,0	16,0	111	91,0	122

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø RAD = External pipe diameter

*1) = Choice of 10.5, 12.0 or 12.5

The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.Recommended screws are listed in the columns M (metr) and M (unc).

WFG (3000 / 6000 PSI) SAE flange adapter, forged



Standard: DIN 3901/3902
Construction: Angle 90°
Included in scope of supply: flange only
Surface protection: electro galvanised
Product versions: WFG M (3000 / 6000 PSI), with 2 flange halves, screw set and O-ring

Supplementary design information: forged
Design: SAE flange adapter
Material: Steel ST 52.3 (FE 510)

Identification	Pressure series	Series	Ø pipe external diameter	Pressure (PB) 10.9	Pressure (PB) 8.8	Size	A	B1	B2	C	D	E	F1	F2	I	S1
			mm	bar	bar			mm	mm	mm	mm	mm	mm	mm	mm	mm
WFG 3001/L 15	3000 PSI	L	15	315	315	1/2"	M 22 x 1.5	12	11	38,1	54,0	17,5	66,8	45,6	7,0	39
WFG 3002/L 18	3000 PSI	L	18	315	315	3/4"	M 26 x 1.5	15	19	47,6	64,9	22,2	73,9	51,8	7,5	42
WFG 3002/L 22	3000 PSI	L	22	160	160	3/4"	M 30 x 2	19	19	47,6	64,9	22,2	75,9	51,8	7,5	42
WFG 3003/L 28	3000 PSI	L	28	160	160	1"	M 36 x 2	24	25	52,4	69,9	26,2	82,2	58,4	7,5	45
WFG 3004/L 35	3000 PSI	L	35	160	160	1.1/4"	M 45 x 2	30	27	58,7	79,4	30,2	104,3	72,6	10,5	50
WFG 3005/L 42	3000 PSI	L	42	160	160	1.1/2"	M 52 x 2	36	36	69,9	93,8	35,7	118,2	82,4	11,0	55
WFG 3001/S 16	3000 PSI	S	16	350	350	1/2"	M 24 x 1.5	12	11	38,1	54,0	17,5	70,8	45,6	8,5	39
WFG 3002/S 20	3000 PSI	S	20	350	350	3/4"	M 30 x 2	16	19	47,6	64,9	22,2	79,9	51,8	10,5	42
WFG 3002/S 25	3000 PSI	S	25	350	350	3/4"	M 36 x 2	17	19	47,6	64,9	22,2	82,9	51,8	12,0	42
WFG 3003/S 25	3000 PSI	S	25	315	250	1"	M 36 x 2	20	25	52,4	69,9	26,2	91,2	58,4	12,0	45
WFG 3003/S 30	3000 PSI	S	30	315	250	1"	M 42 x 2	24	25	52,4	69,9	26,2	92,2	58,4	13,5	45
WFG 3004/S 25	3000 PSI	S	25	250	200	1.1/4"	M 36 x 2	20	27	58,7	79,4	30,2	103,3	72,6	12,0	50
WFG 3004/S 30	3000 PSI	S	30	250	200	1.1/4"	M 42 x 2	25	27	58,7	79,4	30,2	106,3	72,6	13,5	50
WFG 3004/S 38	3000 PSI	S	38	250	200	1.1/4"	M 52 x 2	28	27	58,7	79,4	30,2	110,3	72,6	16,0	50
WFG 3005/S 38	3000 PSI	S	38	200	200	1.1/2"	M 52 x 2	32	36	69,9	93,8	35,7	128,2	82,4	16,0	55
WFG 6001/S 16	6000 PSI	S	16	400	350	1/2"	M 24 x 1.5	12	12	40,5	56,4	18,2	71,6	47,2	8,5	39
WFG 6002/S 16	6000 PSI	S	16	400	350	3/4"	M 24 x 1.5	12	17	50,8	71,3	23,8	85,0	60,0	8,5	48
WFG 6002/S 20	6000 PSI	S	20	400	350	3/4"	M 30 x 2	16	17	50,8	71,3	23,8	87,0	60,0	10,5	48
WFG 6002/S 25	6000 PSI	S	25	400	350	3/4"	M 36 x 2	17	17	50,8	71,3	23,8	90,0	60,0	12,0	48
WFG 6003/S 25	6000 PSI	S	25	400	350	1"	M 36 x 2	20	24	57,2	81,0	27,8	99,8	69,0	12,0	60
WFG 6003/S 30	6000 PSI	S	30	400	350	1"	M 42 x 2	24	24	57,2	81,0	27,8	102,9	69,0	13,5	60
WFG 6004/S 30	6000 PSI	S	30	400	350	1.1/4"	M 42 x 2	25	31	66,7	95,2	31,8	109,6	77,2	13,5	68

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø RAD = External pipe diameter

*1) = Choice of 10.5 or 12.5

WFG (3000 / 6000 PSI) (Continuation) SAE flange adapter, forged

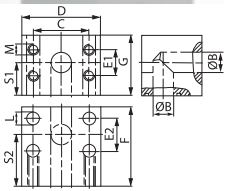
Identification	Pressure series	Series	Ø pipe external diameter mm	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	A	B1 mm	B2 mm	C mm	D mm	E mm	F1 mm	F2 mm	I mm	S1 mm
WFG 6004/S 38	6000 PSI	S	38	350	350	1.1/4"	M 52 x 2	28	31	66,7	95,2	31,8	114,6	77,2	16,0	68
WFG 6005/S 38	6000 PSI	S	38	350	350	1.1/2"	M 52 x 2	30	36	79,4	112,8	36,5	134,5	95,0	16,0	76

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø RAD = External pipe diameter

*1) = Choice of 10.5 or 12.5

The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).Recommended screws are listed in the columns M (metr) and M (unc).The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.

GD (3000 / 6000 PSI) SAE block flange, angle 90°



Standard: SAE J 518 C
ISO 6162
Design: SAE block flange
Material: Steel ST 52.3

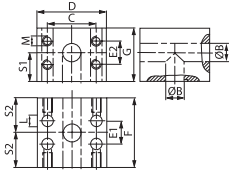
Construction: Angle 90°
Mounting: Inner thread for metric screws
Surface protection: black oiled

Identification	Pressure series	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	Ø B mm	C mm	D mm	E1 mm	E2 mm	F mm	G mm	L mm	S1 mm	S2 mm	M metr.
GD 304	3000 PSI	250	200	1.1/4"	32	58,7	82	30,2	30,2	82	80	13,0	39	38	M 10
GD 305	3000 PSI	200	200	1.1/2"	38	69,9	98	35,7	35,7	92	92	13,5	51	59	M 12
GD 306	3000 PSI	200	160	2"	46	77,8	102	42,9	42,9	85	87	14,0	51	48	M 12
GD 602	6000 PSI	400	350	3/4"	19	50,8	72	23,8	23,8	60	55	11,0	32	36	M 10
GD 603	6000 PSI	400	350	1"	23	57,2	82	27,8	27,8	68	64	14,0	37	40	M 12
GD 604	6000 PSI	400	350	1.1/4"	30	66,7	96	31,8	31,8	76	72	16,0	41	46	M 14
GD 605	6000 PSI	400	350	1.1/2"	38	79,4	114	36,5	36,5	86	89	18,0	50	52	M 16
GD 606	6000 PSI	400	350	2"	50	96,8	133	44,5	44,5	110	105	21,0	59	70	M 20

PN = Nominal pressure PB = Max. operating pressure

The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.

T-GD — SAE block flange, T shaped



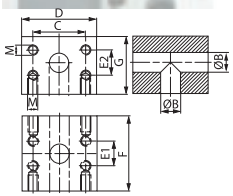
Pressure series: 6000 psi
Construction: T shaped
Mounting: Inner thread for metric screws
Surface protection: electro galvanised

Standard: SAE J 518 C
ISO 6162
Design: SAE block flange
Material: Steel ST 52.3 (FE 510)

Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	Ø B mm	C mm	D mm	E1 mm	E2 mm	F mm	G mm	S1 mm	S2 mm	L mm	M metr.
T GD 602-602	400	350	3/4"	19	50,8	72	23,8	23,8	72	55	32	36	11	M 10
T GD 603-603	400	350	1"	23	57,2	82	27,8	27,8	80	64	37	40	14	M 12
T GD 604-604	400	350	1.1/4"	30	66,7	100	31,8	31,8	92	72	41	46	16	M 14
T GD 605-605	400	350	1.1/2"	38	79,4	114	36,5	36,5	104	89	50	52	18	M 16
T GD 606-606	400	350	2"	50	96,8	133	44,5	44,5	140	105	59	70	22	M 20

PN = Nominal pressure PB = Max. operating pressure
The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).

T BL — SAE block flange, T shaped



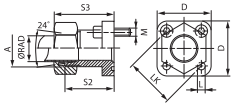
Pressure series: 6000 psi
Construction: T shaped
Mounting: Inner thread for metric screws

Standard: SAE J 518 C
ISO 6162
Design: SAE block flange
Material: Steel ST 52.3 (FE 510)

Identification	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	Size	Ø B mm	C mm	D mm	E1 mm	E2 mm	F mm	G mm	M metr.
T BL 602-602	400	350	3/4"	19	50,8	72	23,8	23,8	72	55	M 10
T BL 603-603	400	350	1"	23	57,2	82	27,8	27,8	82	64	M 12
T BL 604-604	400	350	1.1/4"	30	66,7	100	31,8	31,8	92	72	M 14
T BL 605-605	400	350	1.1/2"	38	79,4	110	36,5	36,5	98	98	M 16
T BL 606-606	400	350	2"	50	96,8	133	44,5	44,5	140	105	M 20

PN = Nominal pressure PB = Max. operating pressure
The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).

GF LK — Pump connection (4 hole)



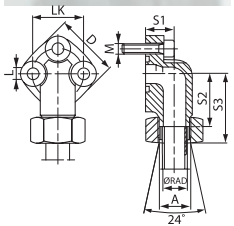
Design: Pump connection (4 hole)
Standard: ISO/DIS 6164
Included in scope of supply: with metric screw set and O-ring
Surface protection: electro galvanised
Product versions: GF LK M, with screw set, O-ring, nut and cutting ring

Construction: straight
Mounting: with metric screw set
Material: A 105

Identification	Series	Ø pipe external diameter mm	Pressure PB bar	LK mm	A	Ø B mm	D mm	L mm	S2 mm	S3 mm	Screws	OR
GF 35 LK L 10 315	L	10	315	35	M 16 x 1.5	11	39	6,4	30	39,0	(4 x) M 6 x 22	20.0 x 2.5
GF 35 LK L 12 315	L	12	315	35	M 18 x 1.5	11	39	6,4	30	39,0	(4 x) M 6 x 22	20.0 x 2.5
GF 35 LK L 15 250	L	15	250	35	M 22 x 1.5	12	39	6,4	30	38,0	(4 x) M 6 x 22	20.0 x 2.5
GF 40 LK L 15 100	L	15	100	40	M 22 x 1.5	13	42	6,4	35	43,0	(4 x) M 6 x 22	26.0 x 2.5
GF 40 LK L 18 100	L	18	100	40	M 26 x 1.5	16	42	6,4	35	44,0	(4 x) M 6 x 22	26.0 x 2.5
GF 40 LK L 22 100	L	22	100	40	M 30 x 2	20	42	6,4	35	44,5	(4 x) M 6 x 22	26.0 x 2.5
GF 40 LK L 28 100	L	28	100	40	M 36 x 2	20	42	6,4	35	44,5	(4 x) M 6 x 22	26.0 x 2.5
GF 35 LK S 16 315	S	16	315	35	M 24 x 1.5	12	39	6,4	30	39,5	(4 x) M 6 x 22	20.0 x 2.5
GF 55 LK S 20 250	S	20	250	55	M 30 x 2	14	55	8,4	35	51,0	(4 x) M 8 x 25	32.0 x 2.5

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø RAD = External pipe diameter
The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.

WF LK 3 — Pump connection (3 hole), angle 90°



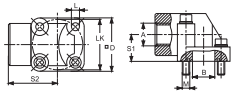
Design: Pump connection (3 hole)
Mounting: with metric screw set
Material: Malleable cast iron GTW 40
Product versions: WF LK 3 M, Pump connection (3 hole), angle 90°, with screw set, O-ring, nut and cutting ring

Construction: Angle 90°
Included in scope of supply: with metric screw set and O-ring
Surface protection: electro galvanised

Identification	Series	Ø pipe external diameter mm	Pressure PB bar	LK mm	A	D mm	S1 mm	S2 mm	S3 mm	L mm	Screws	OR
WF 30 LK L 12-3	L	12	250	30	M 18 x 1.5	38	19	30,0	46,5	6,4	(3 x) M 6 x 25	16.0 x 2.5
WF 30 LK L 15-3	L	15	250	30	M 22 x 1.5	38	19	30,0	46,0	6,4	(3 x) M 6 x 25	16.0 x 2.5
WF 40 LK L 22-3	L	22	160	40	M 30 x 2	48	25	35,5	52,5	8,4	(3 x) M 8 x 30	24.0 x 2.5
WF 40 LK L 28-3	L	28	160	40	M 36 x 2	48	25	35,5	52,5	8,4	(3 x) M 8 x 30	24.0 x 2.5

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø RAD = External pipe diameter
The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.

WVA — Pump connection (4 hole), aluminium, angle 90°



Design: Pump connection (4 hole)
Mounting: with metric screw set
Material: Aluminium

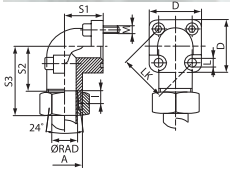
Construction: Angle 90°
Included in scope of supply: with metric screw set and O-ring

Identification	Pressure PB bar	A	B mm	LK mm	S1 mm	S2 mm	L mm	Screws 1	Screws 2	OR
WVA 100 55	120	G 1" -11	25,0	55	29	54,0	8,5	(2x) M 8 x 45	(2x) M 8 x 60	29.74 x 3.53
WVA 12 30	180	G 1/2" -14	11,5	30	18	40,0	6,5	(2x) M 6 x 30	(2x) M 6 x 45	15.88 x 2.62
WVA 12 35	180	G 1/2" -14	14,0	35	18	42,5	6,5	(2x) M 6 x 30	(2x) M 6 x 45	18.72 x 2.62
WVA 12 40	180	G 1/2" -14	17,0	40	24	47,5	6,5	(2x) M 6 x 35	(2x) M 6 x 55	22.22 x 2.62
WVA 34 40	180	G 3/4" -14	17,0	40	24	47,5	6,5	(2x) M 6 x 35	(2x) M 6 x 55	22.22 x 2.62
WVA 34 55	180	G 3/4" -14	25,0	55	29	54,0	8,5	(2x) M 8 x 45	(2x) M 8 x 60	29.74 x 3.53
WVA 38 30	180	G 3/8" -19	11,5	30	18	40,0	6,5	(2x) M 6 x 30	(2x) M 6 x 45	15.88 x 2.62
WVA 38 35	180	G 3/8" -19	14,0	35	18	42,5	6,5	(2x) M 6 x 30	(2x) M 6 x 45	18.72 x 2.62

PN = Nominal pressure PB = Max. operating pressure

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.

WF LK — Pump connection (4 hole), angle 90°



Design: Pump connection (4 hole)
Standard: DIN 3901/3902
Included in scope of supply: with metric screw set and O-ring
Surface protection: electro galvanised
Product versions: WF LK M, Pump connection (4 hole), angle 90°, with screw set, O-ring, nut and cutting ring

Construction: Angle 90°
Mounting: with metric screw set
Material: Malleable cast iron GTW 40

Identification	Series	l mm	Ø pipe external diameter mm	Pressure PB bar	A	LK mm	D mm	S1 mm	S2 mm	S3 mm	L mm	Screws 1	Screws 2	OR
WF 35 LK L 10 315	L	14,0	10	315	M 16 x 1.5	35	39	16,5	30,5	47,0	6,4	(2x) M 6 x 22	(2x) M 6 x 35	20.0 x 2.5
WF 35 LK L 12 315	L	14,0	12	315	M 18 x 1.5	35	39	16,5	30,5	47,0	6,4	(2x) M 6 x 22	(2x) M 6 x 35	20.0 x 2.5
WF 35 LK L 15 250	L	14,0	15	250	M 22 x 1.5	35	39	16,5	30,0	46,0	6,4	(2x) M 6 x 22	(2x) M 6 x 35	20.0 x 2.5
WF 35 LK L 18 250	L	15,0	18	250	M 26 x 1.5	35	39	20,0	30,0	47,5	6,4	(2x) M 6 x 22	(2x) M 6 x 40	20.0 x 2.5
WF 40 LK L 15 100	L	20,0	15	100	M 22 x 1.5	40	42	22,5	30,0	46,0	6,4	(2x) M 6 x 22	(2x) M 6 x 45	26.0 x 2.5
WF 40 LK L 18 100	L	20,0	18	100	M 26 x 1.5	40	42	22,5	30,5	47,0	6,4	(2x) M 6 x 22	(2x) M 6 x 45	26.0 x 2.5
WF 40 LK L 22 100	L	20,0	22	100	M 30 x 2	40	42	22,5	30,5	47,5	6,4	(2x) M 6 x 22	(2x) M 6 x 45	26.0 x 2.5
WF 40 LK L 28 100	L	20,0	28	100	M 36 x 2	40	42	28,0	32,5	49,0	6,4	(2x) M 6 x 22	(2x) M 6 x 50	26.0 x 2.5
WF 40 LK L 35 100	L	20,0	35	100	M 45 x 2	40	42	34,0	30,5	52,0	6,4	(2x) M 6 x 22	(2x) M 6 x 60	26.0 x 2.5
WF 55 LK L 35 100	L	26,0	35	100	M 45 x 2	55	58	32,0	38,5	62,0	8,4	(2x) M 8 x 25	(2x) M 8 x 60	32.0 x 2.5
WF 55 LK L 42 100	L	26,0	42	100	M 52 x 2	55	58	40,0	38,0	61,0	8,4	(2x) M 8 x 25	(2x) M 8 x 70	32.0 x 2.5
WF 35 LK S 16 315	S	15,0	16	315	M 24 x 1.5	35	39	20,0	29,5	48,0	6,4	(2x) M 6 x 22	(2x) M 6 x 40	20.0 x 2.5
WF 35 LK S 20 315	S	15,0	20	315	M 30 x 2	35	39	25,0	34,5	56,0	6,4	(2x) M 6 x 22	(2x) M 6 x 45	20.0 x 2.5
WF 40 LK S 20 250	S	20,0	20	250	M 30 x 2	40	42	22,5	29,5	50,0	6,4	(2x) M 6 x 22	(2x) M 6 x 45	26.0 x 2.5
WF 55 LK S 20 250	S	18,0	20	250	M 30 x 2	55	58	30,0	34,5	56,0	8,4	(2x) M 8 x 25	(2x) M 8 x 55	32.0 x 2.5
WF 55 LK S 25 250	S	20,0	25	250	M 36 x 2	55	58	30,0	37,0	61,0	8,4	(2x) M 8 x 25	(2x) M 8 x 55	32.0 x 2.5
WF 55 LK S 30 250	S	26,0	30	250	M 42 x 2	55	58	32,0	35,5	62,0	8,4	(2x) M 8 x 25	(2x) M 8 x 50	32.0 x 2.5

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø RAD = External pipe diameter

The stated maximum working pressure relates to the flange. The actual working pressure is determined by the pipe (wall thickness) and the quality of the pipe.

MONTAGESPRAY — Fitting spray

Additional feature: white

Identification	Content mL
MONTAGE SPRAY 400	400

MONTAGEPASTE — Fitting lubricant

Identification	Content mL
MONTAGEPASTE 450	450

AN 305 — Sealant

Identification
AN 305-42
AN 305-72

TF BAND — PTFE sealing tape

Standard: DIN EN 751-3

Identification	Width mm	Strength mm	Length m
TF BAND	12	0,10	12

ENTFETTER — Degreaser spray

Identification	Content mL
ENTFETTERSPRAY	500

MULTISPRAY — Multi spray

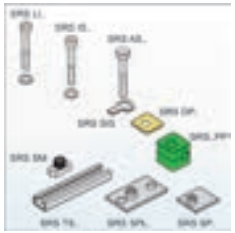
Identification	Content mL
MULTISPRAY 44	400

REINIGER Cleaning spray

Identification	Content mL
REINIGER 706	500

Mounting technology

A 0 Configuration of group A 0



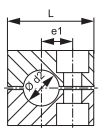
Spare parts: SRS 0 PP, Pipe clamp, light series
SRS 0 LI, Slotted screw for single pipe clamp
SRS 0 IS, Hexagon socket screw, single pipe clamp
SRS 0 AS, Hexagon screw for single pipe clamp
SRS 0 SIS, Lock washer for single pipe clamp
SRS 0 DP, Cover plate for single pipe clamp
SRS 0 TS, Mounting rail, single and double pipe clamp
SRS 0 SM, Mounting rail nut, single pipe clamp
SRS 0 SP, Welded on base plate, single pipe clamp, short
SRS 0 SP L, Welded on and screw-on base plate, long
SRS 0 D SP, Double welded on base plate, single pipe clamp
SRS 0 SP R, Series welded on base plate, single pipe clamp
SRS 0 SPW, Angle welded on and screw-on base plates

Identification

A 0

SRS 0 PP Pipe clamp, light series

Größe 0

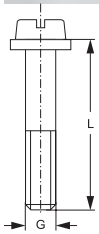


Design: Pipe clamp
Series: light
Temperature min.: -30 °C
Material: Polypropylene
Product versions: SRS 0 PA, Pipe clamp, light series, Polyamide 6
Spare parts: A 0, Configuration of group A 0
A 0 A, Configuration of group A 0 composition

Supplementary design information: Inside of clamp with web
Standard: DIN 3015, Part 1
Temperature max.: 90 °C

Identification	External pipe Ø d2 mm	External pipe Ø d2	Clamp size	e1 mm	H mm	L mm	S1 mm
SRS 0106 PP	6,0	-	0	10	27	28	0,6
SRS 0106.4 PP	6,4	1/4"	0	10	27	28	0,6
SRS 0108 PP	8,0	5/16"	0	10	27	28	0,6
SRS 0109.5 PP	9,5	3/8"	0	10	27	28	0,6
SRS 0110 PP	10,0	-	0	10	27	28	0,6
SRS 0112 PP	12,0	-	0	10	27	28	0,6

SRS 0 LI — Slotted screw for single pipe clamp

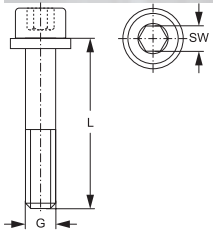


Design: for single pipe clamps
Standard: DIN 84 (ISO 1207)
Material: Steel
Product versions: SRS 0 LI V4, Slotted screw for single pipe clamp, Stainless steel 1.4571
Spare parts: A 0, Configuration of group A 0

Series: light
Included in scope of supply: with plain washer
Surface protection: electro galvanised

Identification	Clamp size	G
SRS LI 1	0 - 1	M 6

SRS 0 IS — Hexagon socket screw, single pipe clamp

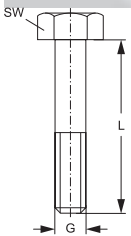


Design: for single pipe clamps
Standard: DIN 912 (ISO 4762)
Material: Steel
Product versions: SRS 0 IS V4, Hexagon socket screw, single pipe clamp, Stainless steel 1.4571
Spare parts: A 0, Configuration of group A 0

Series: light
Included in scope of supply: with plain washer
Surface protection: electro galvanised

Identification	Clamp size	G	L mm	SW mm
SRS IS 1	0 - 1	M 6	20	5

SRS 0 AS — Hexagon screw for single pipe clamp

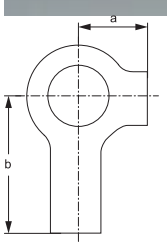


Design: for single pipe clamps
Standard: DIN 931 (ISO 4014) or DIN 933 (ISO 4017)
Surface protection: electro galvanised
Product versions: SRS 0 AS V4, Hexagon screw for single pipe clamp, Stainless steel 1.4571
Spare parts: A 0, Configuration of group A 0

Series: light
Material: Steel

Identification	Clamp size	G	L mm	SW mm
SRS AS 1	0 - 1	M 6	30	10

SRS 0 SIS — Lock washer for single pipe clamp



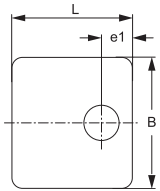
Design: for single pipe clamps
Standard: DIN 3015
Surface protection: electro galvanised
Spare parts: A 1-6, Configuration of group A 1-6
A 0, Configuration of group A 0

Series: light
Material: Steel

Identification	a mm	B mm
SRS SI S	9	18

SRS 0 DP — Cover plate for single pipe clamp

Größe 0

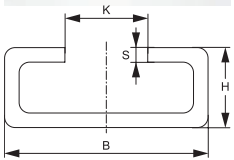


Design: for single pipe clamps
Standard: DIN 3015, Part 1
Surface protection: galvanised
Product versions: SRS 0 DP V4, Cover plate for single pipe clamp, Stainless steel 1.4571
Spare parts: A 0, Configuration of group A 0

Series: light
Material: Steel

Identification	Clamp size	B mm	e1 mm	L mm
SRS DP 1	0	30,0	9,5	28

SRS 0 TS — Mounting rail, single and double pipe clamp

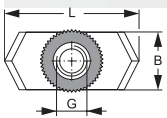


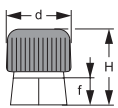
Design: for single and twin pipe clamps
Standard: DIN 3015
Product versions: SRS TS V4, Mounting rail, single and double pipe clamp, Stainless steel 1.4571
SRS TS VZ, Mounting rail, single and double pipe clamp, Steel
Spare parts: B, Configuration of group B
A 1-6, Configuration of group A 1-6
A 0, Configuration of group A 0

Series: light
Material: Steel (bright)

Identification	B mm	H mm	K mm	S mm	Length m
SRS TS 11-1	28	11	11,4	2	1
SRS TS 11-2	28	11	11,4	2	2
SRS TS 14-1	28	14	11,4	2	1
SRS TS 14-2	28	14	11,4	2	2
SRS TS 14-3	28	14	11,4	2	3
SRS TS 30-1	28	30	11,4	2	1
SRS TS 30-2	28	30	11,4	2	2

SRS 0 SM — Mounting rail nut, single pipe clamp



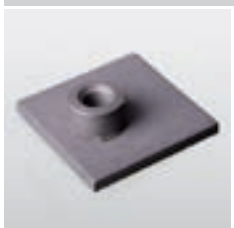


Design: for single and twin pipe clamps
Standard: DIN 3015
Surface protection: electro galvanised
Product versions: SRS SM V4, Mounting rail nut, Stainless steel 1.4571
Spare parts: A 1-6, Configuration of group A 1-6
A 0, Configuration of group A 0

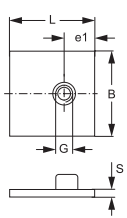
Series: light
Material: Steel and rubber

Identification	Clamp size	B mm	e1 mm	f mm	G	H mm	L mm
SRS SM	0 - 6	10,4	12	5	M 6	14,5	25,4

SRS 0 SP — Welded on base plate, single pipe clamp, short



Größe 0



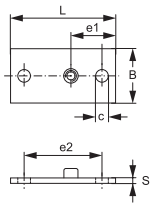
Design: Welded-on base plate
Series: light
Material: Steel
Product versions: SRS 0 SP V4, Welded on base plate, single pipe clamp, short, Stainless steel 1.4571
SRS 0 SP VZ, Welded on base plate, single pipe clamp, short, Steel
Spare parts: A 0, Configuration of group A 0

Supplementary design information: short
Standard: DIN 3015, Part 1
Surface protection: phosphate treated

Identification	Clamp size	B mm	e1 mm	G	L mm	S mm
SRS SP 1	0	30	10,5	M 6	30	3

SRS 0 SP L — Welded on and screw-on base plate, long

Größe 0

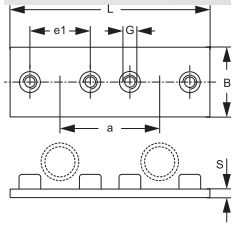


Design: for single pipe clamps
Standard: DIN 3015, Part 1
Surface protection: phosphate treated
Product versions: SRS 0 SP L VZ, Welded on and screw-on base plate, long, Steel
SRS 0 SP L V4, Welded on and screw-on base plate, long, Stainless steel 1.4571
Spare parts: A 0, Configuration of group A 0

Series: light
Material: Steel

Identification	Clamp size	B mm	c mm	e1 mm	e2 mm	G	L mm	S mm
SRS SP L 1	0	30	7	24,5	44	M 6	58	3

SRS 0 D SP — Double welded on base plate, single pipe clamp

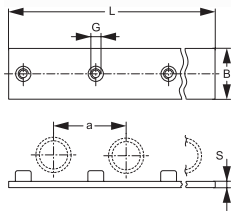


Design: for single pipe clamps
Standard: DIN 3015, Part 1
Surface protection: phosphate treated
Product versions: SRS 0 D SP VZ, Double welded on base plate, single pipe clamp, Steel
Spare parts: A 0, Configuration of group A 0

Series: light
Material: Steel

Identification	Clamp size	B mm	G	L mm	S mm
SRS D SP 1	0	30,0	M 6	61	3

SRS 0 SP R — Series welded on base plate, single pipe clamp



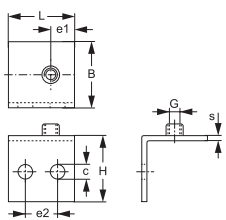
Design: for single pipe clamps
Standard: DIN 3015, Part 1
Surface protection: phosphate treated
Product versions: SRS 0 SP R VZ, Series welded on base plate, single pipe clamp, Steel
Spare parts: A 0, Configuration of group A 0

Series: light
Material: Steel

Identification	Clamp size	a mm	B mm	G	L mm	S mm
SRS SP R 1	0	30	30	M 6	298	3

SRS 0 SPW — Angle welded on and screw-on base plates

Größe 0

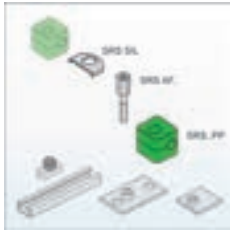


Construction: Angle 90°
Series: light
Material: Steel
Product versions: SRS 0 SPW V4,
Spare parts: A 0, Configuration of group A 0

Design: for single pipe clamps
Standard: DIN 3015, Part 1
Surface protection: phosphate treated

Identification	Clamp size	B mm	c mm	e1 mm	e2 mm	G	H mm	L mm	S mm
SRS SPW 1	0	30	6,6	10,5	14	M 6	30	30	3

A 0 A — Configuration of group A 0 composition



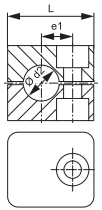
Spare parts: SRS 0 PP, Pipe clamp, light series
SRS 0 AF, Stacking bolt for single pipe clamp
SRS SIL, Lock washer for single pipe clamp

Identification

A 0 A

SRS 0 PP — Pipe clamp, light series

Größe 0

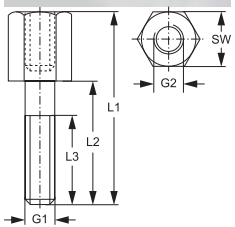


Design: Pipe clamp
Series: light
Temperature min.: -30 °C
Material: Polypropylene
Product versions: SRS 0 PA, Pipe clamp, light series, Polyamide 6
Spare parts: A 0, Configuration of group A 0
A 0 A, Configuration of group A 0 composition

Supplementary design information: Inside of clamp with web
Standard: DIN 3015, Part 1
Temperature max.: 90 °C

Identification	External pipe Ø d2 mm	External pipe Ø d2	Clamp size	e1 mm	H mm	L mm	S1 mm
SRS 0106 PP	6,0	-	0	10	27	28	0,6
SRS 0106.4 PP	6,4	1/4"	0	10	27	28	0,6
SRS 0108 PP	8,0	5/16"	0	10	27	28	0,6
SRS 0109.5 PP	9,5	3/8"	0	10	27	28	0,6
SRS 0110 PP	10,0	-	0	10	27	28	0,6
SRS 0112 PP	12,0	-	0	10	27	28	0,6

SRS 0 AF — Stacking bolt for single pipe clamp

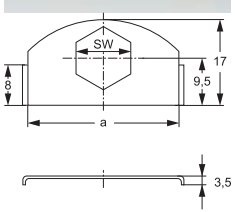


Design: for single pipe clamps
Material: Steel
Product versions: SRS 0 AF V4, Stacking bolt for single pipe clamp, Stainless steel 1.4571
Spare parts: A 0 A, Configuration of group A 0 composition

Series: light
Surface protection: electro galvanised

Identification	Clamp size	G1	G2	L1 mm	L2 mm	L3 mm	SW mm
SRS AF 1	0 - 1	M 6	M 6	34	20	18	11

SRS SIL — Lock washer for single pipe clamp

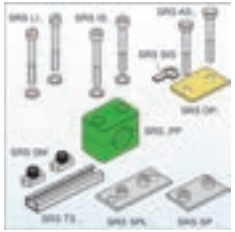


Design: for single pipe clamps
Standard: DIN 3015
Surface protection: electro galvanised
Spare parts: A 0 A, Configuration of group A 0 composition
A 1-6 A, Configuration of group A 1-6 composition

Series: light
Material: Steel

Identification	a mm	SW mm
SRS SI L	30	11

A 1-6 Configuration of group A 1-6



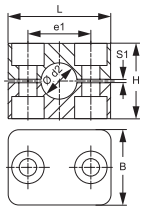
Spare parts: SRS 1-6 PP, Pipe clamp, light series
SRS 1-6 LI, Slotted screw for single pipe clamp
SRS 1-6 IS, Hexagon socket screw, single pipe clamp
SRS 1-6 AS, Hexagon screw for single pipe clamp
SRS SIS, Lock washer for single pipe clamp
SRS 1-6 DP, Cover plate for single pipe clamp
SRS TS, Mounting rail, single and double pipe clamp
SRS SM, Mounting rail nut
SRS 1-6 SP, Welded on base plate, single pipe clamp, short
SRS 1-6 SP L, Welded on and screw-on base plate, long
SRS 1-6 D SP, Double welded on base plate, single pipe clamp
SRS 1-6 SP R, Series welded on base plate, single pipe clamp
SRS 1-6 SPW, Angle welded on and screw-on base plates

Identification

A 1-6

SRS 1-6 PP Pipe clamp, light series

Größe 1 - 6



Design: Single pipe clamp
Series: light
Temperature min.: -30 °C
Material: Polypropylene
Product versions: SRS 1-6 AL, Pipe clamp, light series, Aluminium
SRS 1-6 PA, Pipe clamp, light series, Polyamide 6
SRS 1-6 PA G, Pipe clamp, light series, Polyamide 6
SRS 1-6 PP G, Pipe clamp, light series, Polypropylene
SRS 1-6 VG, Pipe clamp, light series, Solid rubber Shore 64°/73°
Spare parts: A 1-6 A, Configuration of group A 1-6 composition
A 1-6, Configuration of group A 1-6

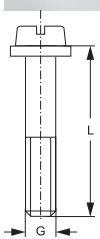
Supplementary design information: Inside of clamp with web
Standard: DIN 3015, Part 1
Temperature max.: 90 °C

Identification	External pipe Ø d2 mm	External pipe Ø d2	Clamp size	e1 mm	H mm	L mm	S1 mm
SRS 106 A PP	6,0	-	1	20	27	34	0,6
SRS 106.4 A PP	6,4	1/4"	1	20	27	34	0,6
SRS 108 A PP	8,0	5/16"	1	20	27	34	0,6
SRS 109.5 A PP	9,5	3/8"	1	20	27	34	0,6
SRS 110 A PP	10,0	-	1	20	27	34	0,6
SRS 112 A PP	12,0	-	1	20	27	34	0,6
SRS 0212.7 PP	12,7	1/2"	2	26	33	40	0,8
SRS 0213.5 PP	13,5	-	2	26	33	40	0,8
SRS 0214 PP	14,0	-	2	26	33	40	0,8
SRS 0215 PP	15,0	-	2	26	33	40	0,8
SRS 0216 PP	16,0	5/8"	2	26	33	40	0,8
SRS 0217.2 PP	17,2	-	2	26	33	40	0,8
SRS 0218 PP	18,0	-	2	26	33	40	0,8
SRS 0319 PP	19,0	3/4"	3	33	35	48	1,0
SRS 0320 PP	20,0	-	3	33	35	48	1,0

SRS 1-6 PP (Continuation) Pipe clamp, light series

Identification	External pipe Ø d2 mm	External pipe Ø d2	Clamp size	e1 mm	H mm	L mm	S1 mm
SRS 0321.3 PP	21,3	-	3	33	35	48	1,0
SRS 0322 PP	22,0	-	3	33	35	48	1,0
SRS 0323 PP	23,0	-	3	33	35	48	1,0
SRS 0325 PP	25,0	1"	3	33	35	48	1,0
SRS 0426.9 PP	26,9	-	4	40	42	57	1,2
SRS 0428 PP	28,0	-	4	40	42	57	1,2
SRS 0430 PP	30,0	-	4	40	42	57	1,2
SRS 0532 PP	32,0	1.1/4"	5	52	58	70	1,2
SRS 0533.7 PP	33,7	-	5	52	58	70	1,2
SRS 0535 PP	35,0	-	5	52	58	70	1,2
SRS 0538 PP	38,0	1.1/2"	5	52	58	70	1,2
SRS 0540 PP	40,0	-	5	52	58	70	1,2
SRS 0542 PP	42,0	-	5	52	58	70	1,2
SRS 0542.4 PP	42,4	-	5	52	58	70	1,2
SRS 0644.5 PP	44,5	1.3/4"	6	66	66	86	1,2
SRS 0645 PP	45,0	-	6	66	66	86	1,2
SRS 0648 PP	48,0	-	6	66	66	86	1,2
SRS 0650 PP	50,0	-	6	66	66	86	1,2
SRS 0650.8 PP	50,8	2"	6	66	66	86	1,2
SRS 0652 PP	52,0	-	6	66	66	86	1,2
SRS 0655 PP	55,0	-	6	66	66	86	1,2
SRS 0657 PP	57,0	2.1/4"	6	66	66	86	1,2

SRS 1-6 LI Slotted screw for single pipe clamp

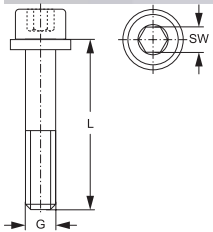


Design: for single pipe clamps
Standard: DIN 84 (ISO 1207)
Material: Steel
Product versions: SRS 1-6 LI V4, Slotted screw for single pipe clamp, Stainless steel 1.4571
Spare parts: A 1-6, Configuration of group A 1-6

Series: light
Included in scope of supply: with plain washer
Surface protection: electro galvanised

Identification	Clamp size	G	L mm
SRS LI 1	0 - 1	M 6	20
SRS LI 2	2	M 6	25
SRS LI 3	3	M 6	30
SRS LI 4	4	M 6	35
SRS LI 5	5	M 6	50
SRS LI 6	6	M 6	60

SRS 1-6 IS — Hexagon socket screw, single pipe clamp

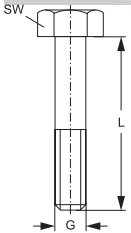


Design: for single pipe clamps
Standard: DIN 912 (ISO 4762)
Material: Steel
Product versions: SRS 1-6 IS V4, Hexagon socket screw, single pipe clamp, Stainless steel 1.4571
Spare parts: A 1-6, Configuration of group A 1-6

Series: light
Included in scope of supply: with plain washer
Surface protection: electro galvanised

Identification	Clamp size	G	L mm	SW mm
SRS IS 1	0 - 1	M 6	20	5
SRS IS 2	2	M 6	25	5
SRS IS 3	3	M 6	30	5
SRS IS 4	4	M 6	35	5
SRS IS 5	5	M 6	50	5
SRS IS 6	6	M 6	60	5

SRS 1-6 AS — Hexagon screw for single pipe clamp

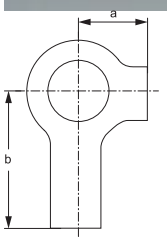


Design: for single pipe clamps
Standard: DIN 931 (ISO 4014) or DIN 933 (ISO 4017)
Surface protection: electro galvanised
Product versions: SRS 1-6 AS V4, Hexagon screw for single pipe clamp, Stainless steel 1.4571

Series: light
Material: Steel

Identification	Clamp size	G	L mm	SW mm
SRS AS 1	0 - 1	M 6	30	10
SRS AS 2	2	M 6	35	10
SRS AS 3	3	M 6	40	10
SRS AS 4	4	M 6	45	10
SRS AS 5	5	M 6	60	10
SRS AS 6	6	M 6	70	10

SRS SIS — Lock washer for single pipe clamp



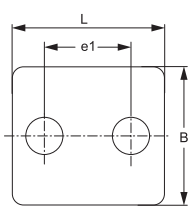
Design: for single pipe clamps
Standard: DIN 3015
Surface protection: electro galvanised
Spare parts: A 1-6, Configuration of group A 1-6
A 0, Configuration of group A 0

Series: light
Material: Steel

Identification	a mm	b mm
SRS SI S	9	18

SRS 1-6 DP — Cover plate for single pipe clamp

Größe 1 - 6

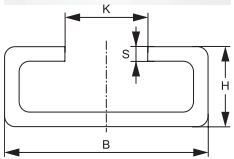


Design: for single pipe clamps
Standard: DIN 3015, Part 1
Surface protection: galvanised
Product versions: SRS 1-6 DP V4, Cover plate for single pipe clamp, Stainless steel 1.4571
Spare parts: A 1-6, Configuration of group A 1-6

Series: light
Material: Steel

Identification	Clamp size	B mm	e1 mm	L mm
SRS DP 1 A	1	30	20	34
SRS DP 2	2	30	26	40
SRS DP 3	3	30	33	48
SRS DP 4	4	30	40	57
SRS DP 5	5	30	52	70
SRS DP 6	6	30	66	86

SRS TS — Mounting rail, single and double pipe clamp

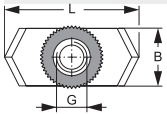


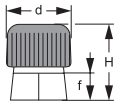
Design: for single and twin pipe clamps
Standard: DIN 3015
Product versions: SRS TS V4, Mounting rail, single and double pipe clamp, Stainless steel 1.4571
SRS TS VZ, Mounting rail, single and double pipe clamp, Steel
Spare parts: B, Configuration of group B
A 1-6, Configuration of group A 1-6
A 0, Configuration of group A 0

Series: light
Material: Steel (bright)

Identification	B mm	H mm	K mm	S mm	Length m
SRS TS 11-1	28	11	11,4	2	1
SRS TS 11-2	28	11	11,4	2	2
SRS TS 14-1	28	14	11,4	2	1
SRS TS 14-2	28	14	11,4	2	2
SRS TS 14-3	28	14	11,4	2	3
SRS TS 30-1	28	30	11,4	2	1
SRS TS 30-2	28	30	11,4	2	2

SRS SM — Mounting rail nut





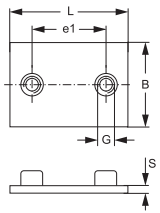
Design: for single and twin pipe clamps
Standard: DIN 3015
Surface protection: electro galvanised
Product versions: SRS SM V4, Mounting rail nut, Stainless steel 1.4571
Spare parts: A 1-6, Configuration of group A 1-6
A 0, Configuration of group A 0

Series: light
Material: Steel and rubber

Identification	Clamp size	B mm	d mm	f mm	G	H mm	L mm
SRS SM	0 - 6	10,4	12	5	M 6	14,5	25,4

SRS 1-6 SP — Welded on base plate, single pipe clamp, short

Größe 1 - 6

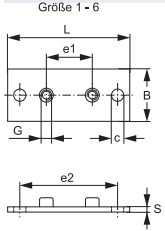


Design: for single pipe clamps
Series: light
Material: Steel
Supplementary design information: short
Standard: DIN 3015, Part 1
Surface protection: phosphate treated
Product versions: SRS 1-6 SP V4, Welded on base plate, single pipe clamp, short, Stainless steel 1.4571
SRS 1-6 SP VZ, Welded on base plate, single pipe clamp, short, Steel
Spare parts: A 1-6, Configuration of group A 1-6

Identification	Clamp size	B mm	e1 mm	G	L mm	S mm
SRS SP 1 A	1	30	20	M 6	36	3
SRS SP 2	2	30	26	M 6	42	3
SRS SP 3	3	30	33	M 6	50	3
SRS SP 4	4	30	40	M 6	59	3
SRS SP 5	5	30	52	M 6	72	3
SRS SP 6	6	30	66	M 6	88	3

SRS 1-6 SP L — Welded on and screw-on base plate, long

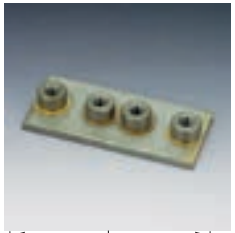
Größe 1 - 6

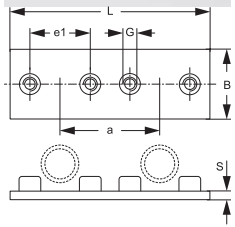


Design: for single pipe clamps
Standard: DIN 3015, Part 1
Surface protection: phosphate treated
Series: light
Material: Steel
Product versions: SRS 1-6 SP L V4, Welded on and screw-on base plate, long, Stainless steel 1.4571
SRS 1-6 SP L VZ, Welded on and screw-on base plate, long, Steel
Spare parts: A 1-6, Configuration of group A 1-6

Identification	Clamp size	B mm	c mm	e1 mm	e2 mm	G	L mm	S mm
SRS SP L 1 A	1	30	7	20	50	M 6	64	3
SRS SP L 2	2	30	7	26	46	M 6	70	3
SRS SP L 3	3	30	7	33	64	M 6	78	3
SRS SP L 4	4	30	7	40	73	M 6	87	3
SRS SP L 5	5	30	7	52	86	M 6	100	3
SRS SP L 6	6	30	7	66	100	M 6	116	3

SRS 1-6 D SP — Double welded on base plate, single pipe clamp



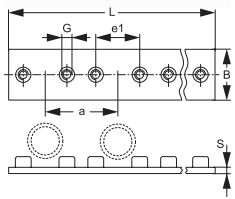


Design: for single pipe clamps
Standard: DIN 3015, Part 1
Surface protection: phosphate treated
Product versions: SRS 1-6 D SP VZ, Double cover plate, single pipe clamp, Steel
Spare parts: A 1-6, Configuration of group A 1-6

Series: light
Material: Steel

Identification	Clamp size	a mm	B mm	e1 mm	G	L mm	S mm
SRS D SP 1 A	1	35	30	20	M 6	69	3
SRS D SP 2	2	43	30	26	M 6	86	3
SRS D SP 3	3	52	30	33	M 6	104	3
SRS D SP 4	4	60	30	40	M 6	117	3
SRS D SP 5	5	75	30	52	M 6	145	3
SRS D SP 6	6	90	30	66	M 6	176	3

SRS 1-6 SP R — Series welded on base plate, single pipe clamp



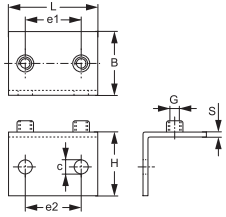
Design: for single pipe clamps
Standard: DIN 3015, Part 1
Surface protection: phosphate treated
Product versions: SRS 1-6 SP R VZ, Series welded on base plate, single pipe clamp, electro galvanised
Spare parts: A 1-6, Configuration of group A 1-6

Series: light
Material: Steel

Identification	Clamp size	a mm	B mm	e1 mm	G	L mm	S mm
SRS SP R 1 A	1	35	30	20	M 6	349	3
SRS SP R 2	2	43	30	26	M 6	427	3
SRS SP R 3	3	52	30	33	M 6	516	3
SRS SP R 4	4	60	30	40	M 6	297	3
SRS SP R 5	5	75	30	52	M 6	370	3
SRS SP R 6	6	90	30	66	M 6	446	3

SRS 1-6 SPW — Angle welded on and screw-on base plates

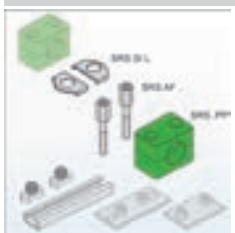
Größe 1 - 6



Construction: Angle 90°
Series: light
Material: Steel
Design: for single pipe clamps
Standard: DIN 3015, Part 1
Surface protection: phosphate treated
Product versions: SRS 1-6 SPW V4, Angle welded on and screw-on base plates, Stainless steel 1.4571
Spare parts: A 1-6, Configuration of group A 1-6

Identification	Clamp size	B	c	e1	e2	G	H	L	S
		mm	mm	mm	mm		mm	mm	mm
SRS SPW 1 A	1	30	6,6	20,0	20	M 6	30	36,0	3
SRS SPW 2	2	30	6,6	26,0	26	M 6	30	42,0	3
SRS SPW 3	3	30	6,6	33,0	33	M 6	30	50,0	3
SRS SPW 4	4	30	6,6	40,0	40	M 6	30	59,0	3
SRS SPW 5	5	30	6,6	52,0	52	M 6	30	72,0	3
SRS SPW 6	6	30	6,6	66,0	66	M 6	30	88,0	3

A 1-6 A — Configuration of group A 1-6 composition

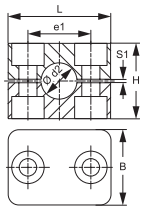


Spare parts: SRS 1-6 PP, Pipe clamp, light series
SRS 1-6 AF, Stacking bolt for single pipe clamp
SRS SIL, Lock washer for single pipe clamp

Identification
A 1-6 A

SRS 1-6 PP — Pipe clamp, light series

Größe 1 - 6



Design: Single pipe clamp
Series: light
Temperature min.: -30 °C
Material: Polypropylene
Product versions: **SRS 1-6 AL,** Pipe clamp, light series, Aluminium
SRS 1-6 PA, Pipe clamp, light series, Polyamide 6
SRS 1-6 PA G, Pipe clamp, light series, Polyamide 6
SRS 1-6 PP G, Pipe clamp, light series, Polypropylene
SRS 1-6 VG, Pipe clamp, light series, Solid rubber Shore 64°/73°
Spare parts: **A 1-6 A,** Configuration of group A 1-6 composition
A 1-6, Configuration of group A 1-6

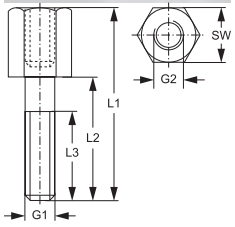
Supplementary design information: Inside of clamp with web
Standard: DIN 3015, Part 1
Temperature max.: 90 °C

Identification	External pipe Ø d2 mm	External pipe Ø d2	Clamp size	e1 mm	H mm	L mm	S1 mm
SRS 106 A PP	6,0	-	1	20	27	34	0,6
SRS 106.4 A PP	6,4	1/4"	1	20	27	34	0,6
SRS 108 A PP	8,0	5/16"	1	20	27	34	0,6
SRS 109.5 A PP	9,5	3/8"	1	20	27	34	0,6
SRS 110 A PP	10,0	-	1	20	27	34	0,6
SRS 110.2 A PP	10,2	1/8"	1	20	27	34	0,6
SRS 112 A PP	12,0	-	1	20	27	34	0,6
SRS 0212.7 PP	12,7	1/2"	2	26	33	40	0,8
SRS 0213 PP	13,0	-	2	26	33	40	0,8
SRS 0213.5 PP	13,5	-	2	26	33	40	0,8
SRS 0214 PP	14,0	-	2	26	33	40	0,8
SRS 0215 PP	15,0	-	2	26	33	40	0,8
SRS 0216 PP	16,0	5/8"	2	26	33	40	0,8
SRS 0217.2 PP	17,2	-	2	26	33	40	0,8
SRS 0218 PP	18,0	-	2	26	33	40	0,8
SRS 0319 PP	19,0	3/4"	3	33	35	48	1,0
SRS 0320 PP	20,0	-	3	33	35	48	1,0
SRS 0321.3 PP	21,3	-	3	33	35	48	1,0
SRS 0322 PP	22,0	-	3	33	35	48	1,0
SRS 0323 PP	23,0	-	3	33	35	48	1,0
SRS 0325 PP	25,0	1"	3	33	35	48	1,0
SRS 0426.9 PP	26,9	-	4	40	42	57	1,2
SRS 0428 PP	28,0	-	4	40	42	57	1,2
SRS 0430 PP	30,0	-	4	40	42	57	1,2
SRS 0532 PP	32,0	1.1/4"	5	52	58	70	1,2
SRS 0533.7 PP	33,7	-	5	52	58	70	1,2
SRS 0535 PP	35,0	-	5	52	58	70	1,2
SRS 0538 PP	38,0	1.1/2"	5	52	58	70	1,2
SRS 0540 PP	40,0	-	5	52	58	70	1,2
SRS 0542 PP	42,0	-	5	52	58	70	1,2
SRS 0542.4 PP	42,4	-	5	52	58	70	1,2
SRS 0644.5 PP	44,5	1.3/4"	6	66	66	86	1,2
SRS 0645 PP	45,0	-	6	66	66	86	1,2
SRS 0648 PP	48,0	-	6	66	66	86	1,2
SRS 0648.3 PP	48,3	-	6	66	66	86	1,2

SRS 1-6 PP (Continuation) Pipe clamp, light series

Identification	External pipe Ø d2 mm	External pipe Ø d2	Clamp size	e1 mm	H mm	L mm	S1 mm
SRS 0650 PP	50,0	-	6	66	66	86	1,2
SRS 0650.8 PP	50,8	2"	6	66	66	86	1,2
SRS 0652 PP	52,0	-	6	66	66	86	1,2
SRS 0655 PP	55,0	-	6	66	66	86	1,2
SRS 0657 PP	57,0	2.1/4"	6	66	66	86	1,2

SRS 1-6 AF Stacking bolt for single pipe clamp

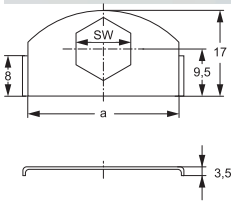


Design: for single pipe clamps
Material: Steel
Product versions: SRS 1-6 AF V4, Stacking bolt for single pipe clamp, Stainless steel 1.4571
Spare parts: A 1-6 A, Configuration of group A 1-6 composition

Series: light
Surface protection: electro galvanised

Identification	Clamp size	G1	G2	L1 mm	L2 mm	L3 mm	SW mm
SRS AF 1	0 - 1	M 6	M 6	34	20	18	11
SRS AF 2	2	M 6	M 6	39	25	18	11
SRS AF 3	3	M 6	M 6	44	28	18	11
SRS AF 4	4	M 6	M 6	49	35	18	11
SRS AF 5	5	M 6	M 6	64	50	18	11
SRS AF 6	6	M 6	M 6	74	60	18	11

SRS SIL — Lock washer for single pipe clamp

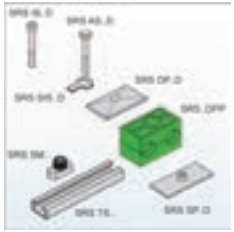


Design: for single pipe clamps
Standard: DIN 3015
Surface protection: electro galvanised
Spare parts: A 0 A, Configuration of group A 0 composition
A 1-6 A, Configuration of group A 1-6 composition

Series: light
Material: Steel

Identification	a mm	SW mm
SRS SI L	30	11

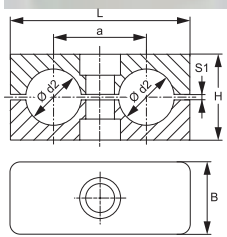
B — Configuration of group B



Spare parts: SRS 1-5 D PP, Pipe clamp, double pipes
SRS IS D, Hexagon socket screw, double pipe clamp
SRS AS D, Hexagon screw for double pipe clamp
SRS SIS D, Lock washer for double pipe clamp
SRS DP D, Cover plate for double pipe clamp
SRS TS, Mounting rail, single and double pipe clamp
SRS SMD, Mounting rail nut, double pipe clamp
SRS SP D, Welded on base plate for double pipe clamp
SRS SPR D, Series welded on base plate, double pipe clamp

Identification
B

SRS 1-5 D PP — Pipe clamp, double pipes



Design: Double pipe clamp
Standard: DIN 3015, Part 3
Temperature max.: 90 °C
Product versions: **SRS 1-5 D PP G,** Pipe clamp, double pipes, Polypropylene
SRS 1-5 D PA, Pipe clamp, double pipes, Polyamide 6
SRS 1-5 D VG, Pipe clamp, double pipes, Solid rubber Shore 64°/73°
Spare parts: **B A,** Configuration of group B composition
B, Configuration of group B

Supplementary design information: Inside of clamp with web
Temperature min.: -30 °C
Material: Polypropylene

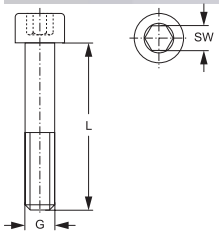
Identification	Clamp size	External pipe Ø d2 mm	External pipe Ø d2	a mm	B mm	H mm	L mm	S1 mm
SRS 106 D PP	1	6,0	-	20	30	27	36	1,0
SRS 106.4 D PP	1	6,4	1/4"	20	30	27	36	1,0
SRS 108 D PP	1	8,0	5/16"	20	30	27	36	1,0
SRS 109.5 D PP	1	9,5	3/8"	20	30	27	36	1,0
SRS 110 D PP	1	10,0	-	20	30	27	36	1,0
SRS 112 D PP	1	12,0	-	20	30	27	36	1,0
SRS 212.7 D PP	2	12,7	1/2"	29	30	26	53	1,2
SRS 213.5 D PP	2	13,5	-	29	30	26	53	1,2
SRS 214 D PP	2	14,0	-	29	30	26	53	1,2
SRS 215 D PP	2	15,0	-	29	30	26	53	1,2
SRS 216 D PP	2	16,0	5/8"	29	30	26	53	1,2
SRS 217.2 D PP	2	17,2	-	29	30	26	53	1,2
SRS 218 D PP	2	18,0	-	29	30	26	53	1,2
SRS 319 D PP	3	19,0	3/4"	36	30	37	67	1,6
SRS 320 D PP	3	20,0	-	36	30	37	67	1,6
SRS 321.3 D PP	3	21,3	-	36	30	37	67	1,6
SRS 322 D PP	3	22,0	-	36	30	37	67	1,6
SRS 325 D PP	3	25,0	1"	36	30	37	67	1,6
SRS 426.9 D PP	4	26,9	-	45	30	42	82	2,0
SRS 428 D PP	4	28,0	-	45	30	42	82	2,0
SRS 430 D PP	4	30,0	-	45	30	42	82	2,0
SRS 532 D PP	5	32,0	1.1/4"	56	30	54	106	2,0
SRS 533.7 D PP	5	33,7	-	56	30	54	106	2,0
SRS 535 D PP	5	35,0	-	56	30	54	106	2,0
SRS 538 D PP	5	38,0	1.1/2"	56	30	54	106	2,0
SRS 542 D PP	5	42,0	-	56	30	54	106	2,0

SRS IS D — Hexagon socket screw, double pipe clamp

Design: for twin pipe clamps
Material: Steel
Spare parts: B, Configuration of group B

Standard: DIN 912 (ISO 4762)
Surface protection: electro galvanised

Identification	Clamp size	G	L mm	SW mm
SRS IS 1 D	1	M 6	35	5
SRS IS 2 D	2	M 8	35	6
SRS IS 3 D	3	M 8	45	6
SRS IS 4 D	4	M 8	50	6
SRS IS 5 D	5	M 8	60	6

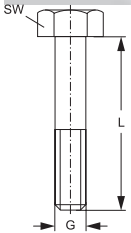


SRS AS D — Hexagon screw for double pipe clamp

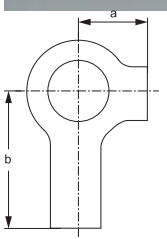
Design: for twin pipe clamps
Material: Steel
Product versions: SRS AS D V4, Hexagon screw for double pipe clamp, Stainless steel 1.4571
Spare parts: B, Configuration of group B

Standard: DIN 931 (ISO 4014) or DIN 933 (ISO 4017)
Surface protection: electro galvanised

Identification	Clamp size	G	L mm	SW mm
SRS AS 1 D	1	M 6	35	10
SRS AS 2 D	2	M 8	35	13
SRS AS 3 D	3	M 8	45	13
SRS AS 4 D	4	M 8	50	13
SRS AS 5 D	5	M 8	60	13



SRS SIS D — Lock washer for double pipe clamp

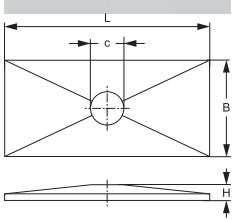


Design: for twin pipe clamps
Material: Steel
Spare parts: B, Configuration of group B

Standard: DIN 3015
Surface protection: electro galvanised

Identification	Clamp size	a mm	b mm
SRS SIS 1 D	1	9	18
SRS SIS 2 D	2 - 5	11	20

SRS DP D — Cover plate for double pipe clamp

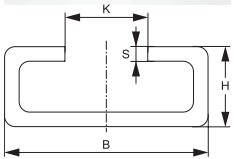


Design: for twin pipe clamps
Material: Steel
Product versions: SRS DP D V4, Cover plate for double pipe clamp, Stainless steel 1.4571
Spare parts: B, Configuration of group B

Standard: DIN 3015, Part 3
Surface protection: electro galvanised

Identification	Clamp size	B mm	C mm	H mm	L mm
SRS DP 1 D	1	30	6,8	6,5	34
SRS DP 2 D	2	30	9,0	6,5	51
SRS DP 3 D	3	30	8,6	6,5	64
SRS DP 4 D	4	30	8,6	6,5	78
SRS DP 5 D	5	30	8,5	6,5	102

SRS TS — Mounting rail, single and double pipe clamp

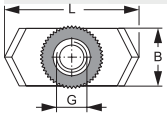


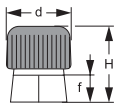
Design: for single and twin pipe clamps
Standard: DIN 3015
Product versions: SRS TS V4, Mounting rail, single and double pipe clamp, Stainless steel 1.4571
SRS TS VZ, Mounting rail, single and double pipe clamp, Steel
Spare parts: B, Configuration of group B
A 1-6, Configuration of group A 1-6
A 0, Configuration of group A 0

Series: light
Material: Steel (bright)

Identification	B mm	H mm	K mm	Length m	S mm
SRS TS 11-1	28,0	11	11,4	1	2,0
SRS TS 11-2	28,0	11	11,4	2	2,0
SRS TS 14-1	28,0	14	11,4	1	2,0
SRS TS 14-2	28,0	14	11,4	2	2,0
SRS TS 14-3	28,0	14	11,4	3	2,0
SRS TS 30-1	28,0	30	11,4	1	2,0
SRS TS 30-2	28,0	30	11,4	2	2,0

SRS SMD — Mounting rail nut, double pipe clamp



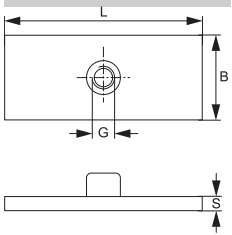


Design: for twin pipe clamps
Material: Steel and rubber
Product versions: SRS SMD V4, Mounting rail nut, double pipe clamp, Stainless steel 1.4571
Spare parts: B, Configuration of group B

Standard: DIN 3015
Surface protection: electro galvanised

Identification	Clamp size	B mm	d mm	f mm	G	H mm	L mm
SRS SM D	2 - 5	10,4	14	5	M 8	13,0	25,4

SRS SP D — Welded on base plate for double pipe clamp

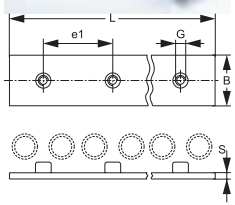


Design: for twin pipe clamps
Material: Steel
Product versions: **SRS SP D V4,** Welded on base plate for double pipe clamp, Stainless steel 1.4571
SRS SP D VZ, Welded on base plate for double pipe clamp, Steel
Spare parts: B, Configuration of group B

Standard: DIN 3015, Part 3
Surface protection: phosphate treated

Identification	Clamp size	B mm	G	L mm	S mm
SRS SP 1 D	1	30	M 6	37	3
SRS SP 2 D	2	30	M 8	55	5
SRS SP 3 D	3	30	M 8	70	5
SRS SP 4 D	4	30	M 8	85	5
SRS SP 5 D	5	30	M 8	110	5

SRS SPR D — Series welded on base plate, double pipe clamp

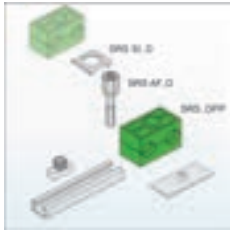


Design: for twin pipe clamps
Material: Steel
Spare parts: B, Configuration of group B

Standard: DIN 3015, Part 3
Surface protection: phosphate treated

Identification	Clamp size	B mm	e1 mm	G	L mm	S mm
SRS SPR 1 D	1	30	40	M 6	196	3
SRS SPR 2 D	2	30	58	M 8	288	5
SRS SPR 3 D	3	30	72	M 8	358	5
SRS SPR 4 D	4	30	90	M 8	446	5
SRS SPR 5 D	5	30	112	M 8	558	5

B A — Configuration of group B composition

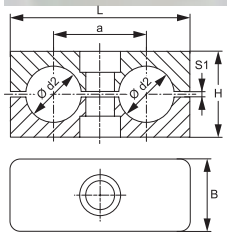


Spare parts: SRS 1-5 D PP, Pipe clamp, double pipes
SRS AF D, Mounting screw for double pipe clamp
SRS SI, Lock washer for double pipe clamp

Identification

B A

SRS 1-5 D PP — Pipe clamp, double pipes



Design: Double pipe clamp
Standard: DIN 3015, Part 3
Temperature max.: 90 °C
Product versions: SRS 1-5 D PP G, Pipe clamp, double pipes, Polypropylene
SRS 1-5 D PA, Pipe clamp, double pipes, Polyamide 6
SRS 1-5 D VG, Pipe clamp, double pipes, Solid rubber Shore 64°/73°
Spare parts: B A, Configuration of group B composition
B, Configuration of group B

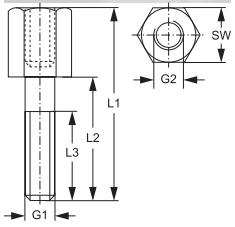
Supplementary design information: Inside of clamp with web
Temperature min.: -30 °C
Material: Polypropylene

Identification	Clamp size	External pipe Ø d2 mm	External pipe Ø d2	a mm	B mm	H mm	L mm	S1 mm
SRS 106 D PP	1	6,0	-	20	30	27	36	1,0
SRS 106.4 D PP	1	6,4	1/4"	20	30	27	36	1,0
SRS 108 D PP	1	8,0	5/16"	20	30	27	36	1,0
SRS 109.5 D PP	1	9,5	3/8"	20	30	27	36	1,0
SRS 110 D PP	1	10,0	-	20	30	27	36	1,0
SRS 112 D PP	1	12,0	-	20	30	27	36	1,0
SRS 212.7 D PP	2	12,7	1/2"	29	30	26	53	1,2
SRS 213.5 D PP	2	13,5	-	29	30	26	53	1,2
SRS 214 D PP	2	14,0	-	29	30	26	53	1,2
SRS 215 D PP	2	15,0	-	29	30	26	53	1,2
SRS 216 D PP	2	16,0	5/8"	29	30	26	53	1,2
SRS 217.2 D PP	2	17,2	-	29	30	26	53	1,2
SRS 218 D PP	2	18,0	-	29	30	26	53	1,2
SRS 319 D PP	3	19,0	3/4"	36	30	37	67	1,6
SRS 320 D PP	3	20,0	-	36	30	37	67	1,6
SRS 321.3 D PP	3	21,3	-	36	30	37	67	1,6
SRS 322 D PP	3	22,0	-	36	30	37	67	1,6
SRS 325 D PP	3	25,0	1"	36	30	37	67	1,6
SRS 426.9 D PP	4	26,9	-	45	30	42	82	2,0
SRS 428 D PP	4	28,0	-	45	30	42	82	2,0
SRS 430 D PP	4	30,0	-	45	30	42	82	2,0
SRS 532 D PP	5	32,0	1.1/4"	56	30	54	106	2,0
SRS 533.7 D PP	5	33,7	-	56	30	54	106	2,0
SRS 535 D PP	5	35,0	-	56	30	54	106	2,0

SRS 1-5 D PP (Continuation) Pipe clamp, double pipes

Identification	Clamp size	External pipe Ø d2 mm	External pipe Ø d2	a mm	B mm	H mm	L mm	S1 mm
SRS 538 D PP	5	38,0	1.1/2"	56	30	54	106	2,0
SRS 542 D PP	5	42,0	-	56	30	54	106	2,0

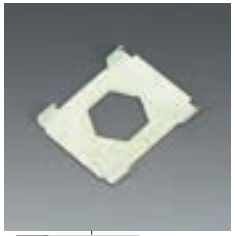
SRS AF D Mounting screw for double pipe clamp

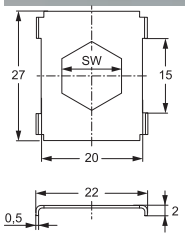


Design: for twin pipe clamps
Material: Steel
Surface protection: electro galvanised
Product versions: SRS AF D V4, Mounting screw for double pipe clamp, Stainless steel 1.4571
Spare parts: B A, Configuration of group B composition

Identification	Clamp size	G1	G2	L1 mm	L2 mm	L3 mm	SW mm
SRS AF 1 D	1	M 6	M 6	34	20	16	11
SRS AF 2 D	2	M 8	M 8	33	20	16	12
SRS AF 3 D	3	M 8	M 8	45	30	16	12
SRS AF 4 D	4	M 8	M 8	50	35	16	12
SRS AF 5 D	5	M 8	M 8	62	47	16	12

SRS SI — Lock washer for double pipe clamp



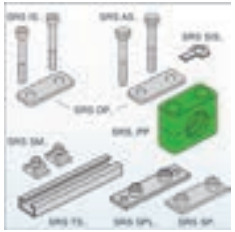


Design: for twin pipe clamps
Material: Steel
Product versions: SRS SI V4, Lock washer for double pipe clamp, Stainless steel 1.4571
Spare parts: B A, Configuration of group B composition

Standard: DIN 3015, Part 3
Surface protection: electro galvanised

Identification	Clamp size	SW mm
SRS SI 1 D	1	11
SRS SI 2 D	2 - 5	12

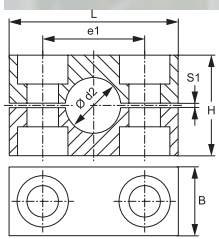
C — Configuration of group C



Spare parts: SRS 30-100 PP, Pipe clamp, heavy series
SRS IS 30-100, Hexagon socket screw, single pipe clamp
SRS AS 30-100, Hexagon screw for single pipe clamp
SRS SIS 30-100, Lock washer for single pipe clamp
SRS DP 30-100, Cover plate for single pipe clamp
SRS TS 40, Mounting rail, single pipe clamp
SRS SM 30-60, Mounting rail nut, single pipe clamp
SRS SP 30-100, Welded on base plate for single pipe clamp
SRS SPL 30-100, Welded on and screw-on base plate, long

Identification
C

SRS 30-100 PP — Pipe clamp, heavy series



Design: Single pipe clamp
Series: heavy
Temperature min.: -30 °C
Material: Polypropylene
Product versions: **SRS 30-100 AL,** Pipe clamp, heavy series, Aluminium
SRS 30-100 PA, Pipe clamp, heavy series, Polyamide 6
SRS 30-100 PP G, Pipe clamp, heavy series, Polypropylene
SRS 30-100 VG, Pipe clamp, heavy series, Solid rubber Shore 64°/73°
Spare parts: **C D,** Configuration of group C double
C A, Configuration of group C composition
C, Configuration of group C

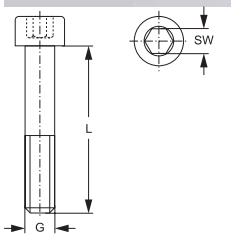
Supplementary design information: Inside of clamp with web
Standard: DIN 3015, Part 2
Temperature max.: 90 °C

Identification	Clamp size	External pipe Ø d2 mm	External pipe Ø d2	B mm	e1 mm	H mm	L mm	S1 mm
SRS 3006 PP	1	6,0	-	30	33	32	56	2
SRS 3008 PP	1	8,0	5/16"	30	33	32	56	2
SRS 3010 PP	1	10,0	-	30	33	32	56	2
SRS 3012 PP	1	12,0	-	30	33	32	56	2
SRS 3012.7 PP	1	12,7	1/2"	30	33	32	56	2
SRS 3013.5 PP	1	13,5	-	30	33	32	56	2
SRS 3014 PP	1	14,0	-	30	33	32	56	2
SRS 3015 PP	1	15,0	-	30	33	32	56	2
SRS 3016 PP	1	16,0	5/8"	30	33	32	56	2
SRS 3017.2 PP	1	17,2	-	30	33	32	56	2
SRS 3018 PP	1	18,0	-	30	33	32	56	2
SRS 4019 PP	2	19,0	3/4"	30	45	48	71	2
SRS 4020 PP	2	20,0	-	30	45	48	71	2
SRS 4021.3 PP	2	21,3	-	30	45	48	71	2
SRS 4022 PP	2	22,0	-	30	45	48	71	2
SRS 4023 PP	2	23,0	-	30	45	48	71	2
SRS 4025 PP	2	25,0	1"	30	45	48	71	2
SRS 4026.9 PP	2	26,9	-	30	45	48	71	2
SRS 4028 PP	2	28,0	-	30	45	48	71	2
SRS 4030 PP	2	30,0	-	30	45	48	71	2
SRS 5030 PP	3	30,0	-	30	60	60	86	2
SRS 5032 PP	3	32,0	1.1/4"	30	60	60	86	2
SRS 5033.7 PP	3	33,7	-	30	60	60	86	2
SRS 5035 PP	3	35,0	-	30	60	60	86	2
SRS 5038 PP	3	38,0	1.1/2"	30	60	60	86	2
SRS 5040 PP	3	40,0	-	30	60	60	86	2
SRS 5042 PP	3	42,0	-	30	60	60	86	2
SRS 6038 PP	4	38,0	1.1/2"	45	90	90	117	3
SRS 6040 PP	4	40,0	-	45	90	90	117	3
SRS 6042 PP	4	42,0	-	45	90	90	117	3
SRS 6045 PP	4	45,0	-	45	90	90	117	3
SRS 6048.3 PP	4	48,3	-	45	90	90	117	3
SRS 6050 PP	4	50,0	-	45	90	90	117	3
SRS 6051 PP	4	51,0	2"	45	90	90	117	3
SRS 6052 PP	4	52,0	-	45	90	90	117	3

SRS 30-100 PP (Continuation) Pipe clamp, heavy series

Identification	Clamp size	External pipe Ø d2 mm	External pipe Ø d2	B mm	e1 mm	H mm	L mm	S1 mm
SRS 6055 PP	4	55,0	-	45	90	90	117	3
SRS 6057 PP	4	57,0	2.1/4"	45	90	90	117	3
SRS 6060.3 PP	4	60,3	-	45	90	90	117	3
SRS 6063 PP	4	63,0	2.1/2"	45	90	90	117	3
SRS 6065 PP	4	65,0	-	45	90	90	117	3
SRS 6070 PP	4	70,0	-	45	90	90	117	3
SRS 7070 PP	5	70,0	-	60	122	120	154	5
SRS 7073 PP	5	73,0	-	60	122	120	154	5
SRS 7075 PP	5	75,0	-	60	122	120	154	5
SRS 7076.1 PP	5	76,1	3"	60	122	120	154	5
SRS 7080 PP	5	80,0	-	60	122	120	154	5
SRS 7082.5 PP	5	82,5	3.1/4"	60	122	120	154	5
SRS 7088.9 PP	5	88,9	3.1/2"	60	122	120	154	5
SRS 7090 PP	5	90,0	-	60	122	120	154	5
SRS 8090 PP	6	90,0	-	80	168	170	205	6
SRS 8097 PP	6	97,0	-	80	168	170	205	6
SRS 8100 PP	6	100,0	-	80	168	170	205	6
SRS 8101.6 PP	6	101,6	4"	80	168	170	205	6
SRS 8108 PP	6	108,0	4.1/4"	80	168	170	205	6
SRS 8114.3 PP	6	114,3	4.1/2"	80	168	170	205	6
SRS 8127 PP	6	127,0	5"	80	168	170	205	6
SRS 9127 PP	7	127,0	5"	90	205	200	250	6
SRS 9133 PP	7	133,0	5.1/4"	90	205	200	250	6
SRS 9140 PP	7	140,0	5.1/2"	90	205	200	250	6
SRS 9150 PP	7	150,0	-	90	205	200	250	6
SRS 9152.4 PP	7	152,4	6"	90	205	200	250	6
SRS 9159 PP	7	159,0	6.1/4"	90	205	200	250	6
SRS 9165.1 PP	7	165,1	6.1/2"	90	205	200	250	6
SRS 9168.3 PP	7	168,3	6.5/8"	90	205	200	250	6
SRS 10168.3 PP	8	168,3	6.5/8"	120	265	270	320	6
SRS 10177.8 PP	8	177,8	7"	120	265	270	320	6
SRS 10193.7 PP	8	193,7	7.5/8"	120	265	270	320	6
SRS 10203 PP	8	203,0	-	120	265	270	320	6
SRS 10219.1 PP	8	219,1	8.5/8"	120	265	270	320	6
SRS 10220 PP	8	220,0	-	120	265	270	320	6

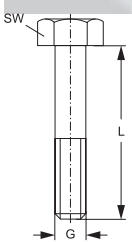
SRS IS 30-100 Hexagon socket screw, single pipe clamp



Design: for single pipe clamps
Series: heavy
Standard: DIN 912 (ISO 4762)
Material: Steel
Surface protection: electro galvanised
Product versions: SRS IS 30-100 V4, Hexagon socket screw, single pipe clamp, Stainless steel 1.4571
Spare parts: C, Configuration of group C
C D, Configuration of group C double

Identification	Clamp size	G	L mm	SW mm
SRS IS 30	1	M 10	40	8
SRS IS 40	2	M 10	60	8
SRS IS 50	3	M 10	70	8
SRS IS 60	4	M 12	100	10
SRS IS 70	5	M 16	130	14
SRS IS 80	6	M 20	190	17
SRS IS 90	7	M 24	220	19
SRS IS 100	8	M 30	300	22

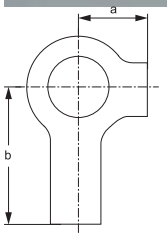
SRS AS 30-100 Hexagon screw for single pipe clamp



Design: for single pipe clamps
Series: heavy
Standard: DIN 931 (ISO 4014) or DIN 933 (ISO 4017)
Material: Steel
Surface protection: electro galvanised
Product versions: SRS AS 30-100 V4, Hexagon screw for single pipe clamp, Stainless steel 1.4571
Spare parts: C D, Configuration of group C double
C, Configuration of group C

Identification	Clamp size	G	L mm	SW mm
SRS AS 30	1	M 10	40	17
SRS AS 40	2	M 10	60	17
SRS AS 50	3	M 10	70	17
SRS AS 60	4	M 12	100	19
SRS AS 70	5	M 16	130	24
SRS AS 80	6	M 20	190	30
SRS AS 90	7	M 24	220	36
SRS AS 100	8	M 30	300	46

SRS SIS 30-100 Lock washer for single pipe clamp

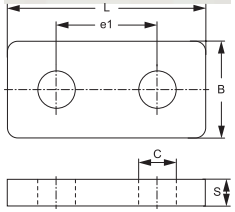


Design: for single pipe clamps
Standard: DIN 3015
Surface protection: electro galvanised
Spare parts: C D, Configuration of group C double
C, Configuration of group C

Series: heavy
Material: Steel

Identification	Clamp size	a mm	b mm
SRS SIS 30	1	13	22
SRS SIS 60	4	15	28
SRS SIS 70	5	18	32
SRS SIS 80	6	21	36

SRS DP 30-100 Cover plate for single pipe clamp



Design: for single pipe clamps
Standard: DIN 3015, Part 2
Surface protection: electro galvanised
Product versions: SRS DP 30-100 V4, Cover plate for single pipe clamp, Stainless steel 1.4571
Spare parts: C, Configuration of group C

Series: heavy
Material: Steel

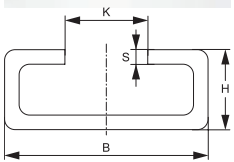
Identification	Clamp size	B mm	C mm	e1 mm	L mm	S mm
SRS DP 30	1	30	11,0	33	55	8
SRS DP 40	2	30	11,0	45	70	8
SRS DP 50	3	30	11,0	60	85	8
SRS DP 60	4	45	14,0	90	115	10
SRS DP 70	5	60	18,0	122	152	10
SRS DP 80	6	80	22,0	168	205	15
SRS DP 90	7	90	28,0	205	250	15
SRS DP 100	8	120	34,0	265	322	25

SRS TS 40 — Mounting rail, single pipe clamp

Design: for single pipe clamps
Standard: DIN 3015
Product versions: **SRS TS 40 VZ,** Mounting rail, single pipe clamp, Steel
SRS TS 40 V4, Mounting rail, single pipe clamp, Stainless steel 1.4571
Spare parts: C, Configuration of group C

Series: heavy
Material: Steel (bright)

Identification	B mm	H mm	K mm	S mm	Length m
SRS TS 40-1	40	22	12,5	5	1
SRS TS 40-2	40	22	12,5	5	2

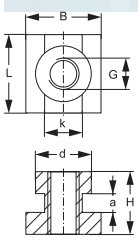


SRS SM 30-60 — Mounting rail nut, single pipe clamp

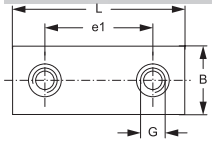
Design: for single pipe clamps
Standard: DIN 3015
Product versions: **SRS SM 30-60 V4,** Mounting rail nut, single pipe clamp, Stainless steel 1.4571
SRS SM 30-60 VZ, Mounting rail nut, single pipe clamp, Steel
Spare parts: C, Configuration of group C

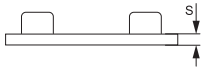
Series: heavy
Material: Steel (bright)

Identification	Clamp size	a mm	B mm	d mm	G	H mm	K mm	L mm
SRS SM 60	4	6	24	19,8	M 12	23	12,0	25



SRS SP 30-100 — Welded on base plate for single pipe clamp

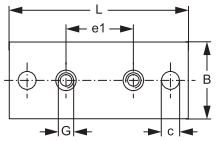


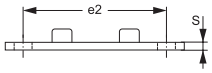


Design: for single pipe clamps
Series: heavy
Standard: DIN 3015, Part 2
Material: Steel
Surface protection: phosphate treated
Product versions: SRS SP 30-100 V4, Welded on base plate for single pipe clamp, Stainless steel 1.4571
SRS SP 30-100 VZ, Welded on base plate for single pipe clamp, Steel
Spare parts: C, Configuration of group C

Identification	Clamp size	B mm	e1 mm	G	L mm	S mm
SRS SP 30	1	30	33	M 10	73	8
SRS SP 40	2	30	45	M 10	84	8
SRS SP 50	3	30	60	M 10	100	8
SRS SP 60	4	45	90	M 12	140	10
SRS SP 70	5	60	122	M 16	180	10
SRS SP 80	6	80	168	M 20	225	15
SRS SP 90	7	90	205	M 24	270	15
SRS SP 100	8	120	265	M 30	340	25

SRS SPL 30-100 — Welded on and screw-on base plate, long

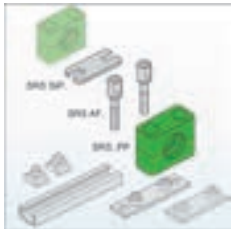




Design: for single pipe clamps
Series: heavy
Standard: DIN 3015, Part 3
Material: Steel
Surface protection: phosphate treated
Spare parts: C, Configuration of group C

Identification	Clamp size	B mm	c mm	e1 mm	e2 mm	G	L mm	S mm
SRS SPL 30	1	30	11	33	85	M 10	113	8
SRS SPL 40	2	30	11	45	97	M 10	125	8
SRS SPL 50	3	30	11	60	112	M 10	140	8
SRS SPL 60	4	45	14	90	160	M 12	190	10
SRS SPL 70	5	60	18	122	205	M 16	240	10
SRS SPL 80	6	80	22	168	270	M 20	310	15
SRS SPL 90	7	90	26	205	320	M 24	370	15
SRS SPL 100	8	120	33	265	390	M 30	450	25

C A — Configuration of group C composition

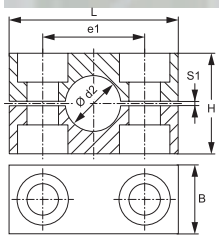


Spare parts: SRS 30-100 PP, Pipe clamp, heavy series
SRS AF 30-100, Stacking bolt for single pipe clamp
SRS SIP, Locking plate for single pipe clamp

Identification

C A

SRS 30-100 PP — Pipe clamp, heavy series



Design: Single pipe clamp
Series: heavy
Temperature min.: -30 °C
Material: Polypropylene
Product versions: SRS 30-100 AL,
SRS 30-100 PA,
SRS 30-100 PP G,
SRS 30-100 VG,
Spare parts: C D, Configuration of group C double
C A, Configuration of group C composition
C, Configuration of group C

Supplementary design information: Inside of clamp with web
Standard: DIN 3015, Part 2
Temperature max.: 90 °C

Identification	Clamp size	External pipe Ø d2 mm	External pipe Ø d2	B mm	e1 mm	H mm	L mm	S1 mm
SRS 3006 PP	1	6,0	-	30	33	32	56	2
SRS 3008 PP	1	8,0	5/16"	30	33	32	56	2
SRS 3010 PP	1	10,0	-	30	33	32	56	2
SRS 3012 PP	1	12,0	-	30	33	32	56	2
SRS 3012.7 PP	1	12,7	1/2"	30	33	32	56	2
SRS 3013.5 PP	1	13,5	-	30	33	32	56	2
SRS 3014 PP	1	14,0	-	30	33	32	56	2
SRS 3015 PP	1	15,0	-	30	33	32	56	2
SRS 3016 PP	1	16,0	5/8"	30	33	32	56	2
SRS 3017.2 PP	1	17,2	-	30	33	32	56	2
SRS 3018 PP	1	18,0	-	30	33	32	56	2
SRS 4019 PP	2	19,0	3/4"	30	45	48	71	2
SRS 4020 PP	2	20,0	-	30	45	48	71	2
SRS 4021.3 PP	2	21,3	-	30	45	48	71	2
SRS 4022 PP	2	22,0	-	30	45	48	71	2
SRS 4023 PP	2	23,0	-	30	45	48	71	2
SRS 4025 PP	2	25,0	1"	30	45	48	71	2
SRS 4026.9 PP	2	26,9	-	30	45	48	71	2
SRS 4028 PP	2	28,0	-	30	45	48	71	2
SRS 4030 PP	2	30,0	-	30	45	48	71	2
SRS 5030 PP	3	30,0	-	30	60	60	86	2

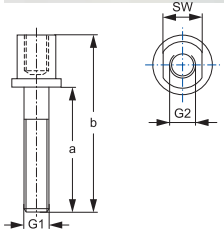
SRS 30-100 PP (Continuation) Pipe clamp, heavy series

Identification	Clamp size	External pipe Ø d2 mm	External pipe Ø d2	B mm	e1 mm	H mm	L mm	S1 mm
SRS 5032 PP	3	32,0	1.1/4"	30	60	60	86	2
SRS 5033.7 PP	3	33,7	-	30	60	60	86	2
SRS 5035 PP	3	35,0	-	30	60	60	86	2
SRS 5038 PP	3	38,0	1.1/2"	30	60	60	86	2
SRS 5040 PP	3	40,0	-	30	60	60	86	2
SRS 5042 PP	3	42,0	-	30	60	60	86	2
SRS 6038 PP	4	38,0	1.1/2"	45	90	90	117	3
SRS 6040 PP	4	40,0	-	45	90	90	117	3
SRS 6042 PP	4	42,0	-	45	90	90	117	3
SRS 6045 PP	4	45,0	-	45	90	90	117	3
SRS 6048.3 PP	4	48,3	-	45	90	90	117	3
SRS 6050 PP	4	50,0	-	45	90	90	117	3
SRS 6051 PP	4	51,0	2"	45	90	90	117	3
SRS 6052 PP	4	52,0	-	45	90	90	117	3
SRS 6055 PP	4	55,0	-	45	90	90	117	3
SRS 6057 PP	4	57,0	2.1/4"	45	90	90	117	3
SRS 6060.3 PP	4	60,3	-	45	90	90	117	3
SRS 6063 PP	4	63,0	2.1/2"	45	90	90	117	3
SRS 6065 PP	4	65,0	-	45	90	90	117	3
SRS 6070 PP	4	70,0	-	45	90	90	117	3
SRS 7070 PP	5	70,0	-	60	122	120	154	5
SRS 7073 PP	5	73,0	-	60	122	120	154	5
SRS 7075 PP	5	75,0	-	60	122	120	154	5
SRS 7076.1 PP	5	76,1	3"	60	122	120	154	5
SRS 7080 PP	5	80,0	-	60	122	120	154	5
SRS 7082.5 PP	5	82,5	3.1/4"	60	122	120	154	5
SRS 7088.9 PP	5	88,9	3.1/2"	60	122	120	154	5
SRS 7090 PP	5	90,0	-	60	122	120	154	5
SRS 8090 PP	6	90,0	-	80	168	170	205	6
SRS 8097 PP	6	97,0	-	80	168	170	205	6
SRS 8100 PP	6	100,0	-	80	168	170	205	6
SRS 8101.6 PP	6	101,6	4"	80	168	170	205	6
SRS 8108 PP	6	108,0	4.1/4"	80	168	170	205	6
SRS 8114.3 PP	6	114,3	4.1/2"	80	168	170	205	6
SRS 8127 PP	6	127,0	5"	80	168	170	205	6
SRS 9127 PP	7	127,0	5"	90	205	200	250	6
SRS 9133 PP	7	133,0	5.1/4"	90	205	200	250	6
SRS 9140 PP	7	140,0	5.1/2"	90	205	200	250	6
SRS 9150 PP	7	150,0	-	90	205	200	250	6
SRS 9152.4 PP	7	152,4	6"	90	205	200	250	6
SRS 9159 PP	7	159,0	6.1/4"	90	205	200	250	6
SRS 9165.1 PP	7	165,1	6.1/2"	90	205	200	250	6
SRS 9168.3 PP	7	168,3	6.5/8"	90	205	200	250	6
SRS 10168.3 PP	8	168,3	6.5/8"	120	265	270	320	6
SRS 10177.8 PP	8	177,8	7"	120	265	270	320	6
SRS 10193.7 PP	8	193,7	7.5/8"	120	265	270	320	6
SRS 10203 PP	8	203,0	-	120	265	270	320	6

SRS 30-100 PP (Continuation) Pipe clamp, heavy series

Identification	Clamp size	External pipe Ø d2 mm	External pipe Ø d2	B mm	e1 mm	H mm	L mm	S1 mm
SRS 10219.1 PP	8	219,1	8.5/8"	120	265	270	320	6
SRS 10220 PP	8	220,0	-	120	265	270	320	6

SRS AF 30-100 Stacking bolt for single pipe clamp

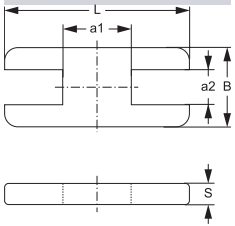


Design: for single pipe clamps
Standard: DIN 3015, Part 2
Surface protection: electro galvanised
Product versions: SRS AF 30-100 V4, Stacking bolt for single pipe clamp, Stainless steel 1.4571
Spare parts: C A, Configuration of group C composition

Series: heavy
Material: Steel

Identification	Clamp size	a mm	b mm	G1 + G2	SW mm
SRS AF 30	1	25	51	M 10	15
SRS AF 40	2	40	65	M 10	15
SRS AF 50	3	50	76	M 10	15
SRS AF 60	4	85	112	M 12	17
SRS AF 70	5	110	146	M 16	21
SRS AF 80	6	155	206	M 20	27
SRS AF 90	7	185	245	M 24	30
SRS AF 100	8	250	330	M 30	36

SRS SIP — Locking plate for single pipe clamp

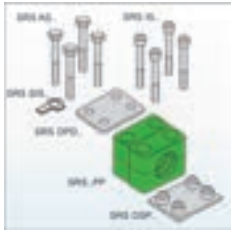


Design: for single pipe clamps
Standard: DIN 3015
Surface protection: electro galvanised
Product versions: SRS SIP V4, Locking plate for single pipe clamp, Stainless steel 1.4571
Spare parts: C A, Configuration of group C composition

Series: heavy
Material: Steel

Identification	a1 mm	a2 mm	B mm	L mm	S mm
SRS SIP 30	14,0	15,5	30	55	8
SRS SIP 40	26,0	15,5	30	70	8
SRS SIP 50	41,0	15,5	30	85	8
SRS SIP 60	69,0	17,5	45	115	10
SRS SIP 70	97,0	21,5	60	152	10
SRS SIP 80	137,0	27,5	80	205	15
SRS SIP 90	169,0	30,5	90	250	15
SRS SIP 100	219,0	36,5	120	320	25

C D — Configuration of group C double

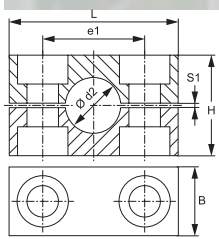


Spare parts: SRS 30-100 PP, Pipe clamp, heavy series
SRS IS 30-100, Hexagon socket screw, single pipe clamp
SRS AS 30-100, Hexagon screw for single pipe clamp
SRS SIS 30-100, Lock washer for single pipe clamp
SRS DPD 30-100, Double cover plate for single pipe clamp
SRS D SP 30-100, Double welded on base plate, single pipe clamp

Identification
C D

SRS 30-100 PP

Pipe clamp, heavy series



Design: Single pipe clamp
Series: heavy
Temperature min.: -30 °C
Material: Polypropylene
Product versions: **SRS 30-100 AL**,
SRS 30-100 PA,
SRS 30-100 PP G,
SRS 30-100 VG,
Spare parts: **C D,** Configuration of group C double
C A, Configuration of group C composition
C, Configuration of group C

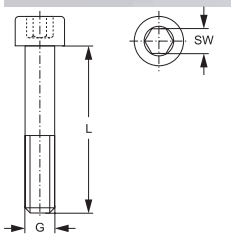
Supplementary design information: Inside of clamp with web
Standard: DIN 3015, Part 2
Temperature max.: 90 °C

Identification	Clamp size	External pipe Ø d2 mm	External pipe Ø d2	B mm	e1 mm	H mm	L mm	S1 mm
SRS 3006 PP	1	6,0	-	30	33	32	56	2
SRS 3008 PP	1	8,0	5/16"	30	33	32	56	2
SRS 3010 PP	1	10,0	-	30	33	32	56	2
SRS 3012 PP	1	12,0	-	30	33	32	56	2
SRS 3012.7 PP	1	12,7	1/2"	30	33	32	56	2
SRS 3013.5 PP	1	13,5	-	30	33	32	56	2
SRS 3014 PP	1	14,0	-	30	33	32	56	2
SRS 3015 PP	1	15,0	-	30	33	32	56	2
SRS 3016 PP	1	16,0	5/8"	30	33	32	56	2
SRS 3017.2 PP	1	17,2	-	30	33	32	56	2
SRS 3018 PP	1	18,0	-	30	33	32	56	2
SRS 4019 PP	2	19,0	3/4"	30	45	48	71	2
SRS 4020 PP	2	20,0	-	30	45	48	71	2
SRS 4021.3 PP	2	21,3	-	30	45	48	71	2
SRS 4022 PP	2	22,0	-	30	45	48	71	2
SRS 4023 PP	2	23,0	-	30	45	48	71	2
SRS 4025 PP	2	25,0	1"	30	45	48	71	2
SRS 4026.9 PP	2	26,9	-	30	45	48	71	2
SRS 4028 PP	2	28,0	-	30	45	48	71	2
SRS 4030 PP	2	30,0	-	30	45	48	71	2
SRS 5030 PP	3	30,0	-	30	60	60	86	2
SRS 5032 PP	3	32,0	1.1/4"	30	60	60	86	2
SRS 5033.7 PP	3	33,7	-	30	60	60	86	2
SRS 5035 PP	3	35,0	-	30	60	60	86	2
SRS 5038 PP	3	38,0	1.1/2"	30	60	60	86	2
SRS 5040 PP	3	40,0	-	30	60	60	86	2
SRS 5042 PP	3	42,0	-	30	60	60	86	2
SRS 6038 PP	4	38,0	1.1/2"	45	90	90	117	3
SRS 6040 PP	4	40,0	-	45	90	90	117	3
SRS 6042 PP	4	42,0	-	45	90	90	117	3
SRS 6045 PP	4	45,0	-	45	90	90	117	3
SRS 6048.3 PP	4	48,3	-	45	90	90	117	3
SRS 6050 PP	4	50,0	-	45	90	90	117	3
SRS 6051 PP	4	51,0	2"	45	90	90	117	3
SRS 6052 PP	4	52,0	-	45	90	90	117	3

SRS 30-100 PP (Continuation) Pipe clamp, heavy series

Identification	Clamp size	External pipe Ø d2 mm	External pipe Ø d2	B mm	e1 mm	H mm	L mm	S1 mm
SRS 6055 PP	4	55,0	-	45	90	90	117	3
SRS 6057 PP	4	57,0	2.1/4"	45	90	90	117	3
SRS 6060.3 PP	4	60,3	-	45	90	90	117	3
SRS 6063 PP	4	63,0	2.1/2"	45	90	90	117	3
SRS 6065 PP	4	65,0	-	45	90	90	117	3
SRS 6070 PP	4	70,0	-	45	90	90	117	3
SRS 7070 PP	5	70,0	-	60	122	120	154	5
SRS 7073 PP	5	73,0	-	60	122	120	154	5
SRS 7075 PP	5	75,0	-	60	122	120	154	5
SRS 7076.1 PP	5	76,1	3"	60	122	120	154	5
SRS 7080 PP	5	80,0	-	60	122	120	154	5
SRS 7082.5 PP	5	82,5	3.1/4"	60	122	120	154	5
SRS 7088.9 PP	5	88,9	3.1/2"	60	122	120	154	5
SRS 7090 PP	5	90,0	-	60	122	120	154	5
SRS 8090 PP	6	90,0	-	80	168	170	205	6
SRS 8097 PP	6	97,0	-	80	168	170	205	6
SRS 8100 PP	6	100,0	-	80	168	170	205	6
SRS 8101.6 PP	6	101,6	4"	80	168	170	205	6
SRS 8108 PP	6	108,0	4.1/4"	80	168	170	205	6
SRS 8114.3 PP	6	114,3	4.1/2"	80	168	170	205	6
SRS 8127 PP	6	127,0	5"	80	168	170	205	6
SRS 9127 PP	7	127,0	5"	90	205	200	250	6
SRS 9133 PP	7	133,0	5.1/4"	90	205	200	250	6
SRS 9140 PP	7	140,0	5.1/2"	90	205	200	250	6
SRS 9150 PP	7	150,0	-	90	205	200	250	6
SRS 9152.4 PP	7	152,4	6"	90	205	200	250	6
SRS 9159 PP	7	159,0	6.1/4"	90	205	200	250	6
SRS 9165.1 PP	7	165,1	6.1/2"	90	205	200	250	6
SRS 9168.3 PP	7	168,3	6.5/8"	90	205	200	250	6
SRS 10168.3 PP	8	168,3	6.5/8"	120	265	270	320	6
SRS 10177.8 PP	8	177,8	7"	120	265	270	320	6
SRS 10193.7 PP	8	193,7	7.5/8"	120	265	270	320	6
SRS 10203 PP	8	203,0	-	120	265	270	320	6
SRS 10219.1 PP	8	219,1	8.5/8"	120	265	270	320	6
SRS 10220 PP	8	220,0	-	120	265	270	320	6

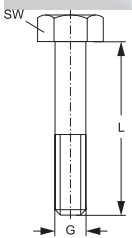
SRS IS 30-100 Hexagon socket screw, single pipe clamp



Design: for single pipe clamps
Series: heavy
Standard: DIN 912 (ISO 4762)
Material: Steel
Surface protection: electro galvanised
Product versions: SRS IS 30-100 V4, Hexagon socket screw, single pipe clamp, Stainless steel 1.4571
Spare parts: C, Configuration of group C
C D, Configuration of group C double

Identification	Clamp size	G	L mm	SW mm
SRS IS 30	1	M 10	40	8
SRS IS 40	2	M 10	60	8
SRS IS 50	3	M 10	70	8
SRS IS 60	4	M 12	100	10
SRS IS 70	5	M 16	130	14
SRS IS 80	6	M 20	190	17
SRS IS 90	7	M 24	220	19
SRS IS 100	8	M 30	300	22

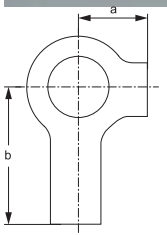
SRS AS 30-100 Hexagon screw for single pipe clamp



Design: for single pipe clamps
Series: heavy
Standard: DIN 931 (ISO 4014) or DIN 933 (ISO 4017)
Material: Steel
Surface protection: electro galvanised
Product versions: SRS AS 30-100 V4, Hexagon screw for single pipe clamp, Stainless steel 1.4571
Spare parts: C D, Configuration of group C double
C, Configuration of group C

Identification	Clamp size	G	L mm	SW mm
SRS AS 30	1	M 10	40	17
SRS AS 40	2	M 10	60	17
SRS AS 50	3	M 10	70	17
SRS AS 60	4	M 12	100	19
SRS AS 70	5	M 16	130	24
SRS AS 80	6	M 20	190	30
SRS AS 90	7	M 24	220	36
SRS AS 100	8	M 30	300	46

SRS SIS 30-100 Lock washer for single pipe clamp

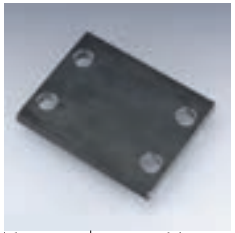


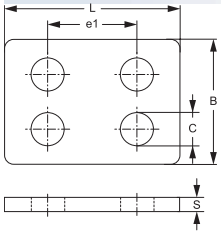
Design: for single pipe clamps
Standard: DIN 3015
Surface protection: electro galvanised
Spare parts: C D, Configuration of group C double
C, Configuration of group C

Series: heavy
Material: Steel

Identification	Clamp size	a mm	b mm
SRS SIS 30	1	13	22
SRS SIS 60	4	15	28
SRS SIS 70	5	18	32
SRS SIS 80	6	21	36

SRS DPD 30-100 Double cover plate for single pipe clamp



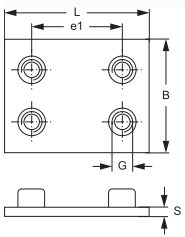


Design: for single pipe clamps
Standard: DIN 3015, Part 2
Surface protection: electro galvanised
Spare parts: C D, Configuration of group C double

Series: heavy
Material: Steel

Identification	Clamp size	B mm	C mm	e1 mm	L mm	S mm
SRS DPD 30	1	60	11,0	33	55	8
SRS DPD 40	2	60	11,0	45	70	8
SRS DPD 50	3	60	11,0	60	85	8
SRS DPD 60	4	90	14,0	90	115	10
SRS DPD 70	5	120	18,0	122	152	10
SRS DPD 80	6	160	24,0	168	205	15
SRS DPD 90	7	180	28,0	205	250	15
SRS DPD 100	8	240	34,0	265	322	25

SRS D SP 30-100 — Double welded on base plate, single pipe clamp

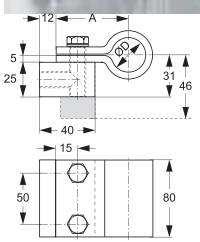


Design: for single pipe clamps
Standard: DIN 3015, Part 2
Surface protection: phosphate treated
Spare parts: C D, Configuration of group C double
C, Configuration of group C

Series: heavy
Material: Steel

Identification	Clamp size	B mm	e1 mm	G	L mm	S mm
SRS D SP 30	1	60	33	M 10	73	8
SRS D SP 40	2	60	45	M 10	84	8
SRS D SP 50	3	60	60	M 10	100	8
SRS D SP 60	4	90	90	M 12	140	10
SRS D SP 70	5	120	122	M 16	180	10
SRS D SP 80	6	160	168	M 20	225	15
SRS D SP 90	7	180	205	M 24	270	15
SRS D SP 100	8	240	265	M 30	340	25

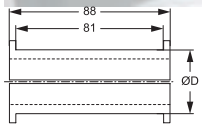
HSRS — Steel pipe clamp

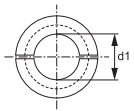


Application: primarily in the construction machinery sector
Accessories: HSRS EE, Elastomer insert for steel pipe clamp

Identification	A mm	Ø D mm
HSRS 25	52,5	25
HSRS 30	55,0	30
HSRS 35	57,5	35
HSRS 38	59,0	38
HSRS 42	61,0	42
HSRS 50	65,0	50

HSRS EE — Elastomer insert for steel pipe clamp





Design: Elastomer insert
Temperature min.: -40 °C
Material: Santoprene 64° Shore A

suitable for: HSRS steel pipe clamps
Temperature max.: 125 °C
Special features: Excellent oil and weather resistance
secure mounting of pipes and hose lines
Improved noise and vibration damping

Accessories: HSRS, Steel pipe clamp

Identification	d1 mm	Ø D mm
HSRS 25-12 EE	12,00	25
HSRS 25-15 EE	15,00	25
HSRS 30-20 EE	20,00	30
HSRS 35-25 EE	25,00	35
HSRS 42-30 EE	30,00	42
HSRS 50-35 EE	35,00	50
HSRS 50-38 EE	38,00	50
HSRS 50-42 EE	42,00	50

2 OK — 2-ear clamp

Application: Hose mountings in low pressure range
Surface protection: electro galvanised
Product versions: 2 OK VC, 2-ear clamp, Steel
2 OK VA, 2-ear clamp, Stainless steel

Material: Steel

Identification	Clamping range (mm)	Band width mm
2 OK 5-7	5 - 7	6,0
2 OK 7-9	7 - 9	6,0
2 OK 9-11	9 - 11	6,5
2 OK 11-13	11 - 13	6,5
2 OK 13-15	13 - 15	7,0
2 OK 14-17	14 - 17	7,0
2 OK 15-18	15 - 18	7,5
2 OK 17-20	17 - 20	7,5
2 OK 18-21	18 - 21	8,0
2 OK 20-23	20 - 23	8,0
2 OK 22-25	22 - 25	8,5
2 OK 23-27	23 - 27	8,5
2 OK 25-28	25 - 28	9,0
2 OK 28-31	28 - 31	9,0
2 OK 31-34	31 - 34	9,5
2 OK 34-37	34 - 37	9,5
2 OK 37-40	37 - 40	10,0

2 OK (Continuation) 2-ear clamp

Identification	Clamping range (mm)	Band width mm
2 OK 40-43	40 - 43	10,0
2 OK 43-46	43 - 46	10,0

ASK M A Hose clamp, mini series

Design: Tensioning screw clamp
Standard: DIN 3017
Surface protection: galvanised
Accessories: SCHRAUBENDR, Screwdriver, flexible

Supplementary design information: Hexagon screw with slot
Material: Steel

Identification	Clamping range (mm)	Band width mm
ASK 06-08 M A	6 - 8	9
ASK 07-09 M A	7 - 9	9
ASK 08-10 M A	8 - 10	9
ASK 09-11 M A	9 - 11	9
ASK 10-12 M A	10 - 12	9
ASK 11-13 M A	11 - 13	9
ASK 12-14 M A	12 - 14	9
ASK 13-15 M A	13 - 15	9
ASK 14-16 M A	14 - 16	9
ASK 15-17 M A	15 - 17	9

ASK Hose clamp

Design: Worm drive hose clamps
Standard: DIN 3017
Surface protection: galvanised
Accessories: SCHRAUBENDR, Screwdriver, flexible

Supplementary design information: Hexagon screw with slot
Material: Steel

Identification	Clamping range (mm)	Band width mm
ASK 08-12	8 - 12	9
ASK 10-16	10 - 16	9
ASK 12-20	12 - 20	9
ASK 16-25	16 - 25	12
ASK 20-32	20 - 32	12
ASK 25-40	25 - 40	12
ASK 35-50		12
ASK 40-60	40 - 60	12
ASK 50-70	50 - 70	12
ASK 60-80	60 - 80	12
ASK 70-90	70 - 90	12
ASK 80-100	80 - 100	12
ASK 90-110	90 - 110	12
ASK 100-120	100 - 120	12
ASK 110-130	110 - 130	12
ASK 120-140	120 - 140	12
ASK 130-150	130 - 150	12

Identification	Clamping range (mm)	Band width mm
ASK 140-160	140 - 160	12
ASK 150-170	150 - 170	12
ASK 150-180	150 - 180	12
ASK 160-180	160 - 180	12
ASK 170-190	170 - 190	12
ASK 180-200	180 - 200	12
ASK 190-210	190 - 210	12
ASK 200-220	200 - 220	12
ASK 210-230	210 - 230	12
ASK 220-240	220 - 240	12
ASK 230-250	230 - 250	12
ASK 240-260	240 - 260	12
ASK 250-270	250 - 270	12
ASK 260-280	260 - 280	12
ASK 270-290	270 - 290	12
ASK 280-300	280 - 300	12
ASK 290-310	290 - 310	12

ASK A Hose clamp

Design: Worm drive hose clamps
Standard: DIN 3017
Surface protection: galvanised
Accessories: SCHRAUBENDR, Screwdriver, flexible

Supplementary design information: Hexagon screw with slot
Material: Steel

Identification	Clamping range (mm)	Band width mm
ASK 08-12 A	8 - 12	9
ASK 08-14 A	8 - 14	9
ASK 10-16 A	10 - 16	9
ASK 11-17 A	11 - 17	9
ASK 12-20 A	12 - 20	9
ASK 13-20 A	13 - 20	9
ASK 15-24 A	15 - 24	12
ASK 16-25 A	16 - 25	12
ASK 19-28 A	19 - 28	12
ASK 20-32 A	20 - 32	12
ASK 22-32 A	22 - 32	12
ASK 25-40 A	25 - 40	12
ASK 32-44 A	32 - 44	12
ASK 32-50 A	32 - 50	12
ASK 38-50 A	38 - 50	12
ASK 40-60 A	40 - 60	12
ASK 44-56 A	44 - 56	12
ASK 50-70 A	50 - 70	12
ASK 58-75 A	58 - 75	12
ASK 60-80 A	60 - 80	12
ASK 68-85 A	68 - 85	12
ASK 70-90 A	70 - 90	12
ASK 77-95 A	77 - 95	12
ASK 80-100 A	80 - 100	12
ASK 87-112 A	87 - 112	12
ASK 90-110 A	90 - 110	12
ASK 100-120 A	100 - 120	12

Identification	Clamping range (mm)	Band width mm
ASK 104-138 A	104 - 138	12
ASK 110-130 A	110 - 130	12
ASK 120-140 A	120 - 140	12
ASK 130-150 A	130 - 150	12
ASK 130-165 A	130 - 65	12
ASK 140-160 A	140 - 160	12
ASK 150-170 A	150 - 170	12
ASK 150-180 A	150 - 180	12
ASK 160-180 A	160 - 180	12
ASK 170-190 A	170 - 190	12
ASK 175-205 A	175 - 205	12
ASK 180-200 A	180 - 200	12
ASK 190-210 A	190 - 210	12
ASK 200-220 A	200 - 220	12
ASK 200-231 A	200 - 231	12
ASK 210-230 A	210 - 230	12
ASK 220-240 A	220 - 240	12
ASK 226-256 A	226 - 256	12
ASK 230-250 A	230 - 250	12
ASK 240-260 A	240 - 260	12
ASK 250-270 A	250 - 270	12
ASK 251-282 A	251 - 282	12
ASK 260-280 A	260 - 280	12
ASK 270-290 A	270 - 290	12
ASK 277-307 A	277 - 307	12
ASK 280-300 A	280 - 300	12
ASK 290-310 A	290 - 310	12

ESK — Hose clamp

Design: Worm drive hose clamps
Material: Stainless steel 1.4301
Product versions : ESK W2, Hose clamp, Stainless steel 1.4016
ESK W5, Hose clamp, Stainless steel 1.4436
Accessories: SCHRAUBENDR, Screwdriver, flexible

Supplementary design information: Hexagon screw with slot

Identification	Clamping range (mm)	Band width mm
ESK 11-17	11 - 17	9
ESK 15-24	15 - 24	9
ESK 19-28	19 - 28	12
ESK 22-32	22 - 32	12
ESK 26-38	26 - 38	12
ESK 32-44	32 - 44	12
ESK 38-50	38 - 50	12
ESK 44-56	44 - 56	12
ESK 50-65	50 - 65	12
ESK 58-75	58 - 75	12
ESK 68-85	68 - 85	12

Identification	Clamping range (mm)	Band width mm
ESK 77-95	77 - 95	12
ESK 87-112	87 - 112	12
ESK 104-138	104 - 138	12
ESK 136-165	136 - 165	12
ESK 150-180	150 - 180	12
ESK 175-205	175 - 205	12
ESK 200-231	200 - 231	12
ESK 226-256	226 - 256	12
ESK 251-282	251 - 282	12
ESK 277-307	277 - 307	12

SCHELLEN SET A — DIN clamp set

Design: Worm drive hose clamps
Included in scope of supply: 135 parts
Surface protection: galvanised

Supplementary design information: Hexagon screw with slot
Material: Steel

Identification	Dimension (mm)
SCHELLEN SET A	340 x 240 x 50

Consisting of:
10 x ASK 06-08 M 10 x ASK 14-16 M 10 x ASK 15-24
20 x ASK 08-10 M 10 x ASK 15-17 M 5 x ASK 19-28
20 x ASK 10-12 M 10 x ASK 11-17 5 x ASK 22-32
10 x ASK 12-14 M 20 x ASK 13-20 5 x ASK 26-28
1 x screwdriver 30

SCHELLEN SET B — DIN clamp set

Design: Worm drive hose clamps
Included in scope of supply: 265 parts
Surface protection: galvanised

Supplementary design information: Hexagon screw with slot
Material: Steel

Identification	Dimension (mm)
SCHELLEN SET B	400 x 270 x 85

Consisting of:
50 x ASK 08-12 25 x ASK 16-25 15 x ASK 32-50
50 x ASK 10-16 25 x ASK 20-32 10 x ASK 40-60
50 x ASK 12-20 20 x ASK 25-40 20 x ASK 50-70
1 x screwdriver 30

MRS — Hinge bolt clamp

Application: for suction and return hoses
Standard: similar to DIN 3017
Surface protection: electro galvanised
Product versions : MRSS, Hinge bolt clamp, Stainless steel 1.4301

Design: Hinge bolt clamp
Material: Steel

Identification	Clamping range (mm)	Band width mm
MRS 17-19	17 - 19	18
MRS 20-22	20 - 22	18
MRS 21-23	21 - 23	18
MRS 23-25	23 - 25	18
MRS 25-27	25 - 27	18
MRS 26-28	26 - 28	18
MRS 29-31	29 - 31	18
MRS 32-35	32 - 35	20
MRS 36-39	36 - 39	20
MRS 40-43	40 - 43	20
MRS 44-47	44 - 47	22
MRS 48-51	48 - 51	20
MRS 52-55	52 - 55	22
MRS 56-59	56 - 59	20
MRS 60-63	60 - 63	20
MRS 64-67	64 - 67	22
MRS 68-73	68 - 73	24
MRS 74-79	74 - 79	24
MRS 80-85	80 - 85	24
MRS 86-91	86 - 91	24

Identification	Clamping range (mm)	Band width mm
MRS 92-97	92 - 97	24
MRS 98-103	98 - 103	24
MRS 104-112	104 - 112	24
MRS 113-121	113 - 121	24
MRS 122-130	122 - 130	25
MRS 131-139	131 - 139	25
MRS 140-148	140 - 148	25
MRS 149-161	149 - 161	25
MRS 162-174	162 - 174	25
MRS 175-187	175 - 187	25
MRS 188-200	188 - 200	25
MRS 201-213	201 - 213	25
MRS 214-226	214 - 226	25
MRS 227-239	227 - 239	25
MRS 240-252	240 - 252	25
MRS 253-265	253 - 265	30
MRS 266-278	266 - 278	30
MRS 279-291	279 - 291	30
MRS 292-304	292 - 304	30

SBS 12 / 15 / 20 / 25 — Clamping jaw

Application: for rubber and plastic hoses
Supplementary design information: 1-piece with clamping jaw tightening to DIN 3017
Surface protection: electro galvanised

Design: Hose clamp
Material: Steel

Identification	Minimum Ø mm	Band width mm
SBS 12-18	18	12
SBS 12-21	21	12
SBS 12-22	22	12
SBS 12-24	28	12
SBS 12-26	26	12
SBS 12-28	28	12
SBS 12-30	30	12
SBS 12-32	32	12
SBS 12-34	34	12
SBS 12-36	36	12
SBS 12-38	38	12
SBS 12-40	40	12
SBS 15-21	21	15
SBS 15-22	22	15

Identification	Minimum Ø mm	Band width mm
SBS 20-50	50	20
SBS 20-52	52	20
SBS 20-54	54	20
SBS 20-56	56	20
SBS 20-58	58	20
SBS 20-60	60	20
SBS 20-62	62	20
SBS 20-64	64	20
SBS 20-66	66	20
SBS 20-68	68	20
SBS 20-70	70	20
SBS 20-72	72	20
SBS 20-74	74	20
SBS 20-76	76	20

SBS 12 / 15 / 20 / 25 (Continuation) Clamping jaw

Identification	Minimum Ø mm	Band width mm
SBS 15-24	24	15
SBS 15-25	25	15
SBS 15-26	26	15
SBS 15-28	28	15
SBS 15-30	30	15
SBS 15-32	32	15
SBS 15-34	34	15
SBS 15-36	36	15
SBS 15-38	38	15
SBS 15-40	40	15
SBS 15-42	42	15
SBS 15-44	44	15
SBS 15-46	46	15
SBS 15-48	48	15
SBS 15-50	50	15
SBS 15-52	52	15
SBS 15-54	54	15
SBS 15-56	56	15
SBS 15-58	58	15
SBS 15-60	60	15
SBS 15-62	62	15
SBS 15-64	64	15
SBS 15-66	66	15
SBS 15-68	68	15
SBS 15-70	70	15
SBS 15-72	72	15
SBS 15-74	74	15
SBS 15-76	76	15
SBS 15-78	78	15
SBS 15-80	80	15
SBS 15-82	82	15
SBS 15-84	84	15
SBS 15-86	86	15
SBS 15-88	88	15
SBS 15-90	90	15
SBS 20-25	25	20
SBS 20-28	28	20
SBS 20-30	30	20
SBS 20-32	32	20
SBS 20-34	34	20
SBS 20-36	36	20
SBS 20-38	38	20
SBS 20-40	40	20
SBS 20-42	42	20
SBS 20-44	44	20
SBS 20-46	46	20
SBS 20-48	48	20

Identification	Minimum Ø mm	Band width mm
SBS 20-78	78	20
SBS 20-80	80	20
SBS 20-82	82	20
SBS 20-84	84	20
SBS 20-86	86	20
SBS 20-88	88	20
SBS 20-90	90	20
SBS 20-92	92	20
SBS 20-94	94	20
SBS 20-96	96	20
SBS 20-98	98	20
SBS 20-100	100	20
SBS 25-32	32	25
SBS 25-34	34	25
SBS 25-36	36	25
SBS 25-38	38	25
SBS 25-40	40	25
SBS 25-42	42	25
SBS 25-44	44	25
SBS 25-46	46	25
SBS 25-48	48	25
SBS 25-50	50	25
SBS 25-52	52	25
SBS 25-54	54	25
SBS 25-56	56	25
SBS 25-58	58	25
SBS 25-60	60	25
SBS 25-62	62	25
SBS 25-64	64	25
SBS 25-66	66	25
SBS 25-68	68	25
SBS 25-70	70	25
SBS 25-72	72	25
SBS 25-74	74	25
SBS 25-76	76	25
SBS 25-78	78	25
SBS 25-80	80	25
SBS 25-82	82	25
SBS 25-84	84	25
SBS 25-86	86	25
SBS 25-88	88	25
SBS 25-90	90	25
SBS 25-92	92	25
SBS 25-94	94	25
SBS 25-96	96	25
SBS 25-98	98	25
SBS 25-100	100	25

KSKL (LZ) Hose clamp

Design: 2 piece hose clamps
Material: Malleable cast iron

Supplementary design information: with loose tongues
Surface protection: electro galvanised

Identification	Clamping range (mm)	Width mm	Working pressure bar
KSKL 22-29	22 - 29	61,5	PN 16
KSKL 28-34	28 - 34	71,0	PN 16
KSKL 32-40	32 - 40	81,0	PN 16
KSKL 39-49	39 - 49	92,5	PN 16
KSKL 48-60	48 - 60	105,0	PN 16
KSKL 60-76	60 - 76	115,0	PN 16
KSKL 77-94	77 - 94	150,5	PN 16
KSKL 94-115	94 - 115	163,0	PN 16
KSKL 115-145	115 - 145	198,0	PN 16

KSKL SK Hose clamp with safety claw

Design: 2 piece hose clamps
Material: Malleable cast iron

Supplementary design information: with loose tongues and safety claws
Surface protection: electro galvanised

Identification	Clamping range (mm)	Width mm	Working pressure bar
KSKL 22-29 SK	22 - 29	63	PN 25
KSKL 28-32 SK	28 - 32	70	PN 25
KSKL 35-42 SK	35 - 42	84	PN 25
KSKL 42-45 SK	42 - 45	92	PN 25
KSKL 45-53 SK	45 - 53	106	PN 25
KSKL 55-60 SK	55 - 60	117	PN 25
KSKL 60-73 SK	60 - 73	117	PN 25
KSKL 86-102 SK	86 - 102	154	PN 25

NRS (20 mm) Retaining clamp

Application: for mounting pipes, hoses and cables
Supplementary design information: with rubber profile
Material: Steel
Product versions : **NRS W4 (20 mm),** Retaining clamp, Chrome nickel steel (1.4301)
NRS (9 mm), Retaining clamp, Steel
NRS (12 mm), Retaining clamp, Steel
NRS W4 (12 mm), Retaining clamp, Chrome nickel steel (1.4301)
NRS (15 mm), Retaining clamp, Steel
NRS W4 (15 mm), Retaining clamp, Chrome nickel steel (1.4301)
NRS (25 mm), Retaining clamp, Steel

Design: Pipe clamp
Standard: DIN 3016
Surface protection: galvanised

Identification	Minimum Ø mm	Band width mm	Hole Ø mm
NRS 10-20	10	20	8,4
NRS 11-20	11	20	8,4
NRS 12-20	12	20	8,4
NRS 13-20	13	20	8,4
NRS 14-20	14	20	8,4
NRS 15-20	15	20	8,4
NRS 16-20	16	20	8,4
NRS 17-20	17	20	8,4
NRS 18-20	18	20	8,4
NRS 19-20	19	20	8,4
NRS 20-20	20	20	8,4
NRS 21-20	21	20	8,4
NRS 22-20	22	20	8,4
NRS 23-20	23	20	8,4
NRS 24-20	24	20	8,4
NRS 25-20	25	20	8,4
NRS 26-20	26	20	8,4
NRS 27-20	27	20	8,4
NRS 28-20	28	20	8,4
NRS 29-20	29	20	8,4
NRS 30-20	30	20	8,4
NRS 31-20	31	20	8,4
NRS 32-20	32	20	8,4
NRS 33-20	33	20	8,4
NRS 34-20	34	20	8,4

Identification	Minimum Ø mm	Band width mm	Hole Ø mm
NRS 35-20	35	20	8,4
NRS 36-20	36	20	8,4
NRS 37-20	37	20	8,4
NRS 38-20	38	20	8,4
NRS 39-20	39	20	8,4
NRS 40-20	40	20	8,4
NRS 41-20	41	20	8,4
NRS 42-20	42	20	8,4
NRS 43-20	43	20	8,4
NRS 44-20	44	20	8,4
NRS 45-20	45	20	8,4
NRS 46-20	46	20	8,4
NRS 47-20	47	20	8,4
NRS 48-20	48	20	8,4
NRS 49-20	49	20	8,4
NRS 50-20	50	20	8,4
NRS 51-20	51	20	8,4
NRS 54-20	54	20	8,4
NRS 57-20	57	20	8,4
NRS 60-20	60	20	8,4
NRS 65-20	64	20	8,4
NRS 80-20	80	20	8,4
NRS 90-20	90	20	8,4
NRS 118-20	118	20	8,4

The rubber profile dampens vibrations and impacts and prevents scratching.

SCHRAUBENDR Screwdriver, flexible

Design: Screwdrivers for clamps
Material: Chrome vanadium
Accessories: **ASK,** Hose clamp
ESK, Hose clamp
ASK M A, Hose clamp, mini series
ASK A, Hose clamp

Supplementary design information: Flexible

Identification	for width across flat mm
SCHRAUBENDR 30	7

Hose technology

KP 100 (1SC) — HD hose in compact design

Application: Medium pressure circuits with restricted installation spaces
Pre-control hoses
Return hoses
Special features: narrow bending radius
Standard: EN 857 1 SC
Inner layer: oil resistant synthetic rubber
Insert: one high tensile steel wire braided insert

Outer layer: oil resistant and weatherproof synthetic rubber
Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Elongation: + 2 % to - 4 %
Media: Mineral oil
Polyglycol based oil
Water (0°C to + 70°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Insert diameter min. mm	Insert diameter max. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
KP 106	6	4	1/4"	6,1	6,9	9,6	10,8	13,5	225	450	900	75
KP 108	8	5	5/16"	7,7	8,5	10,9	12,1	14,5	215	430	860	85
KP 110	10	6	3/8"	9,3	10,1	12,7	14,5	16,9	180	360	720	90
KP 113	12	8	1/2"	12,3	13,5	15,9	18,1	20,4	160	320	640	130
KP 116	16	10	5/8"	15,5	16,7	19,8	21,0	23,0	130	260	520	150
KP 120	19	12	3/4"	18,6	19,8	23,2	24,4	26,7	105	210	420	180
KP 125	25	16	1"	25,0	26,4	30,7	31,9	34,9	88	176	352	230

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

KP 100 P (1SC) — HD hose, compact, Pilot

Application: Medium pressure circuits with restricted installation spaces
Pre-control hoses
Return hoses
Special features: narrow bending radius
kink resistant
Inner layer: oil resistant synthetic rubber
Insert: one high tensile steel wire braided insert
Outer layer: environmentally safe synthetic rubber

Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Media: Mineral oil
Polyglycol based oil
Water (0°C to + 70°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
KP 106 P	6	4	1/4"	6,4	11,5	120	480	25
KP 108 P	8	5	5/16"	7,9	13,1	120	480	30
KP 110 P	10	6	3/8"	9,5	14,8	100	400	40
KP 113 P	12	8	1/2"	12,7	18,0	100	400	50

DN = Nominal diameter, nominal width

KP 200 (2SC)

HD hose in compact design

Application: Medium pressure circuits with restricted installation spaces
Special features: narrow bending radius
Standard: EN 857 2 SC
Inner layer: oil resistant synthetic rubber
Insert: two high tensile steel wire braided inserts

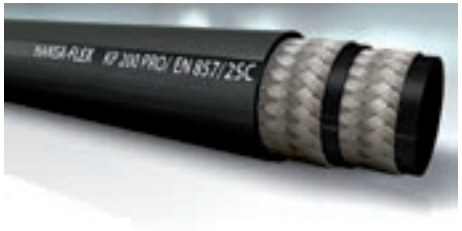
Outer layer: oil resistant and weatherproof synthetic rubber
Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Elongation: + 2 % to - 4 %
Media: Mineral oil
Polyglycol based oil
Water (0°C to + 70°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Insert diameter min. mm	Insert diameter max. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
KP 206	6	4	1/4"	6,1	6,9	10,6	11,7	14,2	400	800	1600	75
KP 208	8	5	5/16"	7,7	8,5	12,1	13,3	16,0	350	700	1400	85
KP 210	10	6	3/8"	9,3	10,1	14,4	15,6	18,3	330	660	1320	90
KP 213	12	8	1/2"	12,3	13,5	17,5	19,1	21,5	275	550	1100	130
KP 216	16	10	5/8"	15,5	16,7	20,5	22,3	24,7	250	500	1000	170
KP 220	19	12	3/4"	18,6	19,8	24,6	26,4	28,6	215	430	860	200
KP 225	25	16	1"	25,0	26,4	32,5	34,3	36,6	165	330	660	250

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

KP 200 PRO (2SC)

HD hose, compact, abrasion resistant



Application: Medium pressure circuits with restricted installation spaces and high abrasion.
Special features: narrow bending radius
extremely abrasion resistant top cover
Standard: EN 857 2 SC
Inner layer: oil resistant synthetic rubber
Insert: two high tensile steel wire braided inserts

Outer layer: synthetic rubber with additional plastic cover, with more than 300 x the abrasion properties of standard outer covers
Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Elongation: + 2 % to - 4 %
Media: Mineral oil
Polyglycol based oil
Water (0°C to + 70°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
KP 206 PRO	6	4	1/4"	6,4	13,7	400	800	1600	75
KP 208 PRO	8	5	5/16"	7,9	15,6	350	700	1400	85
KP 210 PRO	10	6	3/8"	9,5	17,8	330	660	1320	90
KP 213 PRO	12	8	1/2"	12,7	21,5	275	550	1100	130
KP 216 PRO	16	10	5/8"	15,9	25,1	250	500	1000	170
KP 220 PRO	19	12	3/4"	19,4	28,6	215	430	860	200
KP 225 PRO	25	16	1"	25,7	34,9	165	330	660	250

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

KP 200 NO (2SC) — Compact hose

Application: Medium pressure circuits with restricted installation spaces and extreme environmental conditions
Standard: EN 857 2 SC
Inner layer: oil resistant synthetic rubber
Insert: Two high-tensile steel wire braids
Outer layer: synthetic rubber with high ozone, abrasion, and weather resistance

Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Elongation: + 2 % to - 4 %

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
KP 206 NO	6	4	1/4"	6,4	14,0	400	800	1600	75
KP 208 NO	8	5	5/16"	7,9	15,6	350	700	1400	85
KP 210 NO	10	6	3/8"	9,5	17,8	330	660	1320	90
KP 213 NO	12	8	1/2"	12,7	21,3	275	550	1100	130

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

KP 200 S — HD hose in compact design

Application: Medium pressure circuits with restricted installation spaces
Special features: Pulse-tested with up to 1 million cycles!
Standard: exceeds EN 857 2SC
Inner layer: oil resistant synthetic rubber
Insert: two high tensile steel wire braided inserts

Outer layer: oil resistant and weatherproof synthetic rubber
Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Media: Glycol
Water-oil emulsions
Water (0°C to + 70°C)
Mineral oil

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
KP 206 S	6	4	1/4"	6,4	13,4	450	900	1800	45
KP 208 S	8	5	5/16"	7,9	15,0	420	840	1680	60
KP 210 S	10	6	3/8"	9,5	17,4	385	770	1540	70
KP 213 S	12	8	1/2"	12,7	20,6	345	690	1380	90
KP 216 S	16	10	5/8"	15,9	23,7	290	580	1160	130
KP 220 S	19	12	3/4"	19,0	27,7	280	560	1120	160
KP 225 S	25	16	1"	25,4	35,6	200	400	800	210

DN = Nominal diameter, nominal width

KP 400 — Compact hose

Special features: Medium and high pressure circuit with restricted installation space
Standard: SAE 100 R 12
Inner layer: oil resistant synthetic rubber
Insert: four maximum strength steel wire spiral layers
Outer layer: synthetic rubber with high ozone, abrasion, and weather resistance

Colour: black
Temperature min.: -40 °C
Temperature max.: 121 °C
Media: Mineral oil
Glycol
Water-glycol emulsions
Water (0°C to + 70°C)

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
KP 410	10	6	3/8"	9,5	20,3	280	560	1120	65
KP 413	12	8	1/2"	12,7	23,8	280	560	1120	90
KP 416	16	10	5/8"	15,9	27,4	280	560	1120	100
KP 420	19	12	3/4"	19,0	30,7	280	560	1120	120
KP 425	25	16	1"	25,4	38,0	280	560	1120	155

DN = Nominal diameter, nominal width

HD 100 (1SN) — HD hose

Application: Low and medium high pressure circuits
Return hoses
Standard: EN 853 1 SN
Inner layer: oil resistant synthetic rubber
Insert: one high tensile steel wire braided insert
Outer layer: synthetic rubber with high temperature, ozone and weather resistance

Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Elongation: + 2 % to - 4 %
Media: Mineral oil
Polyglycol based oil
Water (0°C to + 70°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Insert diameter min. mm	Insert diameter max. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 104	5	3	3/16"	4,6	5,4	9,0	10,0	12,5	250	500	1000	90
HD 106	6	4	1/4"	6,2	7,0	10,6	11,6	14,1	225	450	900	100
HD 108	8	5	5/16"	7,7	8,5	12,1	13,3	15,7	215	430	850	115
HD 110	10	6	3/8"	9,3	10,1	14,5	15,7	18,1	180	360	720	130
HD 113	12	8	1/2"	12,3	13,5	17,5	19,1	21,4	160	320	640	180
HD 116	16	10	5/8"	15,5	16,7	20,6	22,2	24,5	130	260	520	200
HD 120	19	12	3/4"	18,6	19,8	24,6	26,2	28,5	105	210	420	240
HD 125	25	16	1"	25,0	26,4	32,5	34,1	36,6	88	175	350	300
HD 132	31	20	1.1/4"	31,4	33,0	39,3	41,7	44,8	63	150	250	420
HD 140	38	24	1.1/2"	37,7	39,3	45,6	48,0	52,1	50	100	200	500
HD 150	51	32	2"	50,4	52,0	58,7	61,7	65,5	40	80	160	630

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

HD 100 T (1SN)

HD hose, high thermal resistance

Application: Low and medium pressure circuits with extreme temperatures (e.g. foundries, compressors)
Hydraulics in mechanical engineering
Special features: outstanding ozone, weather, UV and temperature resistance
Standard: EN 853 1 SN
Inner layer: oil resistant synthetic rubber
Insert: one high tensile steel wire braided insert

Outer layer: synthetic rubber with high temperature, ozone and weather resistance
Colour: blue
Temperature min.: -55 °C
Temperature max.: 135 °C
Elongation: + 2 % to - 4 %
Media: Mineral oil
Gear oil
Glycol and polyglycol
Air-oil vapour
Water-oil emulsion (0°C to +100°C)

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Insert diameter min. mm	Insert diameter max. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 106 T	6	4	1/4"	6,2	7,0	10,6	11,6	14,1	225	450	900	100
HD 108 T	8	5	5/16"	7,7	8,5	12,1	13,3	15,7	215	430	850	115
HD 110 T	10	6	3/8"	9,3	10,1	14,5	15,7	18,1	180	360	720	130
HD 113 T	12	8	1/2"	12,3	13,5	17,5	19,1	21,4	160	320	640	180
HD 116 T	16	10	5/8"	15,5	16,7	20,6	22,2	24,5	130	260	520	200
HD 120 T	19	12	3/4"	18,6	19,8	24,6	26,2	28,5	105	210	420	240
HD 125 T	25	16	1"	25,0	26,4	32,5	34,1	36,6	88	175	350	300

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.Operation with compressed air requires a perforated outer cover.

HD 200 (2SN)

HD hose

Application: medium high pressure circuits
Standard: EN 853 2 SN
Inner layer: oil resistant synthetic rubber
Insert: two high tensile steel wire braided inserts
Outer layer: synthetic rubber with high temperature, ozone and weather resistance

Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Elongation: + 2 % to - 4 %
Media: Mineral oil
Polyglycol based oil
Water (0°C to + 70°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Insert diameter min. mm	Insert diameter max. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 204	5	3	3/16"	4,6	5,4	10,6	11,6	14,1	415	830	1650	90
HD 206	6	4	1/4"	6,2	7,0	12,1	13,3	15,7	400	800	1600	100
HD 208	8	5	5/16"	7,7	8,5	13,7	14,9	17,3	350	700	1400	115
HD 210	10	6	3/8"	9,3	10,1	16,1	17,3	19,7	330	660	1320	130
HD 213	12	8	1/2"	12,3	13,5	19,0	20,6	23,0	275	550	1100	180
HD 216	16	10	5/8"	15,5	16,7	22,2	23,8	26,2	250	500	1000	200
HD 220	19	12	3/4"	18,6	19,8	26,2	27,8	30,1	215	430	850	240
HD 225	25	16	1"	25,0	26,4	34,1	35,7	38,9	165	325	650	300
HD 232	31	20	1.1/4"	31,4	33,0	43,3	45,7	49,5	125	250	500	420

DN = Nominal diameter, nominal width

HD 200 (2SN) (Continuation) HD hose

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Insert diameter min. mm	Insert diameter max. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 240	38	24	1.1/2"	37,7	39,3	49,6	52,0	55,9	90	180	360	500
HD 250	51	32	2"	50,4	52,0	62,3	64,7	68,6	80	160	320	630
HD 260	60	40	2.3/8"	59,6	61,2	67,4	70,2	73,1	90	180	360	630
HD 276	76	48	3"	75,6	77,2	85,4	88,4	92,6	45	90	180	912

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

HD 200 S (2SN) HD hose, harsh conditions

Application: medium high pressure range under extreme usage conditions.
Standard: exceeds EN 853 2SN
Inner layer: oil resistant synthetic rubber
Insert: two high tensile steel wire braided inserts
Outer layer: oil resistant and weatherproof synthetic rubber

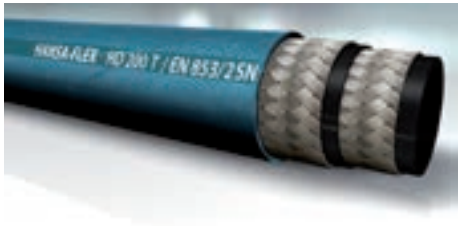
Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Media: Glycol
Water-oil emulsion (0°C to +100°C)
Water (0°C to + 70°C)
Mineral oil

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 213 S	12	8	1/2"	12,7	22,0	380	760	1520	130
HD 216 S	16	10	5/8"	15,9	24,7	350	700	1400	180
HD 220 S	19	12	3/4"	19,0	29,3	310	620	1240	240
HD 225 S	25	16	1"	25,4	35,6	230	460	920	240
HD 232 S	31	20	1.1/4"	31,8	47,6	175	350	700	419

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

HD 200 T (2SN)

HD hose, high thermal resistance



Application: Low and medium pressure circuits with extreme temperatures (e.g. foundries, compressors)
Hydraulics in mechanical engineering
Special features: outstanding ozone, weather, UV and temperature resistance
Standard: EN 853 2 SN
Inner layer: oil resistant synthetic rubber
Insert: two high tensile steel wire braided inserts

Outer layer: synthetic rubber with high temperature, ozone and weather resistance
Colour: blue
Temperature min.: -55 °C
Temperature max.: 135 °C
Elongation: + 2 % to - 4 %
Media: Mineral oil
Gear oil
Glycol and polyglycol
Air-oil vapour
Water-oil emulsion (0°C to +100°C)

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Insert diameter min. mm	Insert diameter max. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 206 T	6	4	1/4"	6,2	7,0	12,1	13,3	15,7	400	800	1600	100
HD 208 T	8	5	5/16"	7,7	8,5	13,7	14,9	17,3	350	700	1400	115
HD 210 T	10	6	3/8"	9,3	10,1	16,1	17,3	19,7	330	660	1320	130
HD 213 T	12	8	1/2"	12,3	13,5	19,0	20,6	23,0	275	550	1100	180
HD 216 T	16	10	5/8"	15,5	16,7	22,2	23,8	26,2	250	500	1000	200
HD 220 T	19	12	3/4"	18,6	19,8	26,2	27,8	30,1	215	430	850	240
HD 225 T	25	16	1"	25,0	26,4	34,1	35,7	38,9	165	325	650	300
HD 232 T	31	20	1.1/4"	31,4	33,0	43,3	45,7	49,5	125	250	500	420
HD 240 T	38	24	1.1/2"	37,7	39,3	49,6	52,0	55,9	90	180	360	500
HD 250 T	51	32	2"	50,4	52,0	62,3	64,7	68,6	80	160	320	630

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.Operation with compressed air requires a perforated outer cover.

HD 400 (4SP)

HD hose

Application: High pressure circuits
Standard: EN 856 4 SP
Inner layer: oil resistant synthetic rubber
Insert: four high tensile steel wire spiral inserts
Outer layer: synthetic rubber with high temperature, ozone and abrasion resistance

Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Elongation: + 2 % to - 4 %
Media: Mineral oil
Glycol
Water (0°C to + 70°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Insert diameter min. mm	Insert diameter max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 406	6	4	1/4"	6,2	7,0	14,1	15,3	17,1	18,7	450	900	1800	150
HD 410	10	6	3/8"	9,3	10,1	16,9	18,1	20,6	22,2	445	890	1780	180
HD 413	12	8	1/2"	12,3	13,5	19,4	21,0	23,8	25,4	415	830	1660	230
HD 416	16	10	5/8"	15,5	16,7	23,0	24,6	27,4	29,0	350	700	1400	250
HD 420	19	12	3/4"	18,5	19,8	27,4	29,0	31,4	33,0	350	700	1400	300

DN = Nominal diameter, nominal width

HD 400 (4SP) (Continuation) HD hose

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Insert diameter min. mm	Insert diameter max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 425	25	16	1"	25,0	26,4	34,5	36,1	38,5	40,9	280	560	1120	340
HD 432	31	20	1.1/4"	31,4	33,0	45,0	47,0	49,2	52,4	210	420	840	460

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

HD 500 (4SH) HD hose

Application: High pressure circuits
Standard: EN 856 4 SH
Inner layer: oil resistant synthetic rubber
Insert: four high tensile steel wire spiral inserts
Outer layer: synthetic rubber with high temperature, ozone and abrasion resistance

Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Elongation: + 2 % to - 4 %
Media: Mineral oil
Glycol
Water (0°C to + 70°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Insert diameter min. mm	Insert diameter max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 520	19	12	3/4"	18,6	19,8	27,6	29,2	31,4	33,0	420	840	1680	280
HD 525	25	16	1"	25,0	26,4	34,4	36,0	37,5	39,9	380	760	1520	340
HD 532	31	20	1.1/4"	31,4	33,0	40,9	42,9	43,9	47,1	325	650	1300	460
HD 540	38	24	1.1/2"	37,7	39,3	47,8	49,8	51,9	55,1	290	580	1160	560
HD 550	51	32	2"	50,4	52,0	62,2	64,2	66,5	69,7	250	500	1000	700

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

HD 600 (R13)

HD hose

Application: High pressure circuits with high loads
hydrostatic drives
Standard: EN 856 R 13
Inner layer: oil resistant synthetic rubber
Insert: six high tensile steel wire spiral inserts
Outer layer: synthetic rubber with high temperature, ozone and abrasion resistance

Colour: black
Temperature min.: -40 °C
Temperature max.: 121 °C
Elongation: + 2 % to - 2 %
Media: Mineral oil
Glycol
Water (0°C to + 70°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Insert diameter min. mm	Insert diameter max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 650	51	32	2"	50,4	52,0	66,9	69,3	69,5	72,7	345	690	1379	630

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

HD 700 (R15)

HD hose

Application: High pressure circuits with high loads
hydrostatic gearboxes
Shipbuilding
Standard: SAE 100 R 15
Inner layer: oil resistant synthetic rubber
Insert: four (up to NW 25) or six (from NW 32) high tensile steel wire spirals
Outer layer: synthetic rubber with high temperature, ozone and abrasion resistance

Colour: black
Temperature min.: -40 °C
Temperature max.: 121 °C
Elongation: + 2 % to - 2 %
Media: Mineral oil
Glycol
Water (0°C to + 70°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
HD 720	19	12	3/4"	19,0	32,0	420	1680	265
HD 725	25	16	1"	25,4	38,2	420	1680	330
HD 732 S	31	20	1.1/4"	31,8	50,4	420	1680	445
HD 740	38	24	1.1/2"	38,1	57,3	420	1680	530
HD 750	51	32	2"	50,8	71,5	420	1680	700

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

HD 700 PRO

HD hose, extremely abrasion resistant outer cover

Application: High pressure circuits with high loads
hydrostatic gearboxes
Shipbuilding
Special features: extremely abrasion resistant top cover
Standard: from DN 19: SAE 100 R 15
DN 10 + 12: EN 856 4 SP
DN 16: EN 856 4 SH
Inner layer: oil resistant synthetic rubber
Insert: four (up to NW 25) or six (from NW 32) high tensile steel wire spirals

Outer layer: synthetic rubber with additional plastic cover, with more than 300 x the abrasion properties of standard outer covers
Colour: black
Temperature min.: -40 °C
Temperature max.: 121 °C
Elongation: + 2 % to - 2 %
Media: Mineral oil
Glycol
Water (0°C to + 70°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
HD 710 PRO	10	6	3/8"	9,5	21,4	445	1780	180
HD 713 PRO	12	8	1/2"	12,7	24,6	415	1660	230
HD 716 PRO	16	10	5/8"	16,2	29,2	420	1680	250
HD 720 PRO	19	12	3/4"	19,0	32,0	420	1680	265
HD 725 PRO	25	16	1"	25,4	38,2	420	1680	330
HD 732 PRO	31	20	1.1/4"	31,8	50,4	420	1680	445
HD 740 PRO	38	24	1.1/2"	38,1	57,3	420	1680	530
HD 750 PRO	51	32	2"	50,8	71,5	420	1680	700

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

HD 200 RM (2SN)

HD hose, harsh conditions

Application: medium high pressure range under extreme usage conditions
Installations with high abrasion
Shipbuilding
Special features: high ozone and abrasion resistance
weatherproof
Standard: EN 853 2 SN
Inner layer: oil resistant synthetic rubber
Insert: two high tensile steel wire braided inserts

Outer layer: flame-retardant to MSHA
Synthetic rubber with high ozone, abrasion, weather and salt water resistance
Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Media: Mineral oil
Glycol
Polyglycol based oil
Water (0°C to + 70°C)
Water-oil emulsion (0°C to +100°C)

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Insert diameter min. mm	Insert diameter max. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 206 RM	6	4	1/4"	6,2	7,0	12,1	13,3	15,7	400	800	1600	100
HD 208 RM	8	5	5/16"	7,7	8,5	13,7	14,9	17,3	350	700	1400	115
HD 210 RM	10	6	3/8"	9,3	10,1	16,1	17,3	19,7	330	660	1320	125
HD 213 RM	12	8	1/2"	12,3	13,5	19,0	20,6	23,0	275	550	1100	180
HD 216 RM	16	10	5/8"	15,5	16,7	22,2	23,8	26,2	250	500	1000	200
HD 220 RM	19	12	3/4"	18,6	19,8	26,2	27,8	30,1	215	430	850	240
HD 225 RM	25	16	1"	25,0	26,4	34,1	35,7	38,9	165	325	650	300
HD 232 RM	31	20	1.1/4"	31,4	33,0	43,3	45,7	49,5	125	250	500	420

DN = Nominal diameter, nominal width

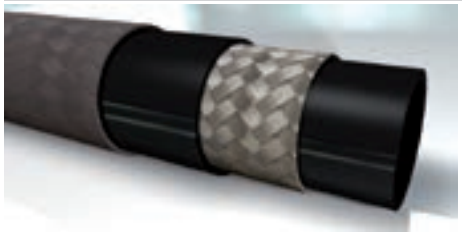
HD 200 RM (2SN) (Continuation) HD hose, harsh conditions

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Insert diameter min. mm	Insert diameter max. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 240 RM	38	24	1.1/2"	37,7	39,3	49,6	52,0	55,9	90	180	360	500
HD 250 RM	51	32	2"	50,4	52,0	62,3	64,7	68,6	80	160	320	630

DN = Nominal diameter, nominal width

The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

MD 100 Medium pressure hose



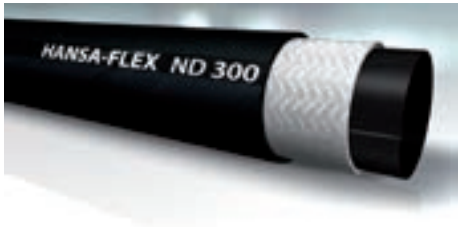
Application: Low and medium pressure circuits
Standard: SAE 100 R 5
Inner layer: oil resistant synthetic rubber
Insert: one textile braided insert and one steel wire braid
Outer layer: one textile braided insert embedded in synthetic rubber

Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Media: Mineral oil
Polyglycol based oil
Water (0°C to + 70°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
MD 104	5	3	3/16"	4,8	5,5	12,7	13,7	207	414	827	76
MD 106	6	5	1/4"	6,4	7,2	14,3	15,3	207	414	827	95
MD 108	8	6	5/16"	7,9	8,7	16,7	17,6	155	310	620	102
MD 110	10	6	3/8"	10,3	11,1	18,9	20,0	138	276	552	117
MD 113	12	8	1/2"	12,7	13,7	22,8	24,0	121	241	483	140
MD 116	16	10	5/8"	15,9	17,0	26,8	28,0	103	207	414	165
MD 120	19	12	3/4"	22,2	23,3	30,6	32,2	55	110	221	187
MD 125	25	16	1"	28,6	29,8	37,3	38,9	43	86	172	229
MD 132	31	20	1.1/4"	34,9	36,1	43,7	45,2	34	69	138	267
MD 140	38	24	1.1/2"	46,0	47,2	55,2	57,6	24	48	97	337
MD 160	60	40	2.1/2"	60,3	61,9	71,8	74,2	24	48	97	610

DN = Nominal diameter, nominal width

ND 300 — Low pressure hose with textile insert



Application: Low pressure circuits (no pressure surge loads or critical applications)
Return hoses
Pneumatic controllers
Standard: EN 854 R6, SAE 100 R 6, DN 25 is not specified in the standard
Inner layer: oil resistant synthetic rubber
Insert: one braided textile insert
Outer layer: oil resistant and weatherproof synthetic rubber

Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Media: Mineral oil
Air
Polyglycol based oil
Water (0°C to + 70°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
ND 306	6	4	1/4"	5,9	6,9	11,9		13,5	28	56	112	65
ND 310	10	6	3/8"	9,0	10,0	15,1		16,7	28	56	112	80
ND 313	12	8	1/2"	12,1	13,3	19,0		20,6	28	56	112	100
ND 316	16	10	5/8"	15,3	16,5	22,2		23,8	24	48	96	125
ND 320	19	12	3/4"	18,2	19,8	25,4		27,8	21	41	83	150
ND 325	25	16	1"	24,6	26,2		32,5		13		97	152

DN = Nominal diameter, nominal width

TE 100 (1TE) — Low pressure hose with textile insert

Application: Low pressure hose for general applications.
Standard: EN 854 1 TE
Inner layer: oil resistant synthetic rubber
Insert: one braided textile insert
Outer layer: oil resistant and weatherproof synthetic rubber

Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Elongation: + 2 % to - 4 %
Media: Mineral oil
Glycol
Water (0°C to + 70°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
TE 104	5	3	3/16"	4,4	5,2	10,0		11,6	25	50	100	35
TE 106	6	4	1/4"	5,9	6,9	11,6		13,2	25	50	100	45
TE 108	8	5	5/16"	7,4	8,4	13,1		14,7	20	40	80	65
TE 110	10	6	3/8"	9,0	10,0	14,7		16,3	20	40	80	75
TE 113	12	8	1/2"	12,1	13,3	17,7		19,7	16	32	64	90
TE 116	16	10	5/8"	15,3	16,5	21,9		23,9	16	32	64	115
TE 120	19	12	3/4"	18,2	19,8		26,0		12	24	48	165
TE 125	25	16	1"	24,6	26,2		33,4		12	24	48	220

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

TE 200 B (2TE) — Low pressure hose with textile insert

Application: Low pressure hose for general applications.
Special features: Fire tested to DIN 54 837 with DIN 5510 Part 2 classification (test reports on request)
Standard: EN 854 2 TE
Inner layer: oil resistant synthetic rubber
Insert: one or two textile braided inserts

Outer layer: flame retardant, oil resistant, weatherproof synthetic rubber
Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Media: Mineral oil
Glycol
Water (0°C to + 70°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
TE 204 B	5	3	3/16"	4,5	5,2	10,0	11,6	80	160	320	35
TE 206 B	6	4	1/4"	5,9	6,9	12,6	14,2	75	150	300	40
TE 208 B	8	5	5/16"	7,4	8,4	14,1	15,7	68	136	272	50
TE 210 B	10	6	3/8"	9,0	10,0	15,7	17,3	63	126	252	60
TE 213 B	12	8	1/2"	12,1	13,3	18,7	20,7	58	116	232	70
TE 216 B	16	10	5/8"	15,3	16,5	22,9	24,9	50	100	200	90
TE 220 B	19	12	3/4"	18,2	19,8	26,0	28,0	45	90	180	110
TE 225 B	25	16	1"	24,6	26,2	32,9	35,9	40	80	160	150

DN = Nominal diameter, nominal width

TE 300 (3TE) — Low pressure hose with textile insert

Application: Low pressure hose for general applications.
Standard: EN 854 3 TE
Inner layer: oil resistant synthetic rubber
Insert: two textile braided inserts
Outer layer: oil resistant and weatherproof synthetic rubber

Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Elongation: to DN 32 +2 % to -4 %
to DN 50 +5 % to -0 %
Media: Mineral oil
Glycol
Water (0°C to + 70°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
TE 304	5	3	3/16"	4,4	5,2	12,0	13,6	160	320	640	40
TE 306	6	4	1/4"	5,9	6,9	13,6	15,2	145	290	580	45
TE 308	8	5	5/16"	7,4	8,4	16,1	17,7	130	260	520	55
TE 310	10	6	3/8"	9,0	10,0	17,7	19,3	110	220	440	70
TE 313	12	8	1/2"	12,1	13,3	20,7	22,7	93	186	372	85
TE 316	16	10	5/8"	15,3	16,5	24,9	26,9	80	160	320	105
TE 320	19	12	3/4"	18,2	19,8	28,0	30,0	70	140	280	130
TE 325	25	16	1"	24,6	26,2	34,4	37,4	55	110	220	150
TE 332	31	20	1.1/4"	30,8	32,8	40,8	43,8	45	90	180	190

DN = Nominal diameter, nominal width

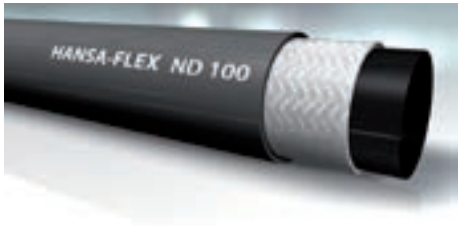
TE 300 (3TE) (Continuation) — Low pressure hose with textile insert

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
TE 340	38	24	1.1/2"	37,1	39,1	47,6	51,6	40	80	160	240
TE 350	51	32	2"	49,8	51,8	60,3	64,3	33	66	132	300
TE 360	60	40	2.3/8"	58,5	61,2	70,0	74,0	25	50	100	400

DN = Nominal diameter, nominal width

The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

ND 100 — Low pressure and plug-in hose



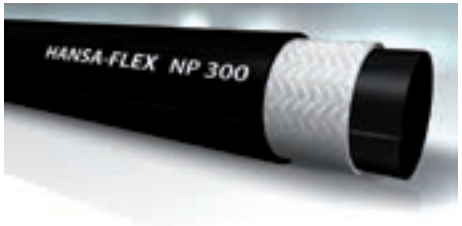
Application: Low pressure circuits (no pressure surge loads or critical applications)
Return hoses
Pneumatic controllers
Inner layer: oil resistant synthetic rubber
Insert: one braided textile insert
Outer layer: oil resistant and weatherproof synthetic rubber
Colour: grey

Temperature min.: -40 °C
Temperature max.: 100 °C
Media: Mineral oil
Antifreeze solutions
Air (up to + 70°C)
Water (0°C to + 85°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
ND 106	6	4	1/4"	5,9	6,9	11,9	13,5	17	42	68	65
ND 110	10	6	3/8"	9,0	10,0	15,1	16,7	17	42	68	80
ND 113	12	8	1/2"	12,1	13,3	19,0	20,6	17	42	68	100

DN = Nominal diameter, nominal width

NP 300 — Plug-in hose



Application: Systems engineering
general application for air, water etc.
Inner layer: NBR (nitrile) base
Insert: one braided textile insert
Outer layer: Synthetic rubber
Colour: black

Temperature min.: -40 °C
Temperature max.: 100 °C
Media: Water
Air
Hydraulic oils (mineral oil base)
Antifreeze solutions

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NP 306	6	4	1/4"	6,0	11,9	21	84	45
NP 310	10	6	3/8"	10,0	15,9	21	84	75
NP 313	12	8	1/2"	13,0	19,6	21	84	80

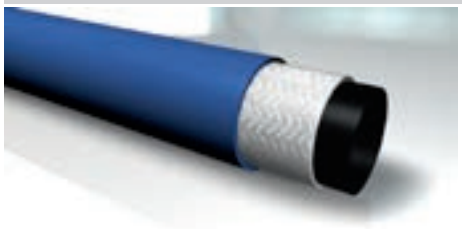
DN = Nominal diameter, nominal width

NP 300 (Continuation) Plug-in hose

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NP 316	16	10	5/8"	16,0	23,9	21	84	115
NP 320	19	12	3/4"	19,0	26,9	21	84	135

DN = Nominal diameter, nominal width

ND 300 T Low pressure and plug-in hose



Application: High temperature applications
Inner layer: Synthetic PKR rubber
Insert: High strength textile yarn braided insert
Outer layer: Synthetic PKR rubber
Colour: blue

Temperature min.: -48 °C
Temperature max.: 150 °C
Media: Liquids based on mineral oil and glycol
Antifreeze agent
Coolant
Air (up to + 70°C)
Lubricating oil
Water (0°C to + 85°C)
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
ND 306 T	6	4	1/4"	6,3	12,7	17	68	65
ND 310 T	10	6	3/8"	9,5	15,7	17	68	75
ND 313 T	12	8	1/2"	12,7	19,8	17	68	130
ND 316 T	16	10	5/8"	15,9	23,1	17	68	150

DN = Nominal diameter, nominal width

SG 100 RI Suction hose

Application: Low pressure hose for suction and return lines with restricted installation space
Special features: narrow bending radius
chequered outer cover
exceptionally abrasion resistant
Standard: SAE 100 R4
Inner layer: synthetic rubber
Insert: two high tensile textile inserts and one spring steel spiral

Outer layer: oil resistant and weatherproof synthetic rubber
Colour: black
Temperature min.: -40 °C
Temperature max.: 80 °C
Media: Mineral oil
Water
Bio oil
Polyglycol based oil
Rape oil
Water-glycol emulsions
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
SG 120 RI	19	12	3/4"	19,0	29	10	30	50

DN = Nominal diameter, nominal width

SG 100 RI (Continuation) Suction hose

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
SG 125 RI	25	16	1"	25,4	34	10	30	60
SG 132 RI	31	20	1.1/4"	32,0	42	10	30	75
SG 140 RI	38	24	1.1/2"	38,0	48	10	30	100
SG 150 RI	51	32	2"	50,8	62	10	30	130
SG 160 RI	60	40	2.3/8"	60,0	72	10	30	165
SG 163 RI	63	40	2.1/2"	63,5	75	10	30	175
SG 176 RI	76	48	3"	76,2	89	10	30	210
SG 190 RI	90	56	3.1/2"	90,0	103	7	21	270
SG 1102 RI	100	64	4"	101,6	116	7	21	300
SG 1127 RI	125	80	5"	127,0	142	4	12	400
SG 1152 RI	150	96	6"	152,4	169	4	12	600
SG 1203 RI	200	128	8"	203,0	223	4	12	810

DN = Nominal diameter, nominal width

SG 100 RI EP Suction hose

Application: Low pressure hose for suction and return lines with restricted installation space
Inner layer: EPDM
Insert: two high tensile textile inserts and one spring steel spiral
Outer layer: EPDM
Colour: black

Temperature min.: -40 °C
Temperature max.: 125 °C
Media: Hot water

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
SG 120 RI EP	19	12	3/4"	19,0	28	10	30	40
SG 125 RI EP	25	16	1"	25,0	35	10	30	60
SG 132 RI EP	31	20	1.1/4"	32,0	42	10	30	85
SG 140 RI EP	38	24	1.1/2"	38,0	48	10	30	110
SG 150 RI EP	51	32	2"	50,8	62	8	24	150
SG 157 RI EP	60	36	2.1/4"	57,0	69	10	30	143
SG 163 RI EP	63	38	2.1/2"	63,5	77	10	30	159
SG 176 RI EP	76	48	3"	76,2	90	10	30	191
SG 190 RI EP	90	56	3.1/2"	90,0	104	10	30	225
SG 1102 RI EP	100	102	4"	101,6	116	8	24	310
SG 1127 RI EP	125	96	5"	127,0	145	8	24	500

DN = Nominal diameter, nominal width

SGB 100 — Suction hose

Application: Low pressure hose for suction and return lines with restricted installation space
Standard: similar to SAE 100 R4
Inner layer: oil resistant synthetic rubber
Insert: two high tensile textile inserts and one embedded spring steel spiral
Outer layer: synthetic rubber with high ozone, abrasion, and weather resistance

Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Media: Mineral oil
Glycol
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
SGB 120	19	12	3/4"	19,0	29	21	63	40
SGB 125	25	16	1"	25,4	35	17	51	55
SGB 132	31	20	1.1/4"	32,0	42	14	42	70
SGB 140	38	24	1.1/2"	38,0	50	10	30	80
SGB 145	45	28	1.3/4"	45,0	56	10	30	100
SGB 150	51	32	2"	50,8	62	10	30	100
SGB 160	60	40	2.3/8"	60,0	72	10	30	145
SGB 163	63	40	2.1/2"	63,5	75	10	30	170
SGB 170	70	44	2.3/4"	70,0	82	10	30	210
SGB 176	76	48	3"	76,2	88	10	30	225
SGB 180	80	50	3.1/8"	80,0	94	10	30	240
SGB 1102	100	64	4"	102,0	116	10	30	305
SGB 1110	110	69	4.3/8"	110,0	125	10	30	335
SGB 1127	125	80	5"	127,0	145	10	30	460
SGB 1152	150	96	6"	152,0	170	10	30	580

DN = Nominal diameter, nominal width

SGD 100 — Suction and pressure hose

Application: Low pressure suction and pressure systems
Inner layer: conductive NBR rubber
Insert: highly tear-resistant synthetic textile insert and steel wire spiral
Outer layer: wear, ozone, oil and weather resistant NBR/PVC rubber
Colour: black

Temperature min.: -40 °C
Temperature max.: 100 °C
Media: Mineral oil
Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Vacuum bar	Min. bending radius mm
SGD 125	25	16	1"	25,4	40	25	75	0,9	152
SGD 132	31	20	1.1/4"	32,0	46	25	75	0,9	192

DN = Nominal diameter, nominal width

SGD 100 (Continuation) Suction and pressure hose

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Vacuum bar	Min. bending radius mm
SGD 140	38	24	1.1/2"	38,0	54	25	75	0,9	228
SGD 150	51	32	2"	50,8	67	25	75	0,9	305
SGD 163	63	40	2.1/2"	63,5	82	25	75	0,9	381
SGD 176	76	48	3"	76,2	96	25	75	0,9	457
SGD 1102	100	64	4"	101,6	125	25	75	0,9	610

DN = Nominal diameter, nominal width

TAF 100 HD hose, type TAF

Application: High pressure hydraulics and as supply line for technical media.
Special features: favourable flow properties
high resistance to light, weathering, aging, chemical media
Inner layer: Polyamide
Insert: one polyester braided insert
Outer layer: NW 4: Polyamide; from NW 6: Polyurethane

Colour: black
Temperature min.: -60 °C
Temperature max.: 100 °C
Elongation: + 3 % to - 1 %

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	BD* at 20°C bar	BD* at 50°C bar	BD* at 80°C bar	Min. bending radius mm
TAF 104	4	3	3/16"	4,0	8,4	370,0	325	280	40
TAF 106	6	4	1/4"	6,3	11,2	255,0	225	190	63
TAF 108	8	5	5/16"	8,0	13,3	225,0	200	170	80
TAF 110	10	6	3/8"	10,0	16,7	190,0	170	145	100
TAF 113	12	8	1/2"	13,0	21,4	160,0	140	120	130

DN = Nominal diameter, nominal width BD = Working pressure
Fitting with press-fit and screw connections.The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

TAF 100 CU

HD hose, type TAF CU, copper braid

Application: Electrically conductive paint spraying hose with high flexibility and low weight
Special features: with copper braid
favourable flow properties
high resistance to light, weathering, aging, chemical media
Inner layer: Polyamide
Insert: one polyester braided insert with interwoven copper braid for dissipating electrostatic charge
Outer layer: NW 4: Polyamide; from NW 6: Polyurethane

Colour: black
Temperature min.: -60 °C
Temperature max.: 80 °C
Elongation: + 3 % to - 1 %
Media: Resistant to many technical media
particularly the paints and solvents used in paint spraying

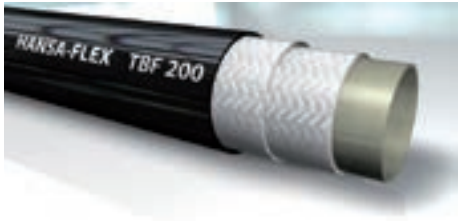
Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	BD* at 20°C bar	BD* at 50°C bar	BD* at 80°C bar	Min. bending radius mm
TAF 104 CU	4	3	3/16"	4,0	8,1	370,0	325	280	40
TAF 106 CU	6	4	1/4"	6,3	11,2	255,0	225	190	63

DN = Nominal diameter, nominal width BD = Working pressure

Fitting with press-fit and screw connections.The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.Paint spraying hoses are subject to the guidelines for liquid jet equipment (ZH 1-406) by the employers' liability insurance association. Follow these guidelines when fitting.

TBF 200

HD hose, type TBF



Application: High pressure hydraulics and as supply line for technical media. Fitting with press-fit and screw connection hose
Special features: favourable flow properties
high resistance to light, weathering, aging, chemical media
Inner layer: Polyamide
Insert: two polyester braided inserts
Outer layer: NW 4: Polyamide; from NW 6: Polyurethane

Colour: black
Temperature min.: -60 °C
Temperature max.: 100 °C
Elongation: + 3 % to - 1 %

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	BD* at 20°C bar	BD* at 50°C bar	BD* at 80°C bar	Min. bending radius mm
TBF 204	4	3	3/16"	4,0	9,2	485,0	425	380	40
TBF 206	6	4	1/4"	6,3	13,0	455,0	400	360	63
TBF 208	8	5	5/16"	8,0	14,9	375,0	330	300	80
TBF 210	10	6	3/8"	10,0	18,0	340,0	300	270	100
TBF 213	12	8	1/2"	13,0	21,9	280,0	245	220	130
TBF 220	19	12	3/4"	19,0	28,1	215,0	190	170	190

DN = Nominal diameter, nominal width BD = Working pressure

The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.Fitting with press-fit and screw connections.

TBFZ 200 — HD hose, type TBF, twin

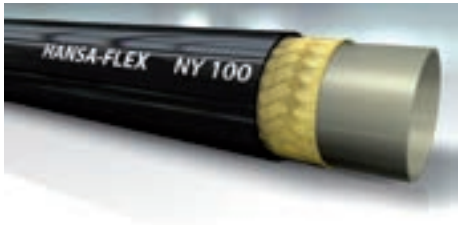
Application: Double hose for high pressure hydraulics and as supply line for technical media
Fitting with press-fit and screw connection hose
Special features: Twin hose
favourable flow properties
high resistance to light, weathering, aging, chemical media
Inner layer: Polyamide
Insert: two polyester braided inserts
Outer layer: NW 4: Polyamide; from NW 6: Polyurethane

Colour: black
Temperature min.: -60 °C
Temperature max.: 100 °C
Elongation: + 3 % to - 1 %

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	BD* at 20°C bar	BD* at 50°C bar	BD* at 80°C bar	Min. bending radius mm
TBFZ 204	4	3	3/16"	4,0	9,2	485,0	452	380	40
TBFZ 206	6	4	1/4"	6,3	13,0	455,0	400	360	63
TBFZ 208	8	5	5/16"	8,0	14,9	375,0	330	300	80
TBFZ 210	10	6	3/8"	10,0	18,0	340,0	300	270	100
TBFZ 213	12	8	1/2"	13,0	21,9	280,0	245	220	130
TBFZ 220	19	12	3/4"	19,0	28,1	215,0	190	170	190

DN = Nominal diameter, nominal width BD = Working pressure
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.Fitting with press-fit and screw connections.

NY 100 — Thermoplastic high pressure hose



Application: medium high pressure circuits
High pressure lubrication lines
Agricultural machines
Special features: high ozone and abrasion resistance
good chemical resistance
low volumetric expansion
Inner layer: Polyester elastomer
Insert: one high tensile steel wire braided insert
Outer layer: Polyurethane

Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Elongation: + 2 % to - 4 %
Media: Mineral oil
Polyglycol based oil
Water (0°C to + 60°C)
Water-oil emulsions (up to 60 °C)

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NY 104	5	3	3/16"	5,0	9,3	300	1200	25
NY 106	6	4	1/4"	6,0	11,5	300	1200	35
NY 108	8	5	5/16"	8,0	13,3	225	900	40
NY 110	10	6	3/8"	10,0	15,0	225	900	60
NY 113	12	8	1/2"	12,0	18,3	180	655	70
NY 116	16	10	5/8"	16,0	21,6	140	540	110
NY 120	19	12	3/4"	19,4	26,7	125	500	170
NY 125	25	16	1"	25,0	33,5	100	400	230

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

NYZ 100 — Thermoplastic high pressure twin hose

Application: medium high pressure circuits
High pressure lubrication lines
Agricultural machines
Special features: high ozone and abrasion resistance
good chemical resistance
low volumetric expansion
Inner layer: Polyester elastomer
Insert: one high tensile steel wire braided insert
Outer layer: Polyurethane

Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Elongation: + 2 % to - 4 %
Media: Mineral oil
Polyglycol based oil
Water (0°C to + 60°C)
Water-oil emulsions (up to 60 °C)

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NYZ 104	5	3	3/16"	5	9,3	300	1200	25
NYZ 106	6	4	1/4"	6	11,5	300	1200	35
NYZ 108	8	5	5/16"	8	13,3	225	900	40
NYZ 110	10	6	3/8"	10	15,0	225	900	60
NYZ 113	12	8	1/2"	12	18,3	180	655	70

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

NY 300 — Thermoplastic high pressure hose

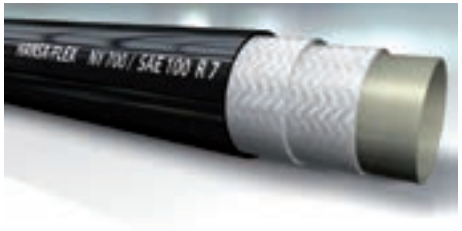
Application: High pressure hydraulic systems
hydraulic tools
Compressors
Special features: high kink resistance
maximum flexibility
Standard: Pressure values from EN 853, SAE 100 R9, SAE 100 R10
Inner layer: Polyamide
Insert: Two high tensile steel wire spiral inserts and one steel wire braid

Outer layer: up to NW 13: Polyurethane; from NW 16: Polyamide
Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Media: Mineral oil
Applications with gaseous and aggressive media
Synthetic oils

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NY 306	6	4	1/4"	6,3	12,5	450	1800	70
NY 308	8	5	5/16"	8,2	14,3	400	1600	100
NY 310	10	6	3/8"	9,7	17,0	375	1500	120
NY 313	12	8	1/2"	12,8	20,7	350	1400	165
NY 316	16	10	5/8"	16,0	24,5	330	1320	200
NY 320	19	12	3/4"	19,6	28,5	300	1200	240
NY 325	25	16	1"	25,0	34,0	275	1100	280
NY 332	31	20	1.1/4"	32,0	44,0	275	1100	400

DN = Nominal diameter, nominal width

NY 700 (R7) — Thermoplastic high pressure hose



Application: medium high pressure systems
Forklift trucks
Lubrication line
Special features: high ozone and abrasion resistance
no swelling or brittleness when used with solvents or alkaline media
very good reverse bending fatigue strength
Standard: SAE 100 R 7
Inner layer: Polyester elastomer
Insert: two high tensile polyester braided inserts

Outer layer: Polyurethane
Colour: black
Temperature min.: -40 °C
Temperature max.: 93 °C
Elongation: + 3 % to - 3 %
Media: Mineral oil
ASTM1
ASTM3
Polyglycol based oil
Synthetic oils
Water (0°C to + 60°C)
Water-oil emulsions (up to 60 °C)

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NY 704	5	3	3/16"	5	9,7	210	840	75
NY 706	6	4	1/4"	6	12,1	215	860	100
NY 708	8	5	5/16"	8	13,8	190	760	115
NY 710	10	6	3/8"	10	16,1	160	640	125
NY 713	12	8	1/2"	12	19,4	140	560	175

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

NYZ 700 (R7) — Thermoplastic high pressure twin hose

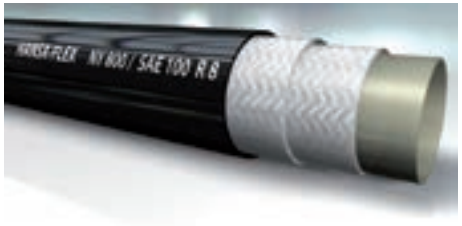
Application: medium high pressure systems
Forklift trucks
Lubrication line
Special features: high ozone and abrasion resistance
no swelling or brittleness when used with solvents or alkaline media
Twin hose
Standard: SAE 100 R 7
Inner layer: NW 4 - 13: Polyester elastomer; from NW 16: Polyamide
Insert: two high tensile polyester braided inserts

Outer layer: Polyurethane
Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Elongation: + 3 % to - 3 %
Media: Mineral oil
ASTM1
ASTM3
Polyglycol based oil
Synthetic oils
Water (0°C to + 60°C)
Water-oil emulsions (up to 60 °C)

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NYZ 704	5	3	3/16"	5	9,7	210	840	75
NYZ 706	6	4	1/4"	6	12,1	215	860	100
NYZ 708	8	5	5/16"	8	13,8	190	760	115
NYZ 710	10	6	3/8"	10	16,1	160	640	125
NYZ 713	12	8	1/2"	12	19,4	140	560	175

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

NY 800 (R8) — Thermoplastic high pressure hose



Application: High pressure circuits
general application
Special features: high ozone and abrasion resistance
no swelling or brittleness when used with solvents or alkaline media
very good reverse bending fatigue strength
Standard: SAE 100 R 8, BS 4983, ISO 3949
Inner layer: Polyester elastomer
Insert: one aramide braided insert

Outer layer: Polyurethane
Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Elongation: + 3 % to - 3 %
Media: Mineral oil
Applications with gaseous or chemical media
Synthetic oils
Water (0°C to + 60°C)
Water-oil emulsions (up to 60 °C)

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NY 804	5	3	3/16"	5,0	9,0	350	1400	75
NY 806	6	4	1/4"	6,0	12,3	350	1400	100
NY 808	8	5	5/16"	8,0	13,8	350	1400	125
NY 810	10	6	3/8"	10,0	16,0	275	1100	125
NY 813	12	8	1/2"	12,0	19,5	240	960	175
NY 820	19	12	3/4"	19,5	26,9	165	660	150
NY 825	25	16	1"	25,9	34,2	140	560	200

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

NYZ 800 (R8) — Thermoplastic high pressure twin hose

Application: High pressure circuits
general application
Special features: high ozone and abrasion resistance
no swelling or brittleness when used with solvents or alkaline media
Twin hose
Standard: SAE 100 R 8, BS 4983, ISO 3949
Inner layer: Polyester elastomer
Insert: one aramide braided insert

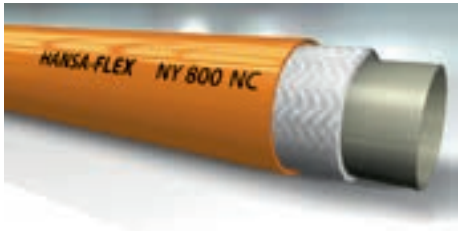
Outer layer: Polyurethane
Colour: black
Temperature min.: -40 °C
Temperature max.: 100 °C
Elongation: + 3 % to - 3 %
Media: Mineral oil
Applications with gaseous or chemical media
Synthetic oils
Water (0°C to + 60°C)
Water-oil emulsions (up to 60 °C)

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NYZ 804	5	3	3/16"	5	9,0	350	1400	75
NYZ 806	6	4	1/4"	6	12,3	350	1400	100
NYZ 808	8	5	5/16"	8	13,8	350	1400	125
NYZ 810	10	6	3/8"	10	16,0	275	1100	125
NYZ 813	12	8	1/2"	12	19,5	240	960	175

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

NY 800 NC (R8)

Thermoplastic high pressure hose, electrically nonconductive



Application: High pressure circuits
general application
Special features: high ozone and abrasion resistance
very good reverse bending fatigue strength
slight volumetric expansion
Standard: SAE J517 - 100 R8 Non Conductive
Inner layer: Polyester elastomer
Insert: one aramide braided insert

Outer layer: Polyurethane
Colour: orange
Temperature min.: -40 °C
Temperature max.: 100 °C
Elongation: + 0 % to - 1 %
Media: Mineral oil
Synthetic oils
Water-oil emulsions (up to 60 °C)
Water (0°C to + 60°C)

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NY 804 NC	5	3	3/16"	5,0	8,9	350	1400	30
NY 806 NC	6	4	1/4"	6,5	11,5	350	1400	50
NY 808 NC	8	5	5/16"	8,1	13,4	300	1200	55
NY 810 NC	10	6	3/8"	9,7	15,5	280	1120	60
NY 813 NC	12	8	1/2"	13,0	19,9	245	980	80
NY 820 NC	19	12	3/4"	19,5	26,9	165	660	150
NY 825 NC	25	16	1"	25,9	34,2	140	560	200

DN = Nominal diameter, nominal width

NY 2100

Thermoplastic extreme pressure hose

Application: Extreme pressure applications
high pressure tools
emergency rescue systems
Special features: Extremely kink-resistant hose
good flexibility at low temperatures
Inner layer: Polyamide
Insert: one aramide braided insert and one high tensile steel wire braided insert
Outer layer: Polyurethane

Temperature min.: -40 °C
Temperature max.: 100 °C
Media: Mineral oil
Synthetic oils

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Colour
NY 2106	6	4	1/4"	6,3	13,3	700	2800	70	black
NY 2106 B	6	4	1/4"	6,3	13,3	700	2800	70	blue
NY 2106 GE	6	4	1/4"	6,3	13,3	700	2800	70	yellow
NY 2106 R	6	4	1/4"	6,3	13,3	700	2800	70	red

DN = Nominal diameter, nominal width

NYZ 2100 — Thermoplastic high pressure twin hose

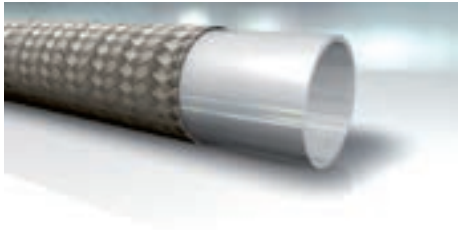
Application: Extreme pressure applications
high pressure tools
emergency rescue systems
Special features: Twin hose
Extremely kink-resistant hose
good flexibility at low temperatures
Inner layer: Polyester elastomer
Insert: one aramide braided insert and one high tensile steel wire braided insert
Outer layer: Polyurethane

Temperature min.: -40 °C
Temperature max.: 100 °C
Media: Mineral oil
Synthetic oils
Water (0°C to + 60°C)
Water-oil emulsions (up to 60 °C)

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Colour
NYZ 2106 B	6	4	1/4"	6,3	13,3	700	2800	70	blue
NYZ 2106 BGE	6	4	1/4"	6,3	13,3	700	2800	70	blue + yellow
NYZ 2106 BR	6	4	1/4"	6,3	13,3	700	2800	70	blue + red
NYZ 2106 GE	6	4	1/4"	6,3	13,3	700	2800	70	yellow
NYZ 2106 R	6	4	1/4"	6,3	13,3	700	2800	70	red

DN = Nominal diameter, nominal width

TF 100 — PTFE hose, smooth, 1 braiding



Application: Medium pressure applications with hydraulic fluids (high temperatures) and aggressive media for the chemical industry
Surface technology
2-component systems
Design: Smooth inliner in white PTFE
Inner layer: PTFE
Insert: one stainless steel braided insert
Outer layer: none

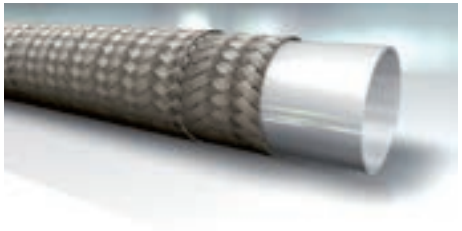
Colour: metallic
Temperature min.: -70 °C
Temperature max.: 260 °C
Material: PTFE (polytetrafluoroethylene)

Identification	DN*	Inches	Size	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
TF 104	5	3/16"	3	5,0	5,4	7,5	8,6	264	396	793	64
TF 106	6	1/4"	4	6,5	7,0	8,8	9,9	224	336	672	76
TF 108	8	5/16"	5	8,2	8,7	10,5	11,6	207	311	621	102
TF 110	10	3/8"	6	9,9	10,6	12,8	14,1	183	275	552	133
TF 113	12	1/2"	8	13,1	13,4	15,9	17,2	161	242	483	152
TF 116	16	5/8"	10	16,0	17,1	19,0	20,6	114	171	345	178
TF 120	19	3/4"	12	19,3	20,3	22,2	23,8	103	155	310	203
TF 125	25	1"	16	25,8	26,6	28,5	30,1	80	120	241	305

DN = Nominal diameter, nominal width

Not recommended for high dynamic pressure loads.From 120 °C the pressure reduction factor is to be taken into account.(Max. operating pressure = operating pressure x factor).Temp.: 120 °C / 140 °C / 160 °C / 180 °C / 200 °C / 220 °CFactor: 1,00 / 0,80 / 0,60 / 0,40 / 0,20 / 0,00

TF 200 — PTFE hose, smooth, 2 braidings



Application: Medium pressure applications with hydraulic fluids (high temperatures) and aggressive media for the chemical industry
Surface technology
2-component systems
Design: Smooth inliner in white PTFE
Inner layer: PTFE
Insert: two stainless steel braided inserts
Outer layer: none

Colour: metallic
Temperature min.: -70 °C
Temperature max.: 260 °C
Material: PTFE (polytetrafluoroethylene)

Identification	DN*	Inches	Size	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
TF 206	6	1/4"	4	6,3	7,1	9,9	11,1	247	371	741	76
TF 208	8	5/16"	5	8,0	8,8	12,0	13,2	230	345	690	102
TF 210	10	3/8"	6	9,6	10,4	14,0	15,2	207	345	621	133
TF 213	12	1/2"	8	12,8	13,6	17,2	19,9	183	275	552	152
TF 216	16	5/8"	10	16,1	17,1	20,3	21,7	138	207	414	178
TF 220	19	3/4"	12	19,2	20,4	23,5	25,2	126	189	379	203
TF 225	25	1"	16	25,5	26,7	29,9	31,6	103	155	310	305

DN = Nominal diameter, nominal width

Not recommended for high dynamic pressure loads.From 120 °C the pressure reduction factor is to be taken into account.(Max. operating pressure = operating pressure x factor).Temp.: 120 °C / 140 °C / 160 °C / 180 °C / 200 °C / 220 °CFactor: 1,00 / 0,80 / 0,60 / 0,40 / 0,20 / 0,00

PSG — PVC hose with braided insert

Application: general application for air, water etc.
Special features: Hardness: approx. 77° Shore A
environmentally and free of heavy metals
abrasion and aging resistant
Inner layer: Soft PVC
Insert: one braided textile insert
Outer layer: Soft PVC

Colour: clear
Temperature min.: -20 °C
Temperature max.: 60 °C
Media: Water
Air

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	BD* at 20 °C bar	Min. bending radius mm	Roll length m
PSG 04-3	4,0	10,0	3,0	20	15	50
PSG 05-3	5,0	11,0	3,0	20	20	50
PSG 06-3	6,0	12,0	3,0	20	25	50
PSG 08-3	8,0	14,0	3,0	20	30	50
PSG 09-3	9,0	15,0	3,0	15	35	50
PSG 10-3	10,0	16,0	3,0	15	40	50
PSG 12-3	12,0	18,0	3,0	15	50	50
PSG 12-4.5	12,0	21,0	4,5	15	50	50
PSG 12.5-3	12,5	18,5	3,0	15	50	50

BD = Working pressure

PSG (Continuation) PVC hose with braided insert

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	BD* at 20 °C bar	Min. bending radius mm	Roll length m
PSG 13-3	13,0	19,0	3,0	15	60	50
PSG 13-3.5	13,0	20,0	3,5	15	60	50
PSG 15-3	15,0	21,0	3,0	10	75	50
PSG 16-3.5	16,0	23,0	3,5	10	80	50
PSG 16-4	16,0	24,0	4,0	10	80	50
PSG 19-3.5	19,0	26,0	3,5	10	80	50
PSG 19-4	19,0	27,0	4,0	10	100	25/50
PSG 19-5	19,0	29,0	5,0	10	100	25/50
PSG 22-4	22,0	30,0	4,0	8	180	25/50
PSG 25-4	25,0	33,0	4,0	8	200	25/50
PSG 25-4.5	25,0	34,0	4,5	8	120	25/50
PSG 30-4	30,0	38,0	4,0	7	170	25/50
PSG 32-5	32,0	42,0	5,0	7	180	25/50
PSG 38-5	38,0	48,0	5,0	6	200	25/50
PSG 45-5	45,0	55,0	5,0	4	300	25
PSG 50-5	50,0	60,0	5,0	4	350	25

BD = Working pressure

PSK PVC hose, transparent

Application: general application for air, water etc.
Special features: Hardness: approx. 77° Shore A
without textile insert
Inner layer: Soft PVC
Insert: none
Outer layer: Soft PVC

Colour: clear
Temperature min.: -20 °C
Temperature max.: 60 °C
Media: Water
Air

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	BD* at 20°C bar	Roll length m
PSK 02-1	2	4	1,0	13,0	50
PSK 03-1	3	5	1,0	9,5	50
PSK 03-1.5	3	6	1,5	12,5	50
PSK 04-1	4	6	1,0	7,5	50
PSK 04-1.5	4	7	1,5	10,5	50
PSK 04-2	4	8	2,0	12,5	50
PSK 05-1	5	7	1,0	6,0	50
PSK 05-1.5	5	8	1,5	8,5	50
PSK 05-2	5	9	2,0	10,5	50
PSK 05-3.5	5	12	3,5	12,5	50
PSK 06-1	6	8	1,0	5,5	50
PSK 06-1.5	6	9	1,5	7,5	50

BD = Working pressure

PSK (Continuation) PVC hose, transparent

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	BD* at 20°C bar	Roll length m
PSK 06-2	6	10	2,0	9,5	50
PSK 06-3	6	12	3,0	12,5	50
PSK 07-1	7	9	1,0	4,5	50
PSK 07-1.5	7	10	1,5	6,5	50
PSK 07-2	7	11	2,0	8,5	50
PSK 08-1	8	10	1,0	4,0	50
PSK 08-1.5	8	11	1,5	6,0	50
PSK 08-2	8	12	2,0	7,5	50
PSK 08-3	8	14	3,0	10,5	50
PSK 09-1	9	11	1,0	3,5	50
PSK 09-1.5	9	12	1,5	5,0	50
PSK 09-2	9	13	2,0	6,5	50
PSK 09-2.5	9	14	2,5	7,0	50
PSK 09-3.5	9	16	3,5	10,5	50
PSK 10-1.5	10	13	1,5	4,5	50
PSK 10-2	10	14	2,0	6,0	50
PSK 10-3	10	16	3,0	8,5	50
PSK 11-2	11	15	2,0	5,5	50
PSK 12-1.5	12	15	1,5	4,0	50
PSK 12-2	12	16	2,0	5,0	50
PSK 12-2.5	12	17	2,5	6,5	50
PSK 12-3	12	18	3,0	7,5	50
PSK 13-2	13	17	2,0	5,0	50
PSK 13-3	13	19	3,0	7,0	50
PSK 14-2	14	18	2,0	4,5	50
PSK 14-2.5	14	19	2,5	5,5	50
PSK 14-3	14	20	3,0	6,0	50
PSK 15-2	15	19	2,0	7,5	50
PSK 15-2.5	15	20	2,5	5,0	50
PSK 15-3	15	21	3,0	6,0	50
PSK 16-2	16	20	2,0	4,0	50
PSK 16-2.5	16	21	2,5	5,0	50
PSK 16-3	16	22	3,0	6,0	50
PSK 18-2	18	22	2,0	3,5	50
PSK 18-3	18	24	3,0	5,0	50
PSK 19-2.5	19	24	2,5	4,5	50
PSK 19-3	19	25	3,0	5,0	50
PSK 19-3.5	19	26	3,5	5,5	50
PSK 19-4	19	27	4,0	6,5	50
PSK 20-2	20	24	2,0	3,0	50
PSK 20-3	20	26	3,0	4,5	50
PSK 22-3	22	28	3,0	4,5	50
PSK 22-4	22	30	4,0	4,5	50
PSK 24-2	24	28	2,0	2,5	50
PSK 24-3	24	30	3,0	4,0	50

BD = Working pressure

The pressure figures relate to a short-term pressure load without pressure surges at +20 °C.

PSK (Continuation) PVC hose, transparent

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	BD* at 20°C bar	Roll length m
PSK 25-3	25	31	3,0	4,0	50
PSK 25-4	25	33	4,0	5,0	50
PSK 25-4.5	25	34	4,5	5,5	50
PSK 27-3	27	33	3,0	3,5	50
PSK 28-4	28	36	4,0	4,5	50
PSK 30-3.5	30	37	3,5	4,0	50
PSK 30-4	30	38	4,0	4,0	50
PSK 30-4.5	30	39	4,5	4,5	50
PSK 30-5	30	40	5,0	5,0	50
PSK 32-3.5	32	39	3,5	3,0	50
PSK 32-4	32	40	4,0	4,0	50
PSK 32-5	32	42	5,0	5,0	50
PSK 35-3.5	35	42	3,5	3,5	50
PSK 35-5	35	45	5,0	4,5	50
PSK 38-5	38	48	5,0	4,0	50
PSK 40-4	40	48	4,0	3,0	50
PSK 40-5	40	50	5,0	4,0	50
PSK 42-5	42	52	5,0	3,5	50
PSK 45-5	45	55	5,0	3,5	25
PSK 50-5	50	60	5,0	3,0	25
PSK 55-4.5	55	64	4,5	2,5	25
PSK 60-5	60	70	5,0	2,5	25
PSK 65-5	65	70	5,0	2,5	25
PSK 70-5	70	80	5,0	2,5	25
PSK 75-7.5	75	90	7,5	3,4	25
PSK 80-5	80	90	5,0	2,3	25
PSK 90-5	90	100	5,0	2,1	25

BD = Working pressure

The pressure figures relate to a short-term pressure load without pressure surges at +20 °C.

TR WS

PA 11/12 plastic pipe, soft

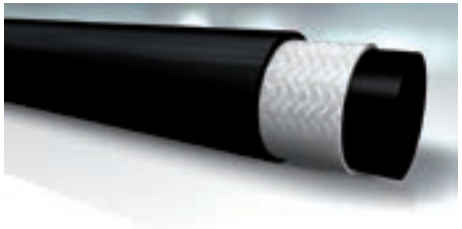
Application: Control lines in hydraulics and pneumatics
automotive technology
laboratories and food industry
Special features: resistant to temperature and weatherproof
low weight
Inner layer: Polyamide
Insert: none
Outer layer: Polyamide

Colour: black
Temperature min.: -60 °C
Temperature max.: 100 °C
Media: Mineral oil
Grease
Propellants
resistant to aqueous acids, alkalis and salts

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	BD* at 20°C bar	Min. bending radius mm
TR 04-0.5 WS	3,0	4,0	0,50	19,0	20
TR 04-0.65 WS	2,7	4,0	0,65	23,0	20
TR 04-1 WS	2,0	4,0	1,00	44,0	20
TR 05-0.85 WS	3,3	5,0	0,85	28,0	25
TR 05-1 WS	3,0	5,0	1,00	34,4	25
TR 06-1 WS	4,0	6,0	1,00	27,0	30
TR 06-1.5 WS	3,0	6,0	1,50	44,0	30
TR 08-1 WS	6,0	8,0	1,00	22,4	40
TR 08-1.25 WS	5,5	8,0	1,25	26,0	40
TR 08-1.5 WS	5,0	8,0	1,50	31,0	40
TR 08-2 WS	4,0	8,0	2,00	41,0	45
TR 09-1.5 WS	6,0	9,0	1,50	24,0	50
TR 10-1 WS	8,0	10,0	1,00	15,0	50
TR 10-1.25 WS	7,5	10,0	1,25	19,0	60
TR 10-1.5 WS	7,0	10,0	1,50	23,0	50
TR 10-2 WS	6,0	10,0	2,00	33,0	50
TR 11-1.5 WS	8,0	11,0	1,50	24,0	50
TR 12-1 WS	10,0	12,0	1,00	12,0	60
TR 12-1.5 WS	9,0	12,0	1,50	19,0	60
TR 12-2 WS	8,0	12,0	2,00	27,0	60
TR 12.5-1.25 WS	10,0	12,5	1,25	17,0	70
TR 14-1.5 WS	11,0	14,0	1,50	16,0	80
TR 14-2 WS	10,0	14,0	2,00	15,0	80
TR 15-1.5 WS	12,0	15,0	1,50	15,0	90
TR 16-2 WS	12,0	16,0	2,00	18,5	90
TR 18-2 WS	14,0	18,0	2,00	16,0	115
TR 20-2 WS	16,0	20,0	2,00	15,0	120
TR 22-2 WS	18,0	22,0	2,00	13,0	150
TR 25-2.5 WS	20,0	25,0	2,50	15,0	150
TR 28-2.5 WS	23,0	28,0	2,50	13,0	150
TR 30-2.5 WS	25,0	30,0	2,50	8,0	260

BD = Working pressure

KOMP — Compressor hose

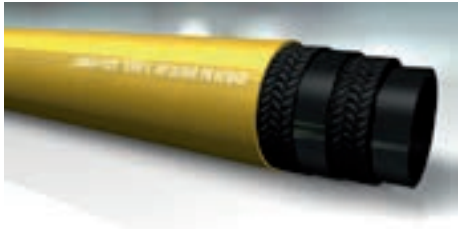


Application: Low pressure range
for compressors
Special features: resistant to aging and weatherproof
Standard: DIN 20018
Inner layer: SBR
Insert: one high tensile synthetic thread braided insert
Outer layer: SBR smooth
Colour: black
Temperature min.: -25 °C
Temperature max.: 70 °C
Media: Water
Compressed air containing oil mist

Identification	Internal Ø mm	External Ø mm	BD* for air bar	Burst pressure bar	Min. bending radius mm	Roll length m
KOMP 6-3.5	6	13	20	60	30	40
KOMP 9-3.5	9	15	20	60	35	40
KOMP 10-5	10	18	20	60	40	40
KOMP 13-5	13	22	20	60	60	40
KOMP 15-6	15	25	20	60	75	40
KOMP 19-6	19	29	20	60	90	40
KOMP 25-7	25	37	20	60	120	40

BD = Working pressure

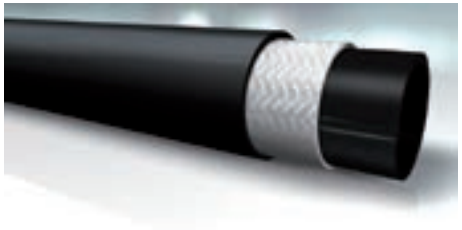
KOMP G — Compressor hose



Application: Mining
Compressors
Special features: smooth outer cover
Inner layer: Natural and synthetic rubber
Insert: highly tear-resistant synthetic textile insert
Outer layer: Natural and synthetic rubber, abrasion, ozone and weather resistant
Colour: yellow
Temperature min.: -25 °C
Temperature max.: 70 °C
Media: Compressed air

Identification	Inches	Internal Ø mm	External Ø mm	Wall thickness mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
KOMP 13-5 G	1/2"	13,0	23	5,0	20	60	125	40
KOMP 19-5 G	3/4"	19,0	29	5,0	20	60	190	40
KOMP 19-6 G	3/4"	19,0	31	6,0	20	60	190	40
KOMP 25-5.5 G	1"	25,4	36	5,5	20	60	254	40
KOMP 25-7 G	1"	25,4	39	7,0	20	60	254	40
KOMP 38-5 G	1.1/2"	38,0	48	5,0	20	60	380	40
KOMP 38-7 G	1.1/2"	38,0	52	7,0	20	60	380	40
KOMP 51-7.5 G	2"	50,8	66	7,5	20	60	510	40
KOMP 75-9 G	3"	76,2	92	9,0	20	60	762	40

BREMS — Brake hose for compressed air brakes



Application: Compressed air brake systems
Special features: weather proof and aging resistant
Standard: DIN 74310
Inner layer: EPDM
Insert: one braided textile insert
Outer layer: EPDM
Colour: black
Temperature min.: -40 °C
Temperature max.: 70 °C
Media: Compressed air

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	Working pressure bar	Burst pressure bar	Roll length m
BREMS 11-3.5	11	18	3,5	10	25	100
BREMS 13-6	13	25	6,0	10	20	100

KANAL S 250 — Drain cleaning hose

Application: High pressure cleaning and sewage cleaning
Special features: abrasion and ozone resistant, weatherproof
Inner layer: NR/SBR, abrasion resistant, black
Insert: two high-tensile synthetic textile braids
Outer layer: NR/SBR
Colour: black
Temperature min.: -40 °C
Temperature max.: 70 °C
Media: Water

Identification	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
KANAL DN13 S 250	1/2"	13,0	25,1	250	625	65	40/60/80/120/160/180/200
KANAL DN 20 S 250	3/4"	19,0	31,6	250	625	90	40/60/80/120/160/180/200
KANAL DN25 S 250	1"	25,5	39,3	250	625	105	40/60/80/120/160/180/200
KANAL DN32 S 250	1.1/4"	32,0	48,0	250	625	140	40/60/80/120/160/180/200

KANAL S — Drain cleaning hose

Application: High pressure cleaning and sewage cleaning
Special features: abrasion and ozone resistant, weatherproof
Inner layer: NR/SBR, abrasion resistant, black
Insert: two high-tensile synthetic textile braids
Outer layer: NR/SBR

Colour: black
Temperature min.: -40 °C
Temperature max.: 70 °C
Media: Water

Identification	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
KANAL DN 13 S	1/2"	12,7	25	200	500	75	40/60/80/120/160/180/200
KANAL DN 20 S	3/4"	19,0	32	200	500	100	40/60/80/120/160/180/200
KANAL DN 25 S	1"	24,4	39	200	500	150	40/60/80/120/160/180/200
KANAL DN 32 S	1.1/4"	32,0	48	200	400	250	40/60/80/120/160/180/200

KUEHLER SBL — Silicone radiator hose, blue

Application: Cooler hose
Special features: very highly resistant to high and low temperatures
very good resistance to coolants, oils and cleaning agents
very good resistance to ozone, UV and classic aging processes
Standard: complies with SAE 20 R3
Inner layer: Silicone blue
Insert: Textile insert

Outer layer: Silicone blue
Colour: blue
Temperature range: Water + Antifreeze agent -50 °C to +150 °C
Hot air +180 °C
Media: Cooling fluids
hot air

Identification	Internal Ø mm	External Ø mm	Burst pressure bar	Roll length m
KUEHLER 08-4 SBL	8	16	24	1/10/20
KUEHLER 10-4 SBL	10	18	24	1/10/20
KUEHLER 12-4 SBL	12	20	24	1/10/20
KUEHLER 14-4 SBL	14	22	20	1/10/20
KUEHLER 16-4 SBL	16	24	18	1/10/20
KUEHLER 18-4 SBL	18	26	18	1/10/20
KUEHLER 20-4 SBL	20	28	14	1/10/20
KUEHLER 22-4 SBL	22	30	14	1/10/20
KUEHLER 25-4.5 SBL	25	34	14	1/10/20
KUEHLER 28-4.5 SBL	28	37	14	1/10/20
KUEHLER 30-4.5 SBL	30	39	14	1
KUEHLER 32-4.5 SBL	32	41	12	1
KUEHLER 35-4.5 SBL	35	44	12	1
KUEHLER 38-4.5 SBL	38	47	10	1
KUEHLER 40-4.5 SBL	40	49	10	1

KUEHLER SBL (Continuation) Silicone radiator hose, blue

Identification	Internal Ø mm	External Ø mm	Burst pressure bar	Roll length m
KUEHLER 45-4.5 SBL	45	54	10	1
KUEHLER 48-5.5 SBL	48	59	8	1
KUEHLER 50-4.5 SBL	50	59	8	1
KUEHLER 57-4.5 SBL	57	66	8	1
KUEHLER 60-4.5 SBL	60	69	8	1
KUEHLER 65-5.5 SBL	65	76	8	1
KUEHLER 70-5.5 SBL	70	81	8	1
KUEHLER 80-6 SBL	80	92	8	1

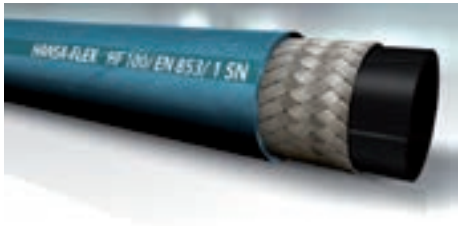
KUEHLER Radiator hose

Application: Radiator hose
Standard: DIN 73411
Inner layer: EPDM
Insert: up to ID 19: one polyester braided insert; from ID 20: one Rayon braided insert
Outer layer: EPDM (from ID 20 mm patterned material)

Colour: black
Temperature min.: -40 °C
Temperature max.: 120 °C
Media: Cooling water

Identification	ID x Wall thickness	Working pressure bar	Burst pressure bar	Roll length m
KUEHLER 08-3.5	8 x 3.5	4	12	40
KUEHLER 10-3.5	10 x 3.5	4	12	40
KUEHLER 12-3.5	12 x 3.5	4	12	40
KUEHLER 13-3.5	13 x 3.5	4	12	40
KUEHLER 15-3.5	15 x 3.5	4	12	40
KUEHLER 16-3.5	16 x 3.5	4	12	40
KUEHLER 18-3.5	18 x 3.5	4	12	40
KUEHLER 20-3.5	20 x 3.5	4	12	40
KUEHLER 22-3.5	22 x 3.5	4	12	40
KUEHLER 25-3.5	25 x 3.5	4	12	40
KUEHLER 28-4	28 x 4	4	12	40
KUEHLER 30-4	30 x 4	4	12	40
KUEHLER 32-4	32 x 4	4	12	40
KUEHLER 35-4	35 x 4	4	12	40
KUEHLER 38-5	38 x 5	4	12	40
KUEHLER 40-5	40 x 5	4	12	40
KUEHLER 42-5	42 x 5	4	12	40
KUEHLER 45-5	45 x 5	4	12	40
KUEHLER 50-5	50 x 5	4	12	40
KUEHLER 55-5	55 x 5	4	12	40
KUEHLER 60-5	60 x 5	4	12	40
KUEHLER 70-5	70 x 5	4	12	40
KUEHLER 90-6	90 x 6	4	12	40

HF 100 (1SN) Hot water hose



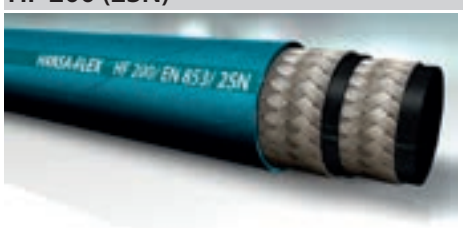
Application: High pressure cleaning equipment
Standard: EN 853 1 SN
Inner layer: water, oil and heat resistant synthetic rubber
Insert: one high tensile steel wire braided insert
Outer layer: environmentally safe synthetic rubber

Colour: blue
Temperature min.: -10 °C
Temperature max.: 150 °C
Elongation: + 2 % to - 4 %
Media: Water
Mineral oil (up to + 100°C)
Water-oil emulsions

Identification	DN*	Inches	Size	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
HF 106	6	1/4"	4	6,4	14,1	225	900	100
HF 108	8	5/16"	5	8,0	15,7	215	850	115
HF 110	10	3/8"	6	9,5	18,1	180	720	130
HF 113	12	1/2"	8	12,7	21,4	160	640	180

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

HF 200 (2SN) Hot water hose



Application: High pressure cleaning equipment
Standard: EN 853 2 SN
Inner layer: water, oil and heat resistant synthetic rubber
Insert: two high tensile steel wire braided inserts
Outer layer: environmentally safe synthetic rubber

Colour: blue
Temperature min.: -10 °C
Temperature max.: 150 °C
Elongation: + 2 % to - 4 %
Media: Water
Mineral oil (up to + 100°C)
Water-oil emulsions

Identification	DN*	Inches	Size	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
HF 206	6	1/4"	4	6,4	15,7	400	1600	100
HF 208	8	5/16"	5	7,9	17,3	350	1470	115
HF 210	10	3/8"	6	9,5	19,7	330	1320	130
HF 213	12	1/2"	8	12,7	23,0	275	1100	180

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

HW 100 (1SN) — Hot water hose

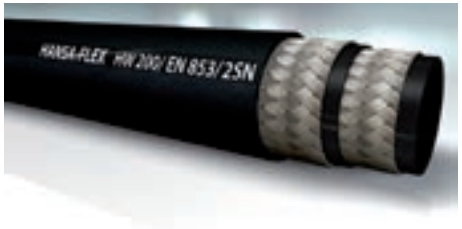
Application: High pressure cleaning equipment
Standard: EN 853 1 SN
Inner layer: water, oil and heat resistant synthetic rubber
Insert: one high tensile steel wire braided insert
Outer layer: environmentally safe synthetic rubber

Colour: black
Temperature min.: -10 °C
Temperature max.: 150 °C
Elongation: + 2 % to - 4 %
Media: Water
Mineral oil (up to + 100°C)
Water-oil emulsions

Identification	DN*	Inches	Size	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
HW 106	6	1/4"	4	6,4	13,4	225	900	100
HW 108	8	5/16"	5	8,0	15,0	215	850	115
HW 110	10	3/8"	6	9,5	17,4	180	720	130
HW 113	12	1/2"	8	12,7	20,6	160	640	180

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

HW 200 (2SN) — Hot water hose



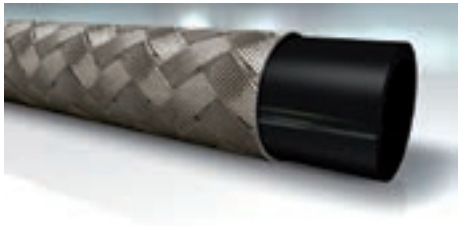
Application: High pressure cleaning equipment
Standard: EN 853 2 SN
Inner layer: water, oil and heat resistant synthetic rubber
Insert: two high tensile steel wire braided inserts
Outer layer: environmentally safe synthetic rubber

Colour: black
Temperature min.: -10 °C
Temperature max.: 150 °C
Elongation: + 2 % to - 4 %
Media: Water
Mineral oil (up to + 100°C)
Water-oil emulsions

Identification	DN*	Inches	Size	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
HW 206	6	1/4"	4	6,4	15,0	345	1840	100
HW 208	8	5/16"	5	7,9	16,6	350	1470	115
HW 210	10	3/8"	6	9,5	19,0	330	1320	130
HW 213	12	1/2"	8	12,7	22,2	275	1200	180

DN = Nominal diameter, nominal width
The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

SI 100 — Fuel hose with braiding



Application: Low pressure hose for fuel lines
Standard: DIN EN ISO 6806
Inner layer: oil resistant synthetic rubber
Insert: one zinc plated steel wire braided insert
Outer layer: none

Colour: metallic
Temperature min.: -35 °C
Temperature max.: 80 °C
Media: Diesel
Crude oil
Lubricating oil
not suitable for petrol fuels

Identification	DN*	Inches	Size	Internal Ø mm	External Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
SI 103	3	1/8"	2	4,5	9,5	20	30	60	25
SI 104	4	3/16"	3	5,5	10,5	20	30	60	25
SI 106	6	1/4"	4	7,5	12,5	15	25	50	30
SI 108	8	5/16"	5	9,0	14,0	15	25	50	40
SI 110	10	3/8"	6	11,5	18,0	15	25	50	45
SI 113	12	1/2"	8	14,5	22,0	15	25	50	50
SI 116	16	5/8"	10	17,0	25,0	15	25	50	70

DN = Nominal diameter, nominal width

SI 200 — Fuel hose with braiding

Application: Low pressure hose for fuel lines
Standard: DIN 73379
Inner layer: oil resistant synthetic rubber
Insert: one braided textile insert
Outer layer: none

Colour: black
Temperature min.: -35 °C
Temperature max.: 80 °C
Media: Petrol fuels
Diesel
Crude oil
Lubricating oil

Identification	DN*	Inches	Size	Internal Ø mm	External Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
SI 202	2	3/32"	1	3,2	7,0	20	30	60	20
SI 203	3	1/8"	2	4,5	9,5	20	30	60	25
SI 204	4	3/16"	3	5,5	10,5	20	30	60	25
SI 206	6	1/4"	4	7,5	12,5	15	25	50	30
SI 208	8	5/16"	5	9,0	14,0	15	25	50	40
SI 210	10	3/8"	6	11,5	17,0	15	25	50	45
SI 213	12	1/2"	8	15,0	22,0	12	20	40	50
SI 216	16	5/8"	10	18,0	26,0	12	20	38	70

DN = Nominal diameter, nominal width

SI 300 — Fuel hose with braiding

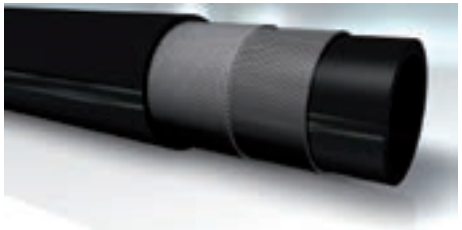
Application: Low pressure hose for fuel lines
Standard: DIN 73379
Inner layer: oil resistant synthetic rubber
Insert: one textile braided insert and one zinc plated steel wire braided insert
Outer layer: none

Colour: metallic
Temperature min.: -35 °C
Temperature max.: 80 °C
Media: Petrol fuels
Diesel
Crude oil
Lubricating oil

Identification	DN*	Inches	Size	Internal Ø mm	External Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
SI 304	4	3/16"	3	5,5	11,5	30	40	60	40
SI 306	6	1/4"	4	7,5	13,5	30	40	60	50
SI 308	8	5/16"	5	9,0	16,0	25	35	45	60
SI 310	10	3/8"	6	11,5	18,5	25	35	45	80
SI 313	12	1/2"	8	15,0	23,0	25	35	45	80
SI 316	16	5/8"	10	17,5	26,0	25	35	45	120

DN = Nominal diameter, nominal width

SI 200 RME — Fuel hose



Application: Low pressure hose for fuel lines
Special features: antistatic inner and outer rubber
Inner layer: NBR
Insert: spiral synthetic textile threads
Outer layer: BNBR/EPDM, smooth

Colour: black
Temperature min.: -30 °C
Temperature max.: 100 °C
Media: Biodiesel, diesel and petrol fuels

Identification	DN*	Inches	Size	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
SI 206 RME	6	1/4"	4	6,0	13	10	30	55
SI 208 RME	8	5/16"	5	7,5	14	10	30	65
SI 210 RME	10	3/8"	6	10,0	16	10	30	75

DN = Nominal diameter, nominal width

FP 104 — Grease gun hose line

Application: Grease guns
Inner layer: Polyester
Insert: one polyester braided insert
Outer layer: PVC
Colour: black

Media: Lubricating grease
Connection 1: metric cylindrical outer thread or imperial cylindrical outer thread
Connection 2: Lubricating nipple H DIN 71412
Sealing form 1: metallic
Hose standard: DIN 1283

Identification	G1	Burst pressure bar	Length mm
FP 104-300 HM	M 10 x 1	1000	300
FP 104-500 HM	M 10 x 1	1000	500
FP 104-300 HR	R 1/8"	1000	300
FP 104-500 HR	R 1/8"	1000	500

G1 = Thread of connection 1

KLIMA — Universal coolant hose

Application: Coolant (air conditioning technology)
Standard: exceeds SAEJ2064 Type E
Inner layer: Polyamide = R134a effusion values 75% lower than required according to SAEJ2064
Rubber intermediate layer: Butyl group = Moisture absorption values; 70% lower than required according to SAEJ2064
Insert: polyester braid

Outer layer: Butyl group = Moisture absorption values 70% lower than required according to SAEJ2064
Colour: black
Temperature min.: -40 °C
Temperature max.: 125 °C
Media: Compressor oils: PAG, ester, mineral oil, alkyl benzene
Coolants: R134a, R404a

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
KLIMA 04	5	3	3/16"	5,1	11,2	35	175	40
KLIMA 08	8	5	5/16"	8,0	14,9	35	175	51
KLIMA 10	10	6	3/8"	10,5	17,9	35	175	63
KLIMA 13	12	8	1/2"	13,1	19,9	35	175	76
KLIMA 16	16	10	5/8"	16,3	24,8	35	175	101
KLIMA 20	19	12	3/4"	22,6	30,6	35	140	178

DN = Nominal diameter, nominal width

MD 100 AC — Coolant hose

Application: Coolant (air conditioning technology)
Design: for screw fittings
Standard: SAE J2064
Inner layer: Butyl = R134a effusion values 65% lower than required according to SAEJ2064.
Insert: very strong steel wire braid

Outer layer: CR = Moisture absorption values 75% lower than required according to SAEJ2064
Colour: black
Temperature min.: -40 °C
Temperature max.: 120 °C
Media: Compressor oils: PAG, ester only for TRITON SE55, SEZ80, Solest oil 35 / 68
Coolants: R134a

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
MD 120 AC	19	12	3/4"	22,8	31,3	35	175	160
MD 125 AC	25	16	1"	29,3	38,3	35	175	195
MD 132 AC	31	20	1.1/4"	35,5	45,6	35	175	225

DN = Nominal diameter, nominal width

ACN AO 90 — AC clip nipples, pipe connection, angle 90°

Application: nipple for air conditioning hoses, clip system
Sealing form 1: flat sealing
Construction: Angle 90°
Surface protection: electro galvanised
Accessories: AC OR TUBO GR, O-ring, TUBO air conditioning

Connection 1: UN/UNF nut threads
Design: O-ring sealed pipe connection, long pilot
Material: Steel

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L2 mm	S1
ACN 08 AO 5/8 90	8	5	5/16"	5/8"-18 UNF	5,5	85,7	39,8	19
ACN 10 AO 90	10	6	3/8"	5/8"-18 UNF	8,0	85,9	46,9	19
ACN 10 AO 13 90	10	6	3/8"	3/4"-16 UNF	8,0	92,8	41,0	22
ACN 13 AO 90	12	8	1/2"	3/4"-16 UNF	9,5	92,3	41,0	22
ACN 13 AO 16 90	12	8	1/2"	7/8"-14 UNF	9,5	101,0	47,1	27
ACN 16 AO 90	16	10	5/8"	7/8"-14 UNF	11,9	100,0	47,1	27
ACN 16 AO 20 90	16	10	5/8"	1.1/16" -14 UNS	11,9	108,5	57,7	32
ACN 20 AO 90	19	12	3/4"	1.1/16" -14 UNS	16,4	111,4	57,7	32

DN = Nominal diameter, nominal width
Order O-ring separately, not included in scope of supply.

ACN AO 45 — AC clip nipples, pipe connection, angle 45°

Application: nipple for air conditioning hoses, clip system
Sealing form 1: flat sealing
Construction: Angle 45°
Surface protection: electro galvanised
Accessories: AC OR TUBO GR, O-ring, TUBO air conditioning

Connection 1: UN/UNF nut threads
Design: O-ring sealed pipe connection, long pilot
Material: Steel

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L2 mm	S1
ACN 08 AO 5/8 45	8	5	5/16"	5/8"-18 UNF	5,5	93,0	20,3	19
ACN 10 AO 45	10	6	3/8"	5/8"-18 UNF	8,0	93,1	20,3	19
ACN 10 AO 13 45	10	6	3/8"	3/4"-16 UNF	8,0	97,2	21,0	22
ACN 13 AO 45	12	8	1/2"	3/4"-16 UNF	9,5	97,0	21,0	22
ACN 13 AO 16 45	12	8	1/2"	7/8"-14 UNF	9,5	108,0	23,0	27
ACN 16 AO 45	16	10	5/8"	7/8"-14 UNF	11,9	108,0	23,0	27
ACN 16 AO 20 45	16	10	5/8"	1.1/16" -14 UNS	11,9	120,7	28,5	32
ACN 20 AO 45	19	12	3/4"	1.1/16" -14 UNS	16,4	123,3	35,4	32

DN = Nominal diameter, nominal width
Order O-ring separately, not included in scope of supply.

ACN AO — AC clip nipples, pipe connection

Application: nipple for air conditioning hoses, clip system
Sealing form 1: flat sealing
Construction: straight
Surface protection: electro galvanised
Accessories: AC OR TUBO GR, O-ring, TUBO air conditioning

Connection 1: UN/UNF nut threads
Design: O-ring sealed pipe connection, long pilot
Material: Steel

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	S1
ACN 08 AO 5/8	8	5	5/16"	5/8"-18 UNF	5,5	72,7	19
ACN 10 AO	10	6	3/8"	5/8"-18 UNF	8,0	72,9	19
ACN 10 AO 13	10	6	3/8"	3/4"-16 UNF	8,0	73,1	22
ACN 13 AO	12	8	1/2"	3/4"-16 UNF	9,5	73,3	22
ACN 13 AO 16	12	8	1/2"	7/8"-14 UNF	9,5	78,1	27
ACN 16 AO	16	10	5/8"	7/8"-14 UNF	11,9	77,8	27
ACN 16 AO 20	16	10	5/8"	1.1/16" -14 UNS	11,9	79,8	32
ACN 20 AO	19	12	3/4"	1.1/16" -14 UNS	16,4	92,2	32

DN = Nominal diameter, nominal width
Order O-ring separately, not included in scope of supply.

ACN AO 45 BN

Application: nipple for air conditioning hoses, clip system
Sealing form 1: flat sealing
Construction: Angle 45°
Surface protection: electro galvanised
Accessories: AC OR TUBO GR, O-ring, TUBO air conditioning

Connection 1: UN/UNF nut threads
Design: O-ring sealed pipe connection and filling valve (low side), long pilot
Material: Steel

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L2 mm	L3 mm	S1
ACN 13 AO 16 45 BN	12	8	1/2"	7/8"-14 UNF	9,5	108	23	38,9	27

DN = Nominal diameter, nominal width
Order O-ring separately, not included in scope of supply.

ACN AO 90 BNL

Application: nipple for air conditioning hoses, clip system
Sealing form 1: flat sealing
Design: O-ring sealed pipe connection and filling valve, long pilot
Material: Steel
Accessories: AC OR TUBO GR, O-ring, TUBO air conditioning

Connection 1: UN/UNF nut threads
Connection 2: Filling valve
Construction: Angle 90°
Surface protection: electro galvanised

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L2 mm	L3 mm	S1
ACN 13 AO 16 90 BN L 32	12	8	1/2"	7/8"-14 UNF	9,5	104,0	32,0	32,0	27
ACN 13 AO 16 90 BN L 47	12	8	1/2"	7/8"-14 UNF	9,5	100,4	47,2	31,0	27
ACN 16 AO 90 BN L 47	16	10	5/8"	7/8"-14 UNF	11,9	100,3	47,2	31,0	27

DN = Nominal diameter, nominal width
Order O-ring separately, not included in scope of supply.

ACN AO 90 BHL

Application: nipple for air conditioning hoses, clip system
Sealing form 1: flat sealing
Design: O-ring sealed pipe connection and filling valve, long pilot
Material: Steel
Accessories: AC OR TUBO GR, O-ring, TUBO air conditioning

Connection 1: UN/UNF nut threads
Connection 2: Filling valve
Construction: Angle 90°
Surface protection: electro galvanised

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L2 mm	L3 mm	S1
ACN 10 AO 13 90 BH L 29	10	6	3/8"	3/4"-16 UNF	8,0	92,8	29,0	27,5	22
ACN 10 AO 13 90 BH L 41	10	6	3/8"	3/4"-16 UNF	8,0	92,4	41,2	24,5	22
ACN 13 AO 90 BH L 41	12	8	1/2"	3/4"-16 UNF	9,5	92,6	41,2	24,5	22

DN = Nominal diameter, nominal width
Order O-ring separately, not included in scope of supply.

ACN AO BN — AC clip nipples, pipe connection with high-pressure filling valve

Application: nipple for air conditioning hoses, clip system
Sealing form 1: flat sealing
Design: O-ring sealed pipe connection and filling valve, long pilot
Material: Steel
Accessories: AC OR TUBO GR, O-ring, TUBO air conditioning
Connection 1: UN/UNF nut threads
Connection 2: Filling valve
Construction: straight
Surface protection: electro galvanised

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L3 mm	S1
ACN 13 AO 16 BN	12	8	1/2"	7/8"-14 UNF	9,5	95,3	24,2	27
ACN 16 AO BN	16	10	5/8"	7/8"-14 UNF	11,9	95,0	24,2	27
ACN 16 AO 20 BN	16	10	5/8"	1.1/16" -14 UNS	11,9	97,0	25,2	32

DN = Nominal diameter, nominal width
Order O-ring separately, not included in scope of supply.

ACN AO BH — AC clip nipples, pipe connection with high-pressure filling valve

Application: nipple for air conditioning hoses, clip system
Sealing form 1: flat sealing
Design: O-ring sealed pipe connection and filling valve, long pilot
Material: Steel
Accessories: AC OR TUBO GR, O-ring, TUBO air conditioning
Connection 1: UN/UNF nut threads
Connection 2: Filling valve
Construction: straight
Surface protection: electro galvanised

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L3 mm	S1
ACN 08 AO 5/8 BH	8	5	5/16"	5/8"-18 UNF	5,5	99,3	33,5	19
ACN 10 AO 13 BH	10	6	3/8"	3/4"-16 UNF	8,0	103,5	35,0	22
ACN 13 AO BH	12	8	1/2"	3/4"-16 UNF	9,5	103,3	35,0	22
ACN 13 AO 16 BH	12	8	1/2"	7/8"-14 UNF	9,5	95,3	24,2	27

DN = Nominal diameter, nominal width
Order O-ring separately, not included in scope of supply.

ACN HO — AC clip nipples, connector, O-ring sealed external thread

Application: nipple for air conditioning hoses, clip system
Sealing form 1: O-ring sealed
Construction: straight
Surface protection: electro galvanised
Connection 1: UN/UNF external threads
Design: Connector, O-ring sealed outer thread
Material: Steel

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	S1
ACN 08 HO 5/8	8	5	5/16"	5/8"-18 UNF	5,5	91,4	17
ACN 10 HO 13	10	6	3/8"	3/4"-16 UNF	8,0	95,4	22
ACN 13 HO 16	12	8	1/2"	7/8"-14 UNF	9,7	99,0	22
ACN 16 HO 20	16	10	5/8"	1.1/16" -14 UNS	11,9	106,3	27

DN = Nominal diameter, nominal width

ACN HJ — AC clip nipples, SAE external thread, 45° sealing cone

Application: nipple for air conditioning hoses, clip system
Sealing form 1: 45° outer cone
Material: Steel
Connection 1: UN/UNF external threads
Construction: straight
Surface protection: electro galvanised

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	S1
ACN 04 HJ	5	3	3/16"	7/16"-20 UNF	3,1	44,4	12

DN = Nominal diameter, nominal width

ACN FO 90 — AC clip nipples, for flange mounting, angle 90°

Application: nipple for air conditioning hoses, clip system
Sealing form 1: O-ring seal
Construction: Angle 90°
Surface protection: electro galvanised
Accessories: AC OR TUBO GR, O-ring, TUBO air conditioning
Connection 1: for flange assembly, long pilot
Design: O-ring sealed pipe connection for flange assembly, long pilot
Material: Steel

Identification	DN*	Size	Inches	for internal pipe Ø mm	Ø d2 mm	L1 mm	L2 mm
ACN 08 FO 90	8	5	5/16"	8,4	5,5	85,7	39,8
ACN 10 FO 08 90	10	6	3/8"	8,4	8,0	85,9	39,8
ACN 16 FO 90	16	10	5/8"	17,5	11,9	108,5	57,7

DN = Nominal diameter, nominal width
Order O-ring separately, not included in scope of supply.

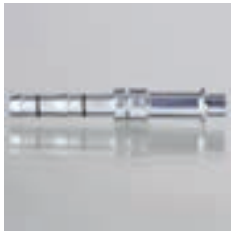
ACN FO 45 — AC clip nipples, for flange mounting, angle 45°

Application: nipple for air conditioning hoses, clip system
Sealing form 1: O-ring seal
Construction: Angle 45°
Surface protection: electro galvanised
Accessories: AC OR TUBO GR, O-ring, TUBO air conditioning
Connection 1: for flange assembly, long pilot
Design: O-ring sealed pipe connection for flange assembly, long pilot
Material: Steel

Identification	DN*	Size	Inches	for internal pipe Ø mm	Ø d2 mm	L1 mm	L2 mm
ACN 08 FO 45	8	5	5/16"	8,4	5,5	93	20,3

DN = Nominal diameter, nominal width
Order O-ring separately, not included in scope of supply.

ACN FO — AC clip nipples, for flange mounting



Application: nipple for air conditioning hoses, clip system
Sealing form 1: O-ring seal
Construction: straight
Surface protection: electro galvanised
Accessories: AC OR TUBO GR, O-ring, TUBO air conditioning

Connection 1: for flange assembly, long pilot
Design: O-ring sealed pipe connection for flange assembly, long pilot
Material: Steel

Identification	DN*	Size	Inches	for internal pipe Ø mm	Ø d2 mm	L1 mm
ACN 08 FO	8	5	5/16"	8,4	5,5	72,7

DN = Nominal diameter, nominal width
Order O-ring separately, not included in scope of supply.

ACN DF 90 — AC clip nipples for DENSO compressor flange, angle 90°

Application: nipple for air conditioning hoses, clip system
Sealing form 1: O-ring sealed pin
Construction: Angle 90°
Surface protection: electro galvanised
Accessories: AC OR TUBO GR, O-ring, TUBO air conditioning

Connection 1: DENSO compressor flange
Design: 45° SAE connection
Material: Steel

Identification	DN*	Size	Inches	for internal pipe Ø mm	Ø d2 mm	L1 mm
ACN 10 DF 90	10	6	3/8"	12,9	8,0	84,4
ACN 16 DF 90	16	10	5/8"	15,7	11,9	81,8

DN = Nominal diameter, nominal width
Order O-ring separately, not included in scope of supply.

ACN FO MF 90 — AC clip nipples, pipe connection with flange, angle 90°

Application: nipple for air conditioning hoses, clip system
Sealing form 1: O-ring seal
Construction: Angle 90°
Surface protection: electro galvanised
Accessories: AC OR TUBO GR, O-ring, TUBO air conditioning

Connection 1: Pipe connection with flange
Design: O-ring sealed pipe connection with flange, long pilot
Material: Steel

Identification	DN*	Size	Inches	for internal pipe Ø mm	Ø d2 mm	L1 mm	L2 mm
ACN 13 FO MF 20 90	12	8	1/2"	17,5	9,5	110,6	57,7
ACN 16 FO MF 20 90	16	10	5/8"	17,5	11,9	108,8	57,7

DN = Nominal diameter, nominal width
Order O-ring separately, not included in scope of supply.

ACN FO MF 45 — AC clip nipples, pipe connection with flange, angle 45°

Application: nipple for air conditioning hoses, clip system
Sealing form 1: O-ring seal
Construction: Angle 45°
Surface protection: electro galvanised
Accessories: AC OR TUBO GR, O-ring, TUBO air conditioning

Connection 1: Pipe connection with flange
Design: O-ring sealed pipe connection with flange, long pilot
Material: Steel

Identification	DN*	Size	Inches	for internal pipe Ø mm	Ø d2 mm	L1 mm	L2 mm
ACN 13 FO MF 20 45	12	8	1/2"	17,5	9,5	122,6	28,5

DN = Nominal diameter, nominal width
Order O-ring separately, not included in scope of supply.

ACN DF — AC clip nipples for DENSO compressor flange

Application: nipple for air conditioning hoses, clip system
Sealing form 1: O-ring sealed pin
Construction: straight
Surface protection: electro galvanised
Accessories: AC OR TUBO GR, O-ring, TUBO air conditioning

Connection 1: DENSO compressor flange
Design: 45° SAE connection
Material: Steel

Identification	DN*	Size	Inches	for internal pipe Ø mm	Ø d2 mm	L1 mm
ACN 10 DF	10	6	3/8"	12,9	8,0	99,0
ACN 16 DF	16	10	5/8"	15,7	11,9	95,8

DN = Nominal diameter, nominal width
Order O-ring separately, not included in scope of supply.

ACN FO MF — AC clip nipples, pipe connection with flange

Application: nipple for air conditioning hoses, clip system
Sealing form 1: O-ring seal
Construction: straight
Surface protection: electro galvanised
Accessories: AC OR TUBO GR, O-ring, TUBO air conditioning

Connection 1: Pipe connection with flange
Design: O-ring sealed pipe connection with flange, long pilot
Material: Steel

Identification	DN*	Size	Inches	for internal pipe Ø mm	Ø d2 mm	L1 mm
ACN 13 FO MF 20	12	8	1/2"	17,5	9,5	81,6

DN = Nominal diameter, nominal width
Order O-ring separately, not included in scope of supply.

ACN AOL — AC clip nipples, DKOL

Application: nipple for air conditioning hoses, clip system
Sealing form 1: 24° outer cone with O-ring
Standard code: DKOL
Surface protection: electro galvanised

Connection 1: metric nut thread
Construction: straight
Material: Steel

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	S1	OR
ACN 20 AOL	19	12	3/4"	M 30 x 2	16,4	71,1	36	20 x 2

DN = Nominal diameter, nominal width

ACN AOL 45 — AC clip nipples, DKOL, angle 45°

Application: nipple for air conditioning hoses, clip system
Sealing form 1: 24° outer cone with O-ring
Standard code: DKOL
Surface protection: electro galvanised

Connection 1: metric nut thread
Construction: Angle 45°
Material: Steel

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L2 mm	S1	OR
ACN 20 AOL 45	19	12	3/4"	M 30 x 2	16,4	104,1	26,6	36	20 x 2

DN = Nominal diameter, nominal width

ACN AJ 90 — AC clip nipples, SAE sealing head, angle 90°

Application: nipple for air conditioning hoses, clip system
Sealing form 1: 45° inner cone
Construction: Angle 90°
Surface protection: electro galvanised

Connection 1: UN/UNF nut threads
Design: 45° SAE connection
Material: Steel

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L2 mm	S1
ACN 04 AJ 90	5	3	3/16"	7/16"-20 UNF	3,1	37,3	19,1	14

DN = Nominal diameter, nominal width

ACN AJ 45 — AC clip nipples, SAE sealing head, angle 45°

Application: nipple for air conditioning hoses, clip system
Sealing form 1: 45° inner cone
Construction: Angle 45°
Surface protection: electro galvanised
Connection 1: UN/UNF nut threads
Design: 45° SAE connection
Material: Steel

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L2 mm	S1
ACN 04 AJ 45	5	3	3/16"	7/16"-20 UNF	3,1	46,9	11,8	14

DN = Nominal diameter, nominal width

ACN AJ — AC clip nipples, SAE sealing head

Application: nipple for air conditioning hoses, clip system
Sealing form 1: 45° inner cone
Construction: straight
Surface protection: electro galvanised
Connection 1: UN/UNF nut threads
Design: 45° SAE connection
Material: Steel

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	S1
ACN 04 AJ	5	3	3/16"	7/16"-20 UNF	3,1	34	14

DN = Nominal diameter, nominal width

ACN VB BH — AC clip nipples, straight connectors with valve (high side)

Application: nipple for air conditioning hoses, clip system
Connection 2: Filling valve
Material: Steel
Connection 1 + 3: Hose connection
Construction: straight
Surface protection: electro galvanised

Identification	DN*	Size	Inches	Ø d3 mm	L1 mm	L2 mm
ACN 08 VB BH	8	5	5/16"	5,5	124,9	38,7
ACN 10 VB BH	10	6	3/8"	8,0	125,8	39,2

DN = Nominal diameter, nominal width

ACN VB BN — AC clip nipples, straight connectors with valve (low side)

Application: nipple for air conditioning hoses, clip system
Connection 2: Filling valve
Material: Steel
Connection 1 + 3: Hose connection
Construction: straight
Surface protection: electro galvanised

Identification	DN*	Size	Inches	Ø d3 mm	L1 mm	L2 mm
ACN 13 VB BN	12	8	1/2"	9,5	126,1	39,4
ACN 16 VB BN	16	10	5/8"	11,9	125,5	40,1

DN = Nominal diameter, nominal width

ACN VB — AC clip nipples, straight connector

Application: nipple for air conditioning hoses, clip system
Construction: straight
Surface protection: electro galvanised
Connection 2: Hose connection
Material: Steel

Identification	DN*	Size	Inches	Ø d3 mm	L1 mm	L2 mm
ACN 08 VB	8	5	5/16"	5,5	124,9	38,7
ACN 10 VB	10	6	3/8"	8,0	125,8	39,2
ACN 13 VB	12	8	1/2"	9,5	126,1	39,4
ACN 16 VB	16	10	5/8"	11,9	125,5	40,1

DN = Nominal diameter, nominal width

AC BUEGEL — Clip for AC clip nipple

Application: Coolant (air conditioning technology)
Material: Stainless steel
Design: AC clip system

Identification	DN*	Size	Inches	L1 mm
AC BUEGEL 04	5	3	3/16"	20,4
AC BUEGEL 08	8	5	5/16"	40,4
AC BUEGEL 10	10	6	3/8"	40,4
AC BUEGEL 13	12	8	1/2"	40,4
AC BUEGEL 16	16	10	5/8"	40,4
AC BUEGEL 20	19	12	3/4"	40,4

DN = Nominal diameter, nominal width

AC SCHELLE — Clamps for AC clip nipple

Application: Coolant (air conditioning technology)
Material: Stainless steel
Design: AC clip system

Identification	DN*	Size	Inches	D mm
AC SCHELLE 04	5	3	3/16"	14,0
AC SCHELLE 08	8	5	5/16"	18,0
AC SCHELLE 10	10	6	3/8"	20,5
AC SCHELLE 13	12	8	1/2"	23,0
AC SCHELLE 16	16	10	5/8"	27,5
AC SCHELLE 20	19	12	3/4"	33,0

DN = Nominal diameter, nominal width

MDN AOL 90 AC — Screw nipple, DKOL for air conditioning hose, angle 90°

Application: Screw ferrule for air conditioning hoses
Sealing form 1: 24° outer cone with O-ring
Material: Steel
Connection 1: metric nut thread
Construction: Angle 90°
Surface protection: electro galvanised

Identification	DN*	Size	Inches	Ø d2 mm	G1	L1 mm	L2 mm	SW mm	S1	OR
MDN 20 AOL 90 AC	19	12	3/4"	20,5	M 30 x 2	89,5	55,0	30	36	20.0 x 2.0
MDN 25 AOL 90 AC	25	16	1"	26,5	M 36 x 2	97,0	64,5	36	41	26.0 x 2.0
MDN 32 AOL 90 AC	31	20	1.1/4"	32,5	M 45 x 2	107,5	76,0	46	50	32.0 x 2.5

SW = Width across flats DN = Nominal diameter, nominal width

MDN AOL 45 AC — Screw nipple, DKOL for air conditioning hose, angle 45°

Application: Screw ferrule for air conditioning hoses
Sealing form 1: 24° outer cone with O-ring
Material: Steel
Connection 1: metric nut thread
Construction: Angle 45°
Surface protection: electro galvanised

Identification	DN*	Size	Inches	Ø d2 mm	G1	L1 mm	L2 mm	SW mm	S1	OR
MDN 20 AOL 45 AC	19	12	3/4"	20,5	M 30 x 2	98,4	26,5	30	36	20.0 x 2.0
MDN 25 AOL 45 AC	25	16	1"	26,5	M 36 x 2	110,3	29,8	36	41	26.0 x 2.0
MDN 32 AOL 45 AC	31	20	1.1/4"	32,5	M 45 x 2	110,5	32,5	46	50	32.0 x 2.5

SW = Width across flats DN = Nominal diameter, nominal width

MDN AOL AC — Screw nipple, DKOL for air conditioning hose

Application: Screw ferrule for air conditioning hoses
Sealing form 1: 24° outer cone with O-ring
Material: Steel
Connection 1: metric nut thread
Construction: straight
Surface protection: electro galvanised

Identification	DN*	Size	Inches	Ø d2 mm	G1	L1 mm	SW mm	S1	OR
MDN 20 AOL AC	19	12	3/4"	20,5	M 30 x 2	69,5	36	36	20.0 x 2.0
MDN 25 AOL AC	25	16	1"	26,5	M 36 x 2	74,9	41	41	26.0 x 2.0
MDN 32 AOL AC	31	20	1.1/4"	32,5	M 45 x 2	77,3	50	50	32.0 x 2.5

SW = Width across flats DN = Nominal diameter, nominal width

MDN BOCK 90 — Screw nipple, block connection for air conditioning hose, angle 90°

Application: Screw ferrule for air conditioning hoses
Construction: Angle 90°
Surface protection: electro galvanised
Connection 1: Block connection
Material: Steel

Identification	DN*	Size	Inches	Ø d2 mm	L1 mm	L2 mm	SW mm
MDN 20 BOCK 90	19	12	3/4"	20,5	81,0	76,5	30
MDN 25 BOCK 90	25	16	1"	26,5	97,0	86,5	36
MDN 32 BOCK 90	31	20	1.1/4"	32,5	108,5	90,5	46

SW = Width across flats DN = Nominal diameter, nominal width

MDN BOCK 45 — Screw nipple, block connection for air conditioning hose, angle 45°

Application: Screw ferrule for air conditioning hoses
Construction: Angle 45°
Surface protection: electro galvanised
Connection 1: Block connection
Material: Steel

Identification	DN*	Size	Inches	Ø d2 mm	L1 mm	L2 mm	SW mm
MDN 20 BOCK 45	19	12	3/4"	20,5	114,3	46,0	30
MDN 25 BOCK 45	25	16	1"	26,5	123,2	45,7	36
MDN 32 BOCK 45	31	20	1.1/4"	32,5	133,7	38,0	46

SW = Width across flats DN = Nominal diameter, nominal width

MDN BOCK — Screw nipple, block connection for air conditioning hose

Application: Screw ferrule for air conditioning hoses
Construction: straight
Surface protection: electro galvanised
Connection 1: Block connection
Material: Steel

Identification	DN*	Size	Inches	Ø d2 mm	L1 mm	SW mm
MDN 20 BOCK	19	12	3/4"	20,5	95,5	30
MDN 25 BOCK	25	16	1"	26,5	102,5	36
MDN 32 BOCK	31	20	1.1/4"	32,5	95,0	46

SW = Width across flats DN = Nominal diameter, nominal width

MDH 100 AC — Screw ferrule for air conditioning hoses

Application: Coolant (air conditioning technology)
Surface protection: electro galvanised
Material: Steel

Identification	DN*	Size	Inches
MDH 120 AC	19	12	3/4"
MDH 125 AC	25	16	1"
MDH 132 AC	31	20	1.1/4"

DN = Nominal diameter, nominal width SW = Width across flats

G TUBO — Connector adapter, TUBO

Connection 1: UNEF external thread
Design: 45° SAE external thread, outer cone long pilot for 5400 coupling
Material: Steel
Connection 2: UN/UNF external threads
Construction: straight
Surface protection: electro galvanised

Identification	G1	G2	L1 mm	SW mm
G 08 TUBO 7/8-20	7/8"-20 UNEF	5/8"-18 UNF	26,7	27
G 10 TUBO 7/8-20	7/8"-20 UNEF	3/4"-16 UNF	28,7	27
G 13 TUBO 11/4-18	1.1/4"-18 UNFE	7/8"-14 UNF	34,3	36
G 16 TUBO 11/4-18	1.1/4"-18 UNFE	1.1/16" -14 UNS	35,6	36

SW = Width across flats

ADAPTER M — Adapter for air conditioning system

Connection 1: metric cylindrical inner thread
Material: Brass
Construction: straight

Identification	G1	L1 mm	SW mm	Design
ADAPTER M13X1	M 13 x 1	15,8	17	Low side
ADAPTER M15X1	M 15 x 1	15,8	19	High side
SW = Width across flats				

VZ M — Valve mounting

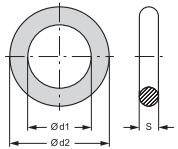
Connection 1: metric cylindrical outer thread
Construction: straight
Sealing form 1: O-ring sealed
Material: Steel

Identification	G1	SW mm	Design
VZ M 13X1	M 13 x 1	15	Low side
VZ M 15X1	M 15 x 1	17	High side
SW = Width across flats			

AC OR — O-ring for AC clip nipple

Design: Sealing ring for AC clip nipple

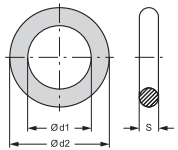
Identification	for hose DN	Ø d1 mm	Ø d2 mm	S mm
AC OR 05	05	3,5	5,5	1,0
AC OR 08	08	5,5	7,5	1,0
AC OR 10	10	8,0	10,0	1,0
AC OR 13	12	9,5	12,5	1,5
AC OR 16	16	12,0	16,0	2,0
AC OR 20	19	15,5	19,5	2,0



AC OR AOL — O-ring for DKOL air conditioning

Temperature min.: -40 °C
Material: NBR
Temperature max.: 125 °C

Identification	for hose DN	Ø d1 mm	Ø d2 mm	S mm
AC OR AOL 20	19	20	24	2,0
AC OR AOL 25	25	26	30	2,0
AC OR AOL 32	31	32	37	2,5

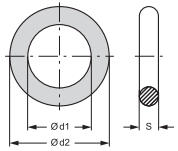


AC OR TUBO GR — O-ring, TUBO air conditioning

Design: Sealing ring
Temperature min.: -40 °C
Material: Chloroprene (neoprene)

suitable for: for following coolants
R134a
R404a
Temperature max.: 150 °C

Accessories: **ACN AO,** AC clip nipples, pipe connection
ACN AO 45, AC clip nipples, pipe connection, angle 45°
ACN AO 45 BN,
ACN AO 90, AC clip nipples, pipe connection, angle 90°
ACN AO 90 BHL,
ACN AO 90 BNL,
ACN AO BH, AC clip nipples, pipe connection with high-pressure filling valve
ACN AO BN, AC clip nipples, pipe connection with high-pressure filling valve
ACN DF, AC clip nipples for DENSO compressor flange
ACN DF 90, AC clip nipples for DENSO compressor flange, angle 90°
ACN FO, AC clip nipples, for flange mounting
ACN FO 45, AC clip nipples, for flange mounting, angle 45°
ACN FO 90, AC clip nipples, for flange mounting, angle 90°
ACN FO MF, AC clip nipples, pipe connection with flange
ACN FO MF 45, AC clip nipples, pipe connection with flange, angle 45°
ACN FO MF 90, AC clip nipples, pipe connection with flange, angle 90°



Identification	Ø d1 mm	Ø d2 mm	S mm
AC OR TUBO 08 GR	7,6	11,16	1,78

AC OR TUBO GR (Continuation) O-ring, TUBO air conditioning

Identification	Ø d1 mm	Ø d2 mm	S mm
AC OR TUBO 10 GR	10,8	14,36	1,78
AC OR TUBO 13 GR	14,0	17,56	1,78
AC OR TUBO 16 GR	17,2	20,76	1,78

AC ZANGE Pliers for AC clip

Application: Pliers for air-conditioning hose clip system

Identification	for hose DN
AC ZANGE	05 - 16
AC ZANGE 16	19

OEL PAG46 Fitting oil

Application: Assembly oil for air conditioning hoses

Identification
OEL PAG 46

AC GLASFASER — Protective hose against radiation heat

Application: thermal protection for air conditioning and hydraulic hose lines
Temperature min.: -50 °C
Colour: silver
Temperature max.: 220 °C

Identification	Internal Ø mm	Wall thickness mm
AC GLASFASER 22	22	0,65
AC GLASFASER 32	32	0,65

AC AF 2 — Condensation protection

Application: Coolant (air conditioning technology)
Colour: black

Identification	Internal Ø min. mm	Internal Ø max. mm	Wall thickness mm
AC AF 2-012	13,0	14,5	11,00
AC AF 2-015	16,0	17,5	11,50
AC AF 2-018	19,0	20,5	11,50
AC AF 2-022	23,0	24,5	12,00
AC AF 2-025	26,0	27,5	12,50
AC AF 2-030	31,0	33,0	12,50
AC AF 2-042	43,5	45,5	13,50
AC AF 2-045	46,0	47,5	13,50

AC AF 2 E — Condensation protection

Application: Coolant (air conditioning technology)
Colour: black

Identification	Internal Ø min. mm	Internal Ø max. mm	Wall thickness mm
AC AF 2-015 E	16,0	17,5	11,50
AC AF 2-018 E	19,0	20,5	11,50
AC AF 2-022 E	23,0	24,5	12,00

X-CODE SET

Hose codes

Included in scope of supply: Plate, cable ties, label

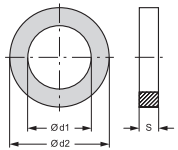
Spare parts: **HD 100 (1SN),** HD hose
HD 100 T (1SN), HD hose, high thermal resistance
HD 200 (2SN), HD hose
HD 200 RM (2SN), HD hose, harsh conditions
HD 200 S (2SN), HD hose, harsh conditions
HD 200 T (2SN), HD hose, high thermal resistance
HD 400 (4SP), HD hose
HD 500 (4SH), HD hose
HD 600 (R13), HD hose
HD 700 (R15), HD hose
HD 700 PRO, HD hose, extremely abrasion resistant outer cover
KP 100 (1SC), HD hose in compact design
KP 100 P (1SC), HD hose, compact, Pilot
KP 200 (2SC), HD hose in compact design
KP 200 NO (2SC), Compact hose
KP 200 PRO (2SC), HD hose, compact, abrasion resistant
KP 200 S, HD hose in compact design
KP 400, Compact hose
MD 100, Medium pressure hose
NY 100, Thermoplastic high pressure hose
NY 2100, Thermoplastic extreme pressure hose
NY 300, Thermoplastic high pressure hose
NY 700 (R7), Thermoplastic high pressure hose
NY 800 (R8), Thermoplastic high pressure hose
NY 800 NC (R8), Thermoplastic high pressure hose, electrically nonconductive
NYZ 100, Thermoplastic high pressure twin hose
NYZ 2100, Thermoplastic high pressure twin hose
NYZ 700 (R7), Thermoplastic high pressure twin hose
NYZ 800 (R8), Thermoplastic high pressure twin hose
SG 100 RI, Suction hose
SG 100 RI EP, Suction hose
SGB 100, Suction hose
SGD 100, Suction and pressure hose
TAF 100, HD hose, type TAF
TAF 100 CU, HD hose, type TAF CU, copper braid
TBF 200, HD hose, type TBF
TBFZ 200, HD hose, type TBF, twin
TE 100 (1TE), Low pressure hose with textile insert
TE 200 B (2TE), Low pressure hose with textile insert
TE 300 (3TE), Low pressure hose with textile insert

Packaging unit: 25 units per pack

Identification

X-CODE SET

SF O-RING — O-ring for SAE flange connection

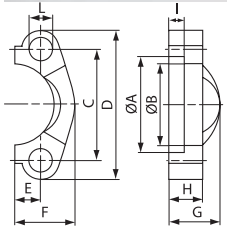


Temperature min.: -20 °C
Temperature max.: 100 °C
Material: NBR 90 Shore A
Product versions: SF O-RING PU, O-ring for SAE flange connection, Polyurethane 93 Shore A
SF O-RING V, O-ring, 90SH FKM (FPM), FKM SH 90 (Viton)

Identification	DN*	Size	Inches	Ø d1 mm	Ø d2 mm	S mm
SF ORING 13	12	8	1/2"	18,66	25,72	3,53
SF ORING 20	19	12	3/4"	24,99	32,05	3,53
SF ORING 25	25	16	1"	32,92	39,98	3,53
SF ORING 32	31	20	1.1/4"	37,70	44,76	3,53
SF ORING 40	38	24	1.1/2"	47,22	54,28	3,53
SF ORING 50	51	32	2"	56,74	63,80	3,53
SF ORING 75	76	48	3"	85,32	92,38	3,53

The SFORING75 is made from the material NBR 70 Shore A.

FH (3000 PSI / 6000 PSI) — SAE flange half



Design: SAE flange half
Included in scope of supply: flange only
Surface protection: electro galvanised

Standard: SAE J 518 C
ISO 6162
Material: Steel ST 52.3 (FE 510)
Mounting: Screw bore hole

Product versions: SFH (3000 PSI / 6000 PSI) VA, SAE flange half, Stainless steel

Identification	Pressure series	Flange size	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M metr.	M unc
FH 3001	3000 PSI	1/2"	350	350	31,0	24,3	38,1	54	8,7	22,8	19	13	6,2	8,7	M 8 x 25	5/16" x 1.1/4"
FH 3002	3000 PSI	3/4"	350	350	38,9	32,1	47,6	65	11,1	25,9	22	14	6,2	10,7	M 10 x 30	3/8" x 1.1/4"
FH 3003	3000 PSI	1"	315	250	45,2	38,5	52,4	70	13,1	29,2	24	16	7,5	10,7	M 10 x 30	3/8" x 1.1/4"
FH 3004	3000 PSI	1.1/4"	250	200	51,6	43,7	58,7	79	15,1	36,3	22	16	7,5	12,0	M 10 x 30	7/16" x 1.1/2"
FH 3005	3000 PSI	1.1/2"	200	200	61,1	50,8	69,9	94	17,9	41,1	25	16	7,5	13,5	M 12 x 35	1/2" x 1.1/2"
FH 3006	3000 PSI	2"	200	160	72,2	62,7	77,8	102	21,4	48,2	26	16	9,0	13,5	M 12 x 35	1/2" x 1.1/2"
FH 3007	3000 PSI	2.1/2"	160	100	84,9	74,9	88,9	114	25,4	54,1	38	19	9,0	13,5	M 12 x 40	1/2" x 1.1/2"
FH 3008	3000 PSI	3"	160	100	102,4	90,9	106,4	135	31,0	65,3	41	22	9,0	17,0	M 16 x 50	5/8" x 2"
FH 3009	3000 PSI	3.1/2"	35	35	115,1	102,4	120,7	152	34,9	69,5	28	22	10,7	17,0	M 16 x 50	5/8" x 2"
FH 3010	3000 PSI	4"	35	35	127,8	115,1	130,2	162	38,9	76,0	35	25	10,7	17,0	M 16 x 50	5/8" x 2"
FH 3011	3000 PSI	5"	35	35	153,2	140,5	152,4	184	46,0	90,0	41	28	10,7	17,0	M 16 x 55	5/8" x 2"
FH 3014	3000 PSI	1.1/4"	250	200	51,6	43,7	58,7	79	15,1	36,3	22	16	7,5	10,7	M 10 x 30	-
FH 3044	3000 PSI	1.1/4"	250	200	51,6	43,7	58,7	79	15,1	36,3	22	16	7,5	12,7	M 12 x 35	-
FH 6001	6000 PSI	1/2"	400	350	32,5	24,6	40,5	56	9,1	23,6	22	16	7,2	8,7	M 8 x 30	5/16" x 1.1/4"
FH 6002	6000 PSI	3/4"	400	350	42,1	32,5	50,8	71	11,9	30,0	28	19	8,3	10,7	M 10 x 35	3/8" x 1.1/2"
FH 6003	6000 PSI	1"	400	350	48,4	38,9	57,2	81	13,9	34,8	33	24	9,0	13,0	M 12 x 45	-

PN = Nominal pressure PB = Max. operating pressure Series: LL = Very light L = Light S = Heavy Ø = External pipe diameter

FH (3000 PSI / 6000 PSI) (Continuation) SAE flange half

Identification	Pressure series	Flange size	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M metr.	M unc
FH 6004	6000 PSI	1.1/4"	400	350	54,8	44,5	66,7	95	15,9	38,6	38	27	9,8	14,7	M 14 x 45	-
FH 6005	6000 PSI	1.1/2"	400	350	64,3	51,6	79,4	113	18,3	47,5	43	30	12,1	17,0	M 16 x 55	5/8" x 2"
FH 6006	6000 PSI	2"	400	350	80,2	67,6	96,8	133	22,2	56,9	52	37	12,1	21,0	M 20 x 70	3/4" x 2.1/2"
FH 6013	6000 PSI	1"	400	350	48,4	38,9	57,2	81	13,9	34,8	33	24	9,0	12,0	-	7/16" x 1.1/4"
FH 6044	6000 PSI	1.1/4"	400	350	54,8	44,5	66,7	95	15,9	38,6	38	27	9,8	13,5	-	1/2" x 1.3/4"

PN = Nominal pressure PB = Max. operating pressure Series: LL = Very light L = Light S = Heavy Ø = External pipe diameter

Recommended screws are listed in the columns M (metr) and M (unc).The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).

SFH (6000 PSI) CAT Flange clamp 6000 PSI (CAT)

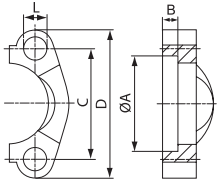
suitable for: Caterpillar

Surface protection: electro galvanised

Material: Steel

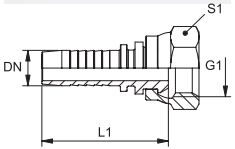
Identification	Flange size	Pressure (PB) 10.9 bar	Pressure (PB) 8.8 bar	A mm	B mm	C mm	D mm	L mm	M metr.	M unc
SFH9 20	3/4"	400	350	42,1	13,3	50,8	71	10,7	M 10 x 35	3/8" x 1.1/2"
SFH9 25	1"	400	350	48,4	13,3	57,2	81	13,0	M 12 x 45	-
SFH9 32	1.1/4"	400	350	54,8	13,3	66,7	95	15,0	M 14 x 45	-
SFH9 40	1.1/2"	400	350	64,3	13,3	79,4	11	17,0	M 16 x 55	5/8" x 2"

Recommended screws are listed in the columns M (metr) and M (unc).The max. working pressure (PB) depends on the property class of the screws (8.8 or 10.9).



PN AB

Swage nipple, DKR



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 60° outer cone
Standard code: DKR
Surface protection: electro galvanised

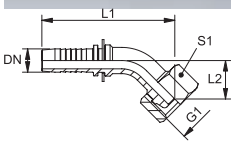
Connection 1: BSP nut thread
Standard: ISO 228-1
ISO 8434-6
BS 5200
Material: Steel

Product versions: PN AB VA, Swage nipple, DKR, Stainless steel

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 04 AB	5	3	3/16"	G 1/8" -28	37,0	14
PN 04 AB 06	5	3	3/16"	G 1/4" -19	37,5	19
PN 06 AB 02	6	4	1/4"	G 1/8" -28	43,0	14
PN 06 AB	6	4	1/4"	G 1/4" -19	44,5	19
PN 06 AB 10	6	4	1/4"	G 3/8" -19	46,5	22
PN 08 AB 06	8	5	5/16"	G 1/4" -19	45,0	19
PN 08 AB 10	8	5	5/16"	G 3/8" -19	47,0	22
PN 08 AB 13	8	5	5/16"	G 1/2" -14	48,5	27
PN 10 AB 06	10	6	3/8"	G 1/4" -19	46,5	19
PN 10 AB	10	6	3/8"	G 3/8" -19	48,0	22
PN 10 AB 13	10	6	3/8"	G 1/2" -14	49,5	27
PN 13 AB 10	12	8	1/2"	G 3/8" -19	48,0	22
PN 13 AB	12	8	1/2"	G 1/2" -14	50,5	27
PN 13 AB 16	12	8	1/2"	G 5/8" -14	49,5	30
PN 13 AB 20	12	8	1/2"	G 3/4" -14	52,0	32
PN 16 AB 13	16	10	5/8"	G 1/2" -14	55,0	27
PN 16 AB	16	10	5/8"	G 5/8" -14	54,0	30
PN 16 AB 20	16	10	5/8"	G 3/4" -14	57,0	32
PN 16 AB 25	16	10	5/8"	G 1" -11	62,0	38
PN 20 AB 13	19	12	3/4"	G 1/2" -14	62,0	27
PN 20 AB 16	19	12	3/4"	G 5/8" -14	61,0	30
PN 20 AB	19	12	3/4"	G 3/4" -14	64,0	32
PN 20 AB 25	19	12	3/4"	G 1" -11	67,0	38
PN 25 AB	25	16	1"	G 1" -11	75,0	38
PN 25 AB 32	25	16	1"	G 1.1/4" -11	80,5	50
PN 32 AB	31	20	1.1/4"	G 1.1/4" -11	88,0	50
PN 40 AB	38	24	1.1/2"	G 1.1/2" -11	92,0	55
PN 50 AB	51	32	2"	G 2" -11	110,5	70

Choose the appropriate ferrule based on the hose type.

PN AB 45 Swage nipple, DKR angle 45°



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 60° outer cone
Standard code: DKR
Surface protection: electro galvanised

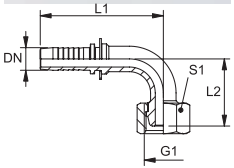
Connection 1: BSP nut thread
Standard: ISO 228-1
ISO 8434-6
BS 5200
Material: Steel

Product versions: PN AB 45 VA, Swage nipple, DKR angle 45°, Stainless steel

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 04 AB 45	5	3	3/16"	G 1/8" -28	54,0	14,0	14
PN 04 AB 06 45	5	3	3/16"	G 1/4" -19	65,0	17,0	17
PN 06 AB 02 45	6	4	1/4"	G 1/8" -28	63,0	14,0	14
PN 06 AB 45	6	4	1/4"	G 1/4" -19	60,5	12,5	19
PN 06 AB 10 45	6	4	1/4"	G 3/8" -19	62,0	14,0	22
PN 08 AB 06 45	8	5	5/16"	G 1/4" -19	76,0	18,0	17
PN 08 AB 10 45	8	5	5/16"	G 3/8" -19	63,0	11,5	22
PN 10 AB 06 45	10	6	3/8"	G 1/4" -19	77,0	18,0	17
PN 10 AB 45	10	6	3/8"	G 3/8" -19	69,5	16,5	22
PN 10 AB 13 45	10	6	3/8"	G 1/2" -14	96,5	18,5	27
PN 13 AB 10 45	12	8	1/2"	G 3/8" -19	91,0	24,0	22
PN 13 AB 45	12	8	1/2"	G 1/2" -14	78,5	17,5	27
PN 13 AB 16 45	12	8	1/2"	G 5/8" -14	80,0	21,5	30
PN 13 AB 20 45	12	8	1/2"	G 3/4" -14	84,0	24,0	32
PN 16 AB 45	16	10	5/8"	G 5/8" -14	96,0	24,5	30
PN 16 AB 20 45	16	10	5/8"	G 3/4" -14	94,5	28,5	32
PN 20 AB 45	19	12	3/4"	G 3/4" -14	108,0	28,5	32
PN 20 AB 25 45	19	12	3/4"	G 1" -11	109,5	26,0	38
PN 25 AB 45	25	16	1"	G 1" -11	137,0	35,0	38
PN 25 AB 32 45	25	16	1"	G 1.1/4" -11	150,0	41,0	50
PN 32 AB 45	31	20	1.1/4"	G 1.1/4" -11	157,0	41,0	50
PN 50 AB 45	51	32	2"	G 2" -11	212,0	60,0	70

Choose the appropriate ferrule based on the hose type.

PN AB 90 Swage nipple, DKR angle 90°



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 60° outer cone
Standard code: DKR
Surface protection: electro galvanised

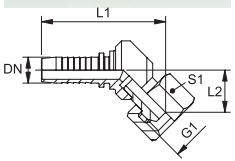
Connection 1: BSP nut thread
Standard: ISO 228-1
ISO 8434-6
BS 5200
Material: Steel

Product versions: PN AB 90 VA, Swage nipple, DKR angle 90°, Stainless steel

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 04 AB 90	5	3	3/16"	G 1/8" -28	47,5	27,5	14
PN 04 AB 06 90	5	3	3/16"	G 1/4" -19	52,0	27,0	17
PN 06 AB 02 90	6	4	1/4"	G 1/8" -28	57,0	27,5	14
PN 06 AB 90	6	4	1/4"	G 1/4" -19	55,0	27,0	19
PN 06 AB 10 90	6	4	1/4"	G 3/8" -19	56,0	27,5	22
PN 08 AB 06 90	8	5	5/16"	G 1/4" -19	63,0	31,0	17
PN 08 AB 10 90	8	5	5/16"	G 3/8" -19	57,0	29,0	22
PN 08 AB 13 90	8	5	5/16"	G 1/2" -14	74,0	43,0	27
PN 10 AB 06 90	10	6	3/8"	G 1/4" -19	64,0	31,0	17
PN 10 AB 90	10	6	3/8"	G 3/8" -19	64,0	33,0	22
PN 10 AB 13 90	10	6	3/8"	G 1/2" -14	64,0	34,0	27
PN 13 AB 10 90	12	8	1/2"	G 3/8" -19	74,0	41,0	22
PN 13 AB 90	12	8	1/2"	G 1/2" -14	72,5	43,0	27
PN 13 AB 16 90	12	8	1/2"	G 5/8" -14	71,5	42,5	30
PN 13 AB 20 90	12	8	1/2"	G 3/4" -14	71,5	45,5	32
PN 16 AB 90	16	10	5/8"	G 5/8" -14	87,0	52,5	30
PN 16 AB 20 90	16	10	5/8"	G 3/4" -14	87,0	55,0	32
PN 20 AB 90	19	12	3/4"	G 3/4" -14	99,0	58,0	32
PN 20 AB 25 90	19	12	3/4"	G 1" -11	99,0	62,0	38
PN 25 AB 90	25	16	1"	G 1" -11	126,0	74,0	38
PN 25 AB 32 90	25	16	1"	G 1.1/4" -11			
PN 32 AB 90	31	20	1.1/4"	G 1.1/4" -11	132,0	74,0	50

Choose the appropriate ferrule based on the hose type.

PN ABK 45 — Swage nipple, DKR Comp. angle 45°



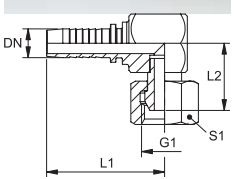
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 60° outer cone
Standard: ISO 228-1 (BS 5200)
Material: Steel

Connection 1: BSP nut thread
Supplementary design information: Compact form
Standard code: DKR
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 06 ABK 45	6	4	1/4"	G 1/4" -19	65,0	12,0	19
PN 10 ABK 45	10	6	3/8"	G 3/8" -19	60,0	19,0	22
PN 13 ABK 45	12	8	1/2"	G 1/2" -14	74,0	15,0	27
PN 16 ABK 45	16	10	5/8"	G 5/8" -14			
PN 20 ABK 45	19	12	3/4"	G 3/4" -14			
PN 25 ABK 45	25	16	1"	G 1" -11			

Choose the appropriate ferrule based on the hose type.

PN ABK 90 — Swage nipple, DKR Comp. angle 90°



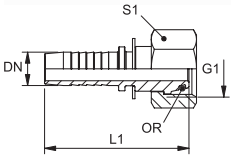
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 60° outer cone
Standard: ISO 228-1 (BS 5200)
Material: Steel

Connection 1: BSP nut thread
Supplementary design information: Compact form
Standard code: DKR
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 04 ABK 90	5	3	3/16"	G 1/8" -28	47,0	17,0	14
PN 06 ABK 90	6	4	1/4"	G 1/4" -19	50,0	20,0	19
PN 06 ABK 10 90	6	4	1/4"	G 3/8" -19	53,5	23,0	22
PN 08 ABK 10 90	8	5	5/16"	G 3/8" -19	54,0	23,0	22
PN 10 ABK 06 90	10	6	3/8"	G 1/4" -19	52,0	20,0	19
PN 10 ABK 90	10	6	3/8"	G 3/8" -19	55,5	23,0	22
PN 10 ABK 13 90	10	6	3/8"	G 1/2" -14	57,6	26,0	27
PN 13 ABK 90	12	8	1/2"	G 1/2" -14	59,6	26,0	27
PN 16 ABK 90	16	10	5/8"	G 5/8" -14	64,1	27,0	30
PN 20 ABK 90	19	12	3/4"	G 3/4" -14	74,8	32,0	32
PN 25 ABK 90	25	16	1"	G 1" -11	92,2	36,0	38

Choose the appropriate ferrule based on the hose type.

PN AOB — Swage nipple, DKOR



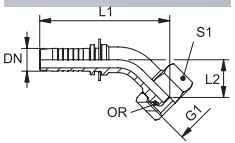
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 60° outer cone with O-ring
Standard code: DKOR
Surface protection: electro galvanised

Connection 1: BSP nut thread
Standard: ISO 228-1
ISO 8434-6
BS 5200
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PN 06 AOB	6	4	1/4"	G 1/4" -19	44,5	19	6.0 x 1.0
PN 10 AOB	10	6	3/8"	G 3/8" -19	48,5	22	8.1 x 1.6
PN 13 AOB	12	8	1/2"	G 1/2" -14	51,0	27	12.1 x 1.6
PN 16 AOB	16	10	5/8"	G 5/8" -14	54,0	30	13.1 x 1.6
PN 20 AOB	19	12	3/4"	G 3/4" -14	63,5	32	17.1 x 1.6
PN 25 AOB	25	16	1"	G 1" -11	75,5	38	22.1 x 1.6
PN 25 AOB 32	25	16	1"	G 1.1/4" -11	78,0	50	29.1 x 1.6
PN 32 AOB	31	20	1.1/4"	G 1.1/4" -11	87,0	50	29.1 x 1.6
PN 32 AOB 40	31	20	1.1/4"	G 1.1/2" -11	88,5	55	35.1 x 1.6
PN 40 AOB	38	24	1.1/2"	G 1.1/2" -11	92,0	55	35.1 x 1.6
PN 40 AOB 50	38	24	1.1/2"	G 2" -11	97,0	70	48.1 x 1.6
PN 50 AOB	51	32	2"	G 2" -11	110,0	70	48.1 x 1.6

Choose the appropriate ferrule based on the hose type.

PN AOB 45 — Swage nipple, DKOR angle 45°



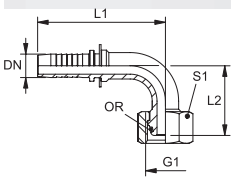
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 60° outer cone with O-ring
Standard code: DKOR
Surface protection: electro galvanised

Connection 1: BSP nut thread
Standard: ISO 228-1
ISO 8434-6
BS 5200
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PN 06 AOB 45	6	4	1/4"	G 1/4" -19	63,0	13,0	19	6.0 x 1.0
PN 10 AOB 45	10	6	3/8"	G 3/8" -19	69,0	18,5	22	8.1 x 1.6
PN 13 AOB 45	12	8	1/2"	G 1/2" -14	77,5	19,0	27	12.1 x 1.6
PN 16 AOB 45	16	10	5/8"	G 5/8" -14	100,0	26,0	30	13.1 x 1.6
PN 20 AOB 45	19	12	3/4"	G 3/4" -14	108,0	28,5	32	17.1 x 1.6
PN 25 AOB 45	25	16	1"	G 1" -11	137,5	38,0	38	22.1 x 1.6
PN 25 AOB 32 45	25	16	1"	G 1.1/4" -11	135,0	31,0	50	29.1 x 1.6
PN 32 AOB 45	31	20	1.1/4"	G 1.1/4" -11	167,5	47,5	50	29.1 x 1.6
PN 32 AOB 40 45	31	20	1.1/4"	G 1.1/2" -11	169,0	49,5	55	35.1 x 1.6
PN 40 AOB 45	38	24	1.1/2"	G 1.1/2" -11	193,0	55,0	55	35.1 x 1.6
PN 40 AOB 50 45	38	24	1.1/2"	G 2" -11	191,0	54,0	70	48.1 x 1.6
PN 50 AOB 45	51	32	2"	G 2" -11	231,0	64,5	70	48.1 x 1.6

Choose the appropriate ferrule based on the hose type.

PN AOB 90 — Swage nipple, DKOR angle 90°



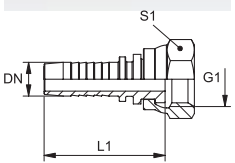
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 60° outer cone with O-ring
Standard code: DKOR
Surface protection: electro galvanised

Connection 1: BSP nut thread
Standard: ISO 228-1
ISO 8434-6
BS 5200
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PN 06 AOB 90	6	4	1/4"	G 1/4" -19	55,0	27,0	19	6.0 x 1.0
PN 10 AOB 90	10	6	3/8"	G 3/8" -19	64,0	33,0	22	8.1 x 1.6
PN 13 AOB 90	12	8	1/2"	G 1/2" -14	72,5	38,0	27	12.1 x 1.6
PN 16 AOB 90	16	10	5/8"	G 5/8" -14	83,0	61,5	30	13.1 x 1.6
PN 20 AOB 90	19	12	3/4"	G 3/4" -14	100,0	60,5	32	17.1 x 1.6
PN 25 AOB 90	25	16	1"	G 1" -11	127,5	75,5	38	22.1 x 1.6
PN 25 AOB 32 90	25	16	1"	G 1.1/4" -11	128,5	68,0	50	29.1 x 1.6
PN 32 AOB 90	31	20	1.1/4"	G 1.1/4" -11	150,5	92,0	50	29.1 x 1.6
PN 32 AOB 40 90	31	20	1.1/4"	G 1.1/2" -11	149,5	97,5	55	35.1 x 1.6
PN 40 AOB 90	38	24	1.1/2"	G 1.1/2" -11	175,5	105,0	55	35.1 x 1.6
PN 40 AOB 50 90	38	24	1.1/4"	G 2" -11	187,0	122,0	70	48.1 x 1.6
PN 50 AOB 90	51	32	2"	G 2" -11	220,0	130,5	70	48.1 x 1.6

Choose the appropriate ferrule based on the hose type.

PN AR — Swage nipple, DKR-Flat



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: flat sealing
Standard code: DKR flat
Surface protection: electro galvanised
Product versions: PN AR VA, Swage nipple, DKR-Flat, Stainless steel

Connection 1: BSP nut thread
Standard: ISO 228-1
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 06 AR 02	6	4	1/4"	G 1/8" -28	43,0	14
PN 06 AR	6	4	1/4"	G 1/4" -19	43,5	19
PN 06 AR 10	6	4	1/4"	G 3/8" -19	44,5	22
PN 08 AR 06	8	5	5/16"	G 1/4" -19	44,0	19
PN 08 AR 10	8	5	5/16"	G 3/8" -19	44,5	22
PN 08 AR 13	8	5	5/16"	G 1/2" -14	46,5	27
PN 10 AR 06	10	6	3/8"	G 1/4" -19	46,0	19
PN 10 AR	10	6	3/8"	G 3/8" -19	47,0	22
PN 10 AR 13	10	6	3/8"	G 1/2" -14	48,0	27
PN 10 AR 13 LM	10	6	3/8"	G 1/2" -14	48,0	27
PN 13 AR 10	12	8	1/2"	G 3/8" -19	48,5	22
PN 13 AR	12	8	1/2"	G 1/2" -14	50,0	27
PN 13 AR 16	12	8	1/2"	G 5/8" -14	49,5	30
PN 13 AR 20	12	8	1/2"	G 3/4" -14	49,5	32
PN 16 AR	16	10	5/8"	G 5/8" -14	55,0	30
PN 16 AR 20	16	10	5/8"	G 3/4" -14	54,0	32
PN 16 AR 25	16	10	5/8"	G 1" -11	56,5	41
PN 20 AR	19	12	3/4"	G 3/4" -14	61,5	32

PN AR (Continuation) Swage nipple, DKR-Flat

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 20 AR 25	19	12	3/4"	G 1" -11	63,0	41
PN 20 AR 32	19	12	3/4"	G 1.1/4" -11	66,5	50
PN 25 AR	25	16	1"	G 1" -11	72,0	38
PN 25 AR 32	25	16	1"	G 1.1/4" -11	74,5	50
PN 32 AR	31	20	1.1/4"	G 1.1/4" -11	84,5	50
PN 40 AR	38	24	1.1/2"	G 1.1/2" -11	88,0	55

Choose the appropriate ferrule based on the hose type.LM = long nut

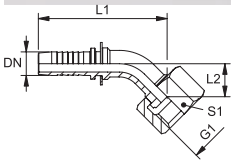
PN AR 45 Swage nipple, DKR-Flat angle 45°

Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: flat sealing
Standard code: DKR flat
Surface protection: electro galvanised

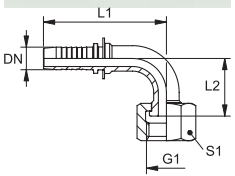
Connection 1: BSP nut thread
Standard: ISO 228-1
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 10 AR 13 45	10	6	3/8"	G 1/2" -14	89,0	23,0	27
PN 13 AR 45	12	8	1/2"	G 1/2" -14	91,0	23,0	27
PN 16 AR 20 45	16	10	5/8"	G 3/4" -14	98,0	25,0	32
PN 20 AR 25 45	19	12	3/4"	G 1" -11	121,0	31,0	41

Choose the appropriate ferrule based on the hose type.



PN AR 90 — Swage nipple, DKR-Flat angle 90°



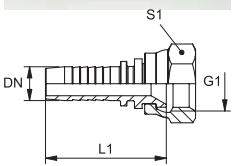
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: flat sealing
Standard code: DKR flat
Surface protection: electro galvanised
Product versions: PN AR 90 VA, Swage nipple, DKR-Flat angle 90°, Stainless steel

Connection 1: BSP nut thread
Standard: ISO 228-1
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 06 AR 90	6	4	1/4"	G 1/4" -19	59,0	32,0	19
PN 10 AR 90	10	6	3/8"	G 3/8" -19	67,0	31,0	22
PN 10 AR 13 90	10	6	3/8"	G 1/2" -14	73,0	39,0	27
PN 13 AR 90	12	8	1/2"	G 1/2" -14	71,0	35,0	27
PN 13 AR 20 90	12	8	1/2"	G 3/4" -14	87,0	54,0	32
PN 16 AR 20 90	16	10	5/8"	G 3/4" -14	91,0	54,0	32
PN 20 AR 90	19	12	3/4"	G 3/4" -14	98,0	54,0	32
PN 20 AR 25 90	19	12	3/4"	G 1" -11	109,0	64,0	41
PN 25 AR 90	25	16	1"	G 1" -11	114,0	64,0	41
PN 32 AR 90	31	20	1.1/4"	G 1.1/4" -11	132,0	74,0	50

Choose the appropriate ferrule based on the hose type.

PN ARI — Swage nipple, JIS



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Connection 1: BSP nut thread
Standard: JIS 8363
Surface protection: electro galvanised

suitable for: Toyota
Sealing form 1: 60° inner cone
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 06 ARI 02	6	4	1/4"	G 1/8" -28	41,5	14
PN 06 ARI	6	4	1/4"	G 1/4" -19	42,5	19
PN 08 ARI 06	8	5	5/16"	G 1/4" -19	42,5	19
PN 08 ARI 10	8	5	5/16"	G 3/8" -19	43,0	22
PN 10 ARI	10	6	3/8"	G 3/8" -19	45,5	22
PN 13 ARI	12	8	1/2"	G 1/2" -14	48,0	27
PN 20 ARI	19	12	3/4"	G 3/4" -14	60,0	32
PN 25 ARI	25	16	1"	G 1" -11	71,0	38
PN 32 ARI	31	20	1.1/4"	G 1.1/4" -11	84,0	50
PN 40 ARI	38	24	1.1/2"	G 1.1/2" -11	88,5	55

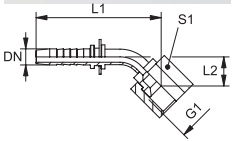
Choose the appropriate ferrule based on the hose type.

PN ARI 45 — Swage nipple, JIS angle 45°

Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Connection 1: BSP nut thread
Standard: JIS 8363
Surface protection: electro galvanised
suitable for: Toyota
Sealing form 1: 60° inner cone
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 06 ARI 45	6	4	1/4"	G 1/4" -19	80,0	23,0	19
PN 08 ARI 10 45	8	5	5/16"	G 3/8" -19	70,0	50,0	22
PN 13 ARI 45	12	8	1/2"	G 1/2" -14	93,0	25,0	27

Choose the appropriate ferrule based on the hose type.

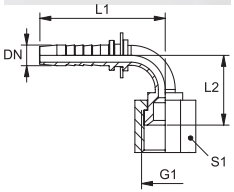


PN ARI 90 — Swage nipple, JIS angle 90°

Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Connection 1: BSP nut thread
Standard: JIS 8363
Surface protection: electro galvanised
suitable for: Toyota
Sealing form 1: 60° inner cone
Material: Steel

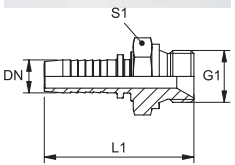
Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 06 ARI 90	6	4	1/4"	G 1/4" -19	63,0	37,0	19
PN 08 ARI 10 90	8	5	5/16"	G 3/8" -19	70,0	41,0	22
PN 13 ARI 90	12	8	1/2"	G 1/2" -14	73,0	40,0	27

Choose the appropriate ferrule based on the hose type.



PN HB

Swage nipple, AGR



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 60° inner cone
Standard code: AGR
Surface protection: electro galvanised

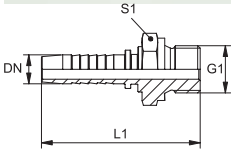
Connection 1: BSP external thread, cylindrical
Standard: ISO 228-1
ISO 8434-6
BS 5200
Material: Steel

Product versions: PN HB VA, Swage nipple, AGR, Stainless steel

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 04 HB	5	3	3/16"	G 1/8" -28	42,5	14
PN 04 HB 06	5	3	3/16"	G 1/4" -19	46,0	19
PN 06 HB 02	6	4	1/4"	G 1/8" -28	48,5	14
PN 06 HB	6	4	1/4"	G 1/4" -19	52,0	19
PN 06 HB 10	6	4	1/4"	G 3/8" -19	54,0	22
PN 06 HB 13	6	4	1/4"	G 1/2" -14	57,5	27
PN 08 HB 06	8	5	5/16"	G 1/4" -19	52,0	19
PN 08 HB 10	8	5	5/16"	G 3/8" -19	54,0	22
PN 08 HB 13	8	5	5/16"	G 1/2" -14	57,5	27
PN 10 HB 02	10	6	3/8"	G 1/8" -28	50,0	17
PN 10 HB 06	10	6	3/8"	G 1/4" -19	53,5	19
PN 10 HB	10	6	3/8"	G 3/8" -19	55,5	22
PN 10 HB 13	10	6	3/8"	G 1/2" -14	59,5	27
PN 13 HB 10	12	8	1/2"	G 3/8" -19	56,5	22
PN 13 HB	12	8	1/2"	G 1/2" -14	60,5	27
PN 13 HB 16	12	8	1/2"	G 5/8" -14	62,5	30
PN 13 HB 20	12	8	1/2"	G 3/4" -14	62,5	32
PN 16 HB 13	16	10	5/8"	G 1/2" -14	65,0	27
PN 16 HB	16	10	5/8"	G 5/8" -14	67,0	30
PN 16 HB 20	16	10	5/8"	G 3/4" -14	67,0	32
PN 20 HB	19	12	3/4"	G 3/4" -14	73,5	32
PN 20 HB 25	19	12	3/4"	G 1" -11	78,5	41
PN 25 HB	25	16	1"	G 1" -11	86,5	41
PN 25 HB 32	25	16	1"	G 1.1/4" -11	87,5	50
PN 32 HB	31	20	1.1/4"	G 1.1/4" -11	97,0	50
PN 32 HB 40	31	20	1.1/4"	G 1.1/2" -11	100,0	55
PN 40 HB 32	38	24	1.1/2"	G 1.1/4" -11	100,5	50
PN 40 HB	38	24	1.1/2"	G 1.1/2" -11	103,5	55
PN 40 HB 50	38	24	1.1/2"	G 2" -11	109,0	70
PN 50 HB	51	32	2"	G 2" -11	124,5	70

Choose the appropriate ferrule based on the hose type.

PN HR Swage nipple, AGR-Flat



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: flat sealing
Standard code: AGR-Flat
Material: Steel

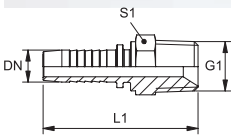
Connection 1: BSP external thread, cylindrical
Standard: ISO 228-1
ISO 8434-6
BS 5200
Surface protection: electro galvanised

Product versions: PN HR VA, Swage nipple, AGR-Flat, Stainless steel

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 04 HR	5	3	3/16"	G 1/8" -28	43,5	14
PN 06 HR	6	4	1/4"	G 1/4" -19	51,5	19
PN 06 HR 10	6	4	1/4"	G 3/8" -19	54,5	22
PN 08 HR 06	8	5	5/16"	G 1/4" -19	52,0	19
PN 08 HR 10	8	5	5/16"	G 3/8" -19	55,0	22
PN 10 HR	10	6	3/8"	G 3/8" -19	56,0	22
PN 10 HR 13	10	6	3/8"	G 1/2" -14	61,0	27
PN 13 HR 10	12	8	1/2"	G 3/8" -19	57,0	22
PN 13 HR	12	8	1/2"	G 1/2" -14	62,0	27
PN 13 HR 16	12	8	1/2"	G 5/8" -14	63,0	30
PN 13 HR 20	12	8	1/2"	G 3/4" -14	66,0	32
PN 16 HR	16	10	5/8"	G 5/8" -14	67,5	30
PN 16 HR 20	16	10	5/8"	G 3/4" -14	70,5	32
PN 16 HR 25	16	10	5/8"	G 1" -11	77,0	41
PN 20 HR	19	12	3/4"	G 3/4" -14	78,0	32
PN 20 HR 25	19	12	3/4"	G 1" -11	84,5	41
PN 20 HR 32	19	12	3/4"	G 1.1/4" -11	90,5	50
PN 25 HR	25	16	1"	G 1" -11	92,0	41
PN 25 HR 32	25	16	1"	G 1.1/4" -11	98,0	50
PN 32 HR	31	20	1.1/4"	G 1.1/4" -11	107,0	50
PN 40 HR	38	24	1.1/2"	G 1.1/2" -11	112,5	55
PN 50 HR	51	32	2"	G 2" -11	134,5	70

Choose the appropriate ferrule based on the hose type.

PN HBK Swage nipple, AGR-K



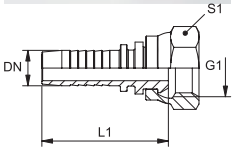
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: thread seal
Standard code: AGR-K
Surface protection: electro galvanised
Product versions: PN HBK VA, Swage nipple, AGR-K, Stainless steel

Connection 1: BSPT conical external threads
Standard: DIN 3858
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 04 HBK 02	5	3	3/16"	R 1/8" K	43,0	12
PN 04 HBK 06	5	3	3/16"	R 1/4" K	47,5	14
PN 06 HBK 02	6	4	1/4"	R 1/8" K	49,0	12
PN 06 HBK	6	4	1/4"	R 1/4" K	53,5	14
PN 06 HBK 10	6	4	1/4"	R 3/8" K	54,0	19
PN 08 HBK 06	8	5	5/16"	R 1/4" K	53,5	14
PN 08 HBK 10	8	5	5/16"	R 3/8" K	54,0	19
PN 10 HBK 06	10	6	3/8"	R 1/4" K	56,0	14
PN 10 HBK	10	6	3/8"	R 3/8" K	56,5	19
PN 10 HBK 13	10	6	3/8"	R 1/2" K	61,0	22
PN 13 HBK 10	12	8	1/2"	R 3/8" K	58,0	19
PN 13 HBK	12	8	1/2"	R 1/2" K	62,0	22
PN 13 HBK 20	12	8	1/2"	R 3/4" K	64,5	27
PN 16 HBK 13	16	10	5/8"	R 1/2" K	67,5	22
PN 16 HBK	16	10	5/8"	R 5/8" K	70,5	24
PN 16 HBK 20	16	10	5/8"	R 3/4" K	69,0	27
PN 20 HBK	19	12	3/4"	R 3/4" K	76,5	27
PN 20 HBK 25	19	12	3/4"	R 1" K	80,5	36
PN 25 HBK	25	16	1"	R 1" K	88,5	36
PN 25 HBK 32	25	16	1"	R 1.1/4" K	91,5	46
PN 32 HBK	31	20	1.1/4"	R 1.1/4" K	101,0	46
PN 32 HBK 40	31	20	1.1/4"	R 1.1/2" K	102,0	50
PN 40 HBK	38	24	1.1/2"	R 1.1/2" K	105,5	50
PN 40 HBK 50	38	24	1.1/2"	R 2" K	113,0	65
PN 50 HBK	51	32	2"	R 2" K	127,5	65

Choose the appropriate ferrule based on the hose type.

PN AFL — Swage nipple, DKL



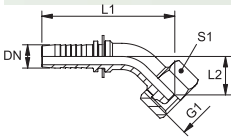
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 24° outer cone
Material: Steel
Series: light
Product versions: PN AFL VA, Swage nipple, DKL, Stainless steel

Connection 1: metric nut thread
Standard code: DKL
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
PN 04 AFL	5	3	3/16"	M 12 x 1.5	6	41,2	14
PN 06 AFL 04	6	4	1/4"	M 12 x 1.5	6	45,0	14
PN 06 AFL	6	4	1/4"	M 14 x 1.5	8	47,0	17
PN 06 AFL 08	6	4	1/4"	M 16 x 1.5	10	47,5	19
PN 06 AFL 10	6	4	1/4"	M 18 x 1.5	12	48,5	22
PN 08 AFL	8	5	5/16"	M 16 x 1.5	10	47,5	19
PN 08 AFL 10	8	5	5/16"	M 18 x 1.5	12	48,5	22
PN 10 AFL 06	10	6	3/8"	M 14 x 1.5	8	49,5	17
PN 10 AFL 08	10	6	3/8"	M 16 x 1.5	10	49,0	19
PN 10 AFL	10	6	3/8"	M 18 x 1.5	12	50,0	22
PN 10 AFL 13	10	6	3/8"	M 22 x 1.5	15	50,5	27
PN 13 AFL	12	8	1/2"	M 22 x 1.5	15	51,5	27
PN 13 AFL 16	12	8	1/2"	M 26 x 1.5	18	54,0	32
PN 16 AFL 13	16	10	5/8"	M 22 x 1.5	15	56,0	27
PN 16 AFL	16	10	5/8"	M 26 x 1.5	18	58,5	32
PN 20 AFL	19	12	3/4"	M 30 x 2	22	66,0	36
PN 20 AFL 25	19	12	3/4"	M 36 x 2	28	67,0	41
PN 25 AFL	25	16	1"	M 36 x 2	28	75,0	41
PN 32 AFL	31	20	1.1/4"	M 45 x 2	35	88,0	50
PN 40 AFL	38	24	1.1/2"	M 52 x 2	42	92,5	60

Choose the appropriate ferrule based on the hose type.

PN AFL 45 — Swage nipple, DKL angle 45°



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 24° outer cone
Material: Steel
Series: light
Product versions: PN AFL 45 VA, Swage nipple, DKL angle 45°, Stainless steel

Connection 1: metric nut thread
Standard code: DKL
Surface protection: electro galvanised

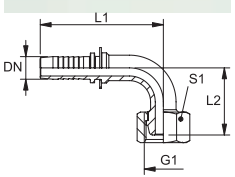
Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1
PN 04 AFL 45	5	3	3/16"	M 12 x 1.5	6	56,0	15,0	14
PN 06 AFL 04 45	6	4	1/4"	M 12 x 1.5	6	76,0	19,0	14
PN 06 AFL 45	6	4	1/4"	M 14 x 1.5	8	62,5	14,5	17
PN 06 AFL 08 45	6	4	1/4"	M 16 x 1.5	10	63,0	15,5	19
PN 06 AFL 10 45	6	4	1/4"	M 18 x 1.5	12	88,0	23,0	22
PN 08 AFL 45	8	5	5/16"	M 16 x 1.5	10	64,5	15,0	19
PN 08 AFL 10 45	8	5	5/16"	M 18 x 1.5	12	65,0	15,5	22
PN 10 AFL 08 45	10	6	3/8"	M 16 x 1.5	10	72,5	19,5	19
PN 10 AFL 45	10	6	3/8"	M 18 x 1.5	12	71,0	18,0	22
PN 10 AFL 13 45	10	6	3/8"	M 22 x 1.5	15	71,5	18,5	27

PN AFL 45 (Continuation) Swage nipple, DKL angle 45°

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1
PN 13 AFL 45	12	8	1/2"	M 22 x 1.5	15	79,5	18,5	27
PN 13 AFL 16 45	12	8	1/2"	M 26 x 1.5	18	93,0	24,0	32
PN 16 AFL 45	16	10	5/8"	M 26 x 1.5	18	95,0	24,0	32
PN 20 AFL 45	19	12	3/4"	M 30 x 2	22	123,0	33,0	36
PN 20 AFL 25 45	19	12	3/4"	M 36 x 2	28	129,0	38,0	41
PN 25 AFL 45	25	16	1"	M 36 x 2	28	150,0	41,0	41
PN 32 AFL 45	31	20	1.1/4"	M 45 x 2	35	157,0	41,0	50
PN 40 AFL 45	38	24	1.1/2"	M 52 x 2	42	171,0	46,0	60

Choose the appropriate ferrule based on the hose type.

PN AFL 90 Swage nipple, DKL angle 90°

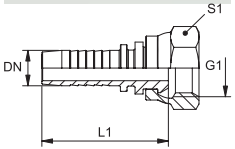


Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 24° outer cone
Material: Steel
Series: light
Product versions: PN AFL 90 VA, Swage nipple, DKL angle 90°, Stainless steel
Connection 1: metric nut thread
Standard code: DKL
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1
PN 04 AFL 90	5	3	3/16"	M 12 x 1.5	6	48,5	29,0	14
PN 06 AFL 04 90	6	4	1/4"	M 12 x 1.5	6	59,0	30,0	14
PN 06 AFL 90	6	4	1/4"	M 14 x 1.5	8	55,0	30,0	17
PN 06 AFL 08 90	6	4	1/4"	M 16 x 1.5	10	55,0	31,0	19
PN 06 AFL 10 90	6	4	1/4"	M 18 x 1.5	12	62,5	35,0	22
PN 08 AFL 90	8	5	5/16"	M 16 x 1.5	10	58,0	30,0	19
PN 08 AFL 10 90	8	5	5/16"	M 18 x 1.5	12	58,0	30,5	22
PN 10 AFL 08 90	10	6	3/8"	M 16 x 1.5	10	63,0	38,0	19
PN 10 AFL 90	10	6	3/8"	M 18 x 1.5	12	64,0	35,0	22
PN 10 AFL 13 90	10	6	3/8"	M 22 x 1.5	15	64,0	35,5	27
PN 13 AFL 90	12	8	1/2"	M 22 x 1.5	15	72,5	39,5	27
PN 13 AFL 16 90	12	8	1/2"	M 26 x 1.5	18	88,0	55,0	32
PN 16 AFL 13 90	16	10	5/8"	M 22 x 1.5	15	87,0	49,5	27
PN 16 AFL 90	16	10	5/8"	M 26 x 1.5	18	88,0	49,5	32
PN 20 AFL 90	19	12	3/4"	M 30 x 2	22	109,0	66,0	36
PN 25 AFL 90	25	16	1"	M 36 x 2	28	125,0	74,0	41
PN 32 AFL 90	31	20	1.1/4"	M 45 x 2	35	132,0	75,0	50
PN 40 AFL 90	38	24	1.1/2"	M 52 x 2	42	147,0	87,0	60

Choose the appropriate ferrule based on the hose type.

PN AFS — Swage nipple, DKS



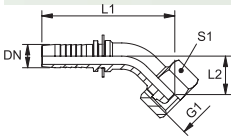
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 24° outer cone
Standard code: DKS
Surface protection: electro galvanised

Connection 1: metric nut thread
Standard: DIN 3863
DIN ISO 12151-2
Material: Steel
Series: heavy

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
PN 04 AFS 03	5	3	3/16"	M 14 x 1.5	6	44,5	17
PN 04 AFS	5	3	3/16"	M 16 x 1.5	8	44,5	19
PN 06 AFS 04	6	4	1/4"	M 16 x 1.5	8	51,5	19
PN 06 AFS	6	4	1/4"	M 18 x 1.5	10	52,5	22
PN 08 AFS 06	8	5	5/16"	M 18 x 1.5	10	52,5	22
PN 08 AFS	8	5	5/16"	M 20 x 1.5	12	52,5	24
PN 10 AFS 06	10						
PN 10 AFS 08	10	6	3/8"	M 20 x 1.5	12	54,0	24
PN 10 AFS	10	6	3/8"	M 22 x 1.5	14	57,0	27
PN 13 AFS 10	12	8	1/2"	M 22 x 1.5	14		
PN 13 AFS	12	8	1/2"	M 24 x 1.5	16	58,0	30
PN 16 AFS	16	10	5/8"	M 30 x 2	20	66,0	36
PN 20 AFS	19	12	3/4"	M 36 x 2	25	75,5	46
PN 25 AFS	25	16	1"	M 42 x 2	30	85,5	50
PN 32 AFS	31	20	1.1/4"	M 52 x 2	38	98,0	60

Choose the appropriate ferrule based on the hose type.

PN AFS 45 — Swage nipple, DKS angle 45°



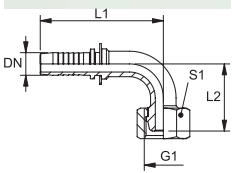
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 24° outer cone
Standard code: DKS
Surface protection: electro galvanised

Connection 1: metric nut thread
Standard: DIN 3863
DIN ISO 12151-2
Material: Steel
Series: heavy

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1
PN 06 AFS 04 45	6	4	1/4"	M 16 x 1.5	8	79,0	21,0	19
PN 06 AFS 45	6	4	1/4"	M 18 x 1.5	10			
PN 08 AFS 45	8	5	5/16"	M 20 x 1.5	12			
PN 20 AFS 45	19	12	3/4"	M 36 x 2	25	129,0	39,0	46

Choose the appropriate ferrule based on the hose type.

PN AFS 90 — Swage nipple, DKS angle 90°



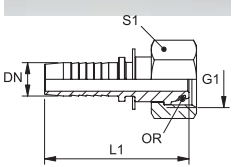
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 24° outer cone
Standard code: DKS
Surface protection: electro galvanised

Connection 1: metric nut thread
Standard: DIN 3863
DIN ISO 12151-2
Material: Steel
Series: heavy

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1
PN 06 AFS 04 90	6	4	1/4"	M 16 x 1.5	8	63,0	35,0	19
PN 08 AFS 90	8	5	5/16"	M 20 x 1.5	12			

Choose the appropriate ferrule based on the hose type.

PN AOL — Swage nipple, DKOL



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 24° outer cone with O-ring
Standard code: DKOL
Surface protection: electro galvanised

Connection 1: metric nut thread
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Material: Steel
Series: light

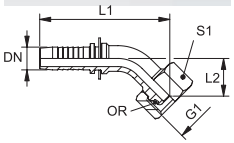
Product versions: PN AOL VA, Swage nipple, DKOL, Stainless steel

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PN 04 AOL	5	3	3/16"	M 12 x 1.5	6	45,5	14	4.0 x 1.5
PN 04 AOL 06	5	3	3/16"	M 14 x 1.5	8	45,5	17	6.0 x 1.5
PN 06 AOL 04	6	4	1/4"	M 12 x 1.5	6	46,5	14	4.0 x 1.5
PN 06 AOL	6	4	1/4"	M 14 x 1.5	8	52,0	17	6.0 x 1.5
PN 06 AOL 08	6	4	1/4"	M 16 x 1.5	10	52,0	19	7.5 x 1.5
PN 06 AOL 10	6	4	1/4"	M 18 x 1.5	12	53,0	22	9.0 x 1.5
PN 08 AOL 06	8	5	5/16"	M 14 x 1.5	8	47,0	17	6.0 x 1.5
PN 08 AOL	8	5	5/16"	M 16 x 1.5	10	52,0	19	7.5 x 1.5
PN 08 AOL 10	8	5	5/16"	M 18 x 1.5	12	53,0	22	9.0 x 1.5
PN 10 AOL 06	10	6	3/8"	M 14 x 1.5	8	50,5	17	6.0 x 1.5
PN 10 AOL 08	10	6	3/8"	M 16 x 1.5	10	51,5	19	7.5 x 1.5
PN 10 AOL	10	6	3/8"	M 18 x 1.5	12	54,5	22	9.0 x 1.5
PN 10 AOL 13	10	6	3/8"	M 22 x 1.5	15	56,5	27	12.0 x 2.0
PN 13 AOL 10	12	8	1/2"	M 18 x 1.5	12	54,5	22	9.0 x 1.5
PN 13 AOL	12	8	1/2"	M 22 x 1.5	15	57,5	27	12.0 x 2.0
PN 13 AOL 16	12	8	1/2"	M 26 x 1.5	18	59,0	32	15.0 x 2.0
PN 16 AOL 13	16	10	5/8"	M 22 x 1.5	15	58,0	27	12.0 x 2.0
PN 16 AOL	16	10	5/8"	M 26 x 1.5	18	64,0	32	15.0 x 2.0

PN AOL (Continuation) Swage nipple, DKOL

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PN 16 AOL 20	16	10	5/8"	M 30 x 2	22	64,5	36	20.0 x 2.0
PN 20 AOL 16	19	12	3/4"	M 26 x 1.5	18	66,5	32	15.0 x 2.0
PN 20 AOL	19	12	3/4"	M 30 x 2	22	71,0	36	20.0 x 2.0
PN 20 AOL 25	19	12	3/4"	M 36 x 2	28	73,0	41	26.0 x 2.0
PN 25 AOL 20	25	16	1"	M 30 x 2	22	75,5	36	20.0 x 2.0
PN 25 AOL	25	16	1"	M 36 x 2	28	81,0	41	26.0 x 2.0
PN 25 AOL 32	25	16	1"	M 45 x 2	35	85,5	50	32.0 x 2.5
PN 32 AOL 25	31	20	1.1/4"	M 36 x 2	28	87,0	41	26.0 x 2.0
PN 32 AOL	31	20	1.1/4"	M 45 x 2	35	94,5	50	32.0 x 2.5
PN 32 AOL 40	31	20	1.1/4"	M 52 x 2	42	94,5	60	38.0 x 2.5
PN 40 AOL 32	38	24	1.1/2"	M 45 x 2	35	94,0	50	32.0 x 2.5
PN 40 AOL	38	24	1.1/2"	M 52 x 2	42	98,0	60	38.0 x 2.5
PN 50 AOL 40	51	32	2"	M 52 x 2	42	112,5	60	38.0 x 2.5

PN AOL 45 Swage nipple, DKOL angle 45°



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 24° outer cone with O-ring
Standard code: DKOL
Surface protection: electro galvanised

Connection 1: metric nut thread
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Material: Steel
Series: light

Product versions: PN AOL 45 VA, Swage nipple, DKOL angle 45°, Stainless steel

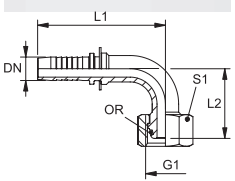
Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PN 04 AOL 45	5	3	3/16"	M 12 x 1.5	6	56,0	15,0	14	4.0 x 1.5
PN 06 AOL 04 45	6	4	1/4"	M 12 x 1.5	6	77,0	20,0	14	4.0 x 1.5
PN 06 AOL 45	6	4	1/4"	M 14 x 1.5	8	63,0	15,0	17	6.0 x 1.5
PN 06 AOL 08 45	6	4	1/4"	M 16 x 1.5	10	64,5	17,0	19	7.5 x 1.5
PN 06 AOL 10 45	6	4	1/4"	M 18 x 1.5	12	91,0	25,0	22	9.0 x 1.5
PN 08 AOL 06 45	8	5	5/16"	M 14 x 1.5	8	78,0	21,0	17	6.0 x 1.5
PN 08 AOL 45	8	5	5/16"	M 16 x 1.5	10	66,0	16,5	19	7.5 x 1.5
PN 08 AOL 10 45	8	5	5/16"	M 18 x 1.5	12	88,0	25,0	22	9.0 x 1.5
PN 10 AOL 08 45	10	6	3/8"	M 16 x 1.5	10	74,0	22,0	19	7.5 x 1.5
PN 10 AOL 45	10	6	3/8"	M 18 x 1.5	12	72,5	19,5	22	9.0 x 1.5
PN 10 AOL 13 45	10	6	3/8"	M 22 x 1.5	15	92,0	26,0	27	12.0 x 2.0
PN 13 AOL 10 45	12	8	1/2"	M 18 x 1.5	12	94,0	26,0	22	9.0 x 1.5
PN 13 AOL 45	12	8	1/2"	M 22 x 1.5	15	81,0	20,0	27	12.0 x 2.0
PN 13 AOL 16 45	12	8	1/2"	M 26 x 1.5	18	102,0	31,0	32	15.0 x 2.0
PN 16 AOL 13 45	16	10	5/8"	M 22 x 1.5	15	102,0	28,0	27	12.0 x 2.0
PN 16 AOL 45	16	10	5/8"	M 26 x 1.5	18	96,0	24,5	32	15.0 x 2.0
PN 16 AOL 20 45	16	10	5/8"	M 30 x 2	22	101,0	28,0	36	20.0 x 2.0
PN 20 AOL 16 45	19	12	3/4"	M 26 x 1.5	18	107,0	28,0	32	15.0 x 2.0
PN 20 AOL 45	19	12	3/4"	M 30 x 2	22	106,0	27,0	36	20.0 x 2.0
PN 20 AOL 25 45	19	12	3/4"	M 36 x 2	28	123,0	33,0	41	26.0 x 2.0
PN 25 AOL 20 45	25	16	1"	M 30 x 2	22	128,0	33,0	36	20.0 x 2.0

PN AOL 45 (Continuation) Swage nipple, DKOL angle 45°

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PN 25 AOL 45	25	16	1"	M 36 x 2	28	132,0	29,5	41	26.0 x 2.0
PN 25 AOL 32 45	25	16	1"	M 45 x 2	35	150,0	41,0	50	32.0 x 2.5
PN 32 AOL 25 45	31	20	1.1/4"	M 36 x 2	28	156,0	41,0	41	26.0 x 2.0
PN 32 AOL 45	31	20	1.1/4"	M 45 x 2	35	159,0	38,5	50	32.0 x 2.5
PN 40 AOL 45	38	24	1.1/2"	M 52 x 2	42	181,5	42,5	60	38.0 x 2.5

Choose the appropriate ferrule based on the hose type.

PN AOL 90 Swage nipple, DKOL angle 90°



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 24° outer cone with O-ring
Standard code: DKOL
Surface protection: electro galvanised

Connection 1: metric nut thread
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Material: Steel
Series: light

Product versions: PN AOL 90 VA, Swage nipple, DKOL angle 90°, Stainless steel

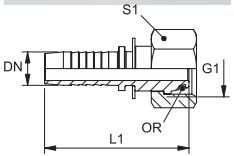
Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PN 04 AOL 90	5	3	3/16"	M 12 x 1.5	6	48,5	29,0	14	4.0 x 1.5
PN 06 AOL 04 90	6	4	1/4"	M 12 x 1.5	6	57,0	30,5	14	4.0 x 1.5
PN 06 AOL 90	6	4	1/4"	M 14 x 1.5	8	55,0	30,5	17	6.0 x 1.5
PN 06 AOL 90 L 50	6	4	1/4"	M 14 x 1.5	8	63,0	50,0	17	6.0 x 1.5
PN 06 AOL 90 L 55	6	4	1/4"	M 14 x 1.5	8	63,0	55,0	17	6.0 x 1.5
PN 06 AOL 08 90	6	4	1/4"	M 16 x 1.5	10	55,0	33,0	19	7.5 x 1.5
PN 06 AOL 08 90 L 60	6	4	1/4"	M 16 x 1.5	10	55,0	60,0	19	7.5 x 1.5
PN 06 AOL 10 90	6	4	1/4"	M 18 x 1.5	12	62,5	37,0	22	9.0 x 1.5
PN 08 AOL 06 90	8	5	5/16"	M 14 x 1.5	8	63,0	35,0	17	6.0 x 1.5
PN 08 AOL 90	8	5	5/16"	M 16 x 1.5	10	58,0	31,5	19	7.5 x 1.5
PN 08 AOL 90 L 42	8	5	5/16"	M 16 x 1.5	10	58,0	42,0	19	7.5 x 1.5
PN 08 AOL 10 90	8	5	5/16"	M 18 x 1.5	12	58,0	32,5	22	9.0 x 1.5
PN 10 AOL 08 90	10	6	3/8"	M 16 x 1.5	10	63,0	40,5	19	7.5 x 1.5
PN 10 AOL 90	10	6	3/8"	M 18 x 1.5	12	64,0	37,0	22	9.0 x 1.5
PN 10 AOL 90 L 50	10	6	3/8"	M 18 x 1.5	12	64,0	50,0	22	9.0 x 1.5
PN 10 AOL 90 L 60	10	6	3/8"	M 18 x 1.5	12	73,0	60,0	22	9.0 x 1.5
PN 10 AOL 90 L 75	10	6	3/8"	M 18 x 1.5	12	73,0	75,0	22	9.0 x 1.5
PN 10 AOL 13 90	10	6	3/8"	M 22 x 1.5	15	73,0	44,0	27	12.0 x 2.0
PN 13 AOL 10 90	12	8	1/2"	M 18 x 1.5	12	75,0	44,0	22	9.0 x 1.5
PN 13 AOL 90	12	8	1/2"	M 22 x 1.5	15	72,5	41,5	27	12.0 x 2.0
PN 13 AOL 90 L 60	12	8	1/2"	M 22 x 1.5	15	88,0	60,0	27	12.0 x 2.0
PN 13 AOL 90 L 77	12	8	1/2"	M 22 x 1.5	15	88,0	77,0	27	12.0 x 2.0
PN 13 AOL 16 90	12	8	1/2"	M 26 x 1.5	18	88,0	61,0	32	15.0 x 2.0
PN 16 AOL 13 90	16	10	5/8"	M 22 x 1.5	15	92,0	56,0	27	12.0 x 2.0
PN 16 AOL 90	16	10	5/8"	M 26 x 1.5	18	88,0	50,5	32	15.0 x 2.0
PN 16 AOL 20 90	16	10	5/8"	M 30 x 2	22	91,0	58,0	36	20.0 x 2.0
PN 20 AOL 16 90	19	12	3/4"	M 26 x 1.5	18	98,0	58,0	32	15.0 x 2.0
PN 20 AOL 90	19	12	3/4"	M 30 x 2	22	99,5	54,5	36	20.0 x 2.0

PN AOL 90 (Continuation) Swage nipple, DKOL angle 90°

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PN 20 AOL 90 L 60	19	12	3/4"	M 30 x 2	22	109,0	60,0	36	20.0 x 2.0
PN 20 AOL 90 L 75	19	12	3/4"	M 30 x 2	22	111,0	75,0	36	20.0 x 2.0
PN 20 AOL 90 L 100	19	12	3/4"	M 30 x 2	22	109,0	100,0	36	20.0 x 2.0
PN 20 AOL 90 L 120	19	12	3/4"	M 30 x 2	22	111,0	120,0	36	20.0 x 2.0
PN 20 AOL 25 90	19	12	3/4"	M 36 x 2	28	109,0	66,0	41	26.0 x 2.0
PN 25 AOL 20 90	25	16	1"	M 30 x 2	22	114,0	66,0	36	20.0 x 2.0
PN 25 AOL 90	25	16	1"	M 36 x 2	28	127,0	66,0	41	26.0 x 2.0
PN 25 AOL 90 L 72	25	16	1"	M 36 x 2	28	125,0	72,0	41	26.0 x 2.0
PN 25 AOL 90 L 100	25	16	1"	M 36 x 2	28	125,0	100,0	41	26.0 x 2.0
PN 25 AOL 90 L 150	25	16	1"	M 36 x 2	28	125,0	150,0	41	26.0 x 2.0
PN 25 AOL 32 90	25	16	1"	M 45 x 2	35	125,0	75,0	50	32.0 x 2.5
PN 32 AOL 25 90	31	20	1.1/4"	M 36 x 2	28	132,0	74,0	41	26.0 x 2.0
PN 32 AOL 90	31	20	1.1/4"	M 45 x 2	35	151,5	82,0	50	32.0 x 2.5
PN 32 AOL 90 L 98	31	20	1.1/4"	M 45 x 2	35	144,0	98,0	50	32.0 x 2.5
PN 32 AOL 40 90	31	20	1.1/4"	M 52 x 2	42	144,0	87,0	60	38.0 x 2.5
PN 40 AOL 32 90	38	24	1.1/2"	M 45 x 2	35	147,0	88,0	50	32.0 x 2.5
PN 40 AOL 90	38	24	1.1/2"	M 52 x 2	42	176,5	95,0	60	38.0 x 2.5

Choose the appropriate ferrule based on the hose type.

PN AOS Swage nipple, DKOS



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 24° outer cone with O-ring
Standard code: DKOS
Surface protection: electro galvanised

Connection 1: metric nut thread
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Material: Steel
Series: heavy

Product versions: PN AOS VA, Swage nipple, DKOS, Stainless steel

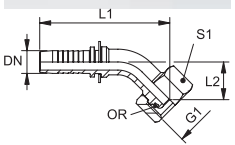
Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PN 04 AOS	5	3	3/16"	M 16 x 1.5	8	47,5	19	6.0 x 1.5
PN 04 AOS 06	5	3	3/16"	M 18 x 1.5	10	48,0	22	7.5 x 1.5
PN 06 AOS 03	6	4	1/4"	M 14 x 1.5	6	53,0	17	4.0 x 1.5
PN 06 AOS 04	6	4	1/4"	M 16 x 1.5	8	54,0	19	6.0 x 1.5
PN 06 AOS	6	4	1/4"	M 18 x 1.5	10	55,0	22	7.5 x 1.5
PN 06 AOS 08	6	4	1/4"	M 20 x 1.5	12	55,0	24	9.0 x 1.5
PN 08 AOS 06	8	5	5/16"	M 18 x 1.5	10	54,0	22	7.5 x 1.5
PN 08 AOS	8	5	5/16"	M 20 x 1.5	12	55,0	24	9.0 x 1.5
PN 10 AOS 06	10	6	3/8"	M 18 x 1.5	10	54,0	22	7.5 x 1.5
PN 10 AOS 08	10	6	3/8"	M 20 x 1.5	12	56,5	24	9.0 x 1.5
PN 10 AOS	10	6	3/8"	M 22 x 1.5	14	60,0	27	10.0 x 2.0
PN 10 AOS 13	10	6	3/8"	M 24 x 1.5	16	61,0	30	12.0 x 2.0
PN 13 AOS 10	12	8	1/2"	M 22 x 1.5	14	56,0	27	10.0 x 2.0
PN 13 AOS	12	8	1/2"	M 24 x 1.5	16	61,0	30	12.0 x 2.0
PN 13 AOS 16	12	8	1/2"	M 30 x 2	20	66,5	36	16.0 x 2.5
PN 16 AOS 13	16	10	5/8"	M 24 x 1.5	16	60,5	30	12.0 x 2.0

PN AOS (Continuation) Swage nipple, DKOS

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PN 16 AOS	16	10	5/8"	M 30 x 2	20	71,0	36	16.0 x 2.5
PN 16 AOS 20	16	10	5/8"	M 36 x 2	25	74,5	46	20.0 x 2.5
PN 16 AOS 20 SW41	16	10	5/8"	M 36 x 2	25	74,5	41	20.0 x 2.5
PN 20 AOS 16	19	12	3/4"	M 30 x 2	20	78,0	36	16.0 x 2.5
PN 20 AOS	19	12	3/4"	M 36 x 2	25	81,0	46	20.0 x 2.5
PN 20 AOS SW41	19	12	3/4"	M 36 x 2	25	81,0	41	20.0 x 2.5
PN 20 AOS 25	19	12	3/4"	M 42 x 2	30	84,0	50	25.0 x 2.5
PN 25 AOS 20	25	16	1"	M 36 x 2	25	89,0	46	20.0 x 2.5
PN 25 AOS	25	16	1"	M 42 x 2	30	92,0	50	25.0 x 2.5
PN 25 AOS 20 SW41	25	16	1"	M 36 x 2	25	89,0	41	20.0 x 2.5
PN 25 AOS 32	25	16	1"	M 52 x 2	38	95,5	60	33.0 x 2.5
PN 32 AOS 25	31	20	1.1/4"	M 42 x 2	30	92,5	50	25.0 x 2.5
PN 32 AOS	31	20	1.1/4"	M 52 x 2	38	104,5	60	33.0 x 2.5
PN 40 AOS 32	38	24	1.1/2"	M 52 x 2	38	107,0	60	33.0 x 2.5

Choose the appropriate ferrule based on the hose type.

PN AOS 45 Swage nipple, DKOS angle 45°



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 24° outer cone with O-ring
Standard code: DKOS
Surface protection: electro galvanised

Connection 1: metric nut thread
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Material: Steel
Series: heavy

Product versions: PN AOS 45 VA, Swage nipple, DKOS angle 45°, Stainless steel

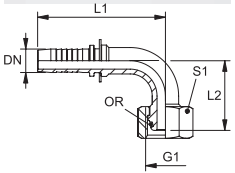
Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PN 04 AOS 45	5	3	3/16"	M 16 x 1.5	8	56,5	15,5	19	6.0 x 1.5
PN 04 AOS 06 45	5	3	3/16"	M 18 x 1.5	10	58,0	17,0	22	7.0 x 2.0
PN 06 AOS 03 45	6	4	1/4"	M 14 x 1.5	6	77,0	21,0	17	4.0 x 1.5
PN 06 AOS 04 45	6	4	1/4"	M 16 x 1.5	8	64,5	16,5	19	6.0 x 1.5
PN 06 AOS 45	6	4	1/4"	M 18 x 1.5	10	65,0	17,0	22	7.5 x 1.5
PN 06 AOS 08 45	6	4	1/4"	M 20 x 1.5	12	96,0	30,0	24	9.0 x 1.5
PN 08 AOS 06 45	8	5	5/16"	M 18 x 1.5	10	82,0	25,0	22	7.5 x 1.5
PN 08 AOS 45	8	5	5/16"	M 20 x 1.5	12	67,5	18,0	24	9.0 x 1.5
PN 10 AOS 06 45	10	6	3/8"	M 18 x 1.5	10	84,0	25,0	22	7.5 x 1.5
PN 10 AOS 08 45	10	6	3/8"	M 20 x 1.5	12	73,0	20,0	24	9.0 x 1.5
PN 10 AOS 45	10	6	3/8"	M 22 x 1.5	14	73,5	20,5	27	10.0 x 2.0
PN 10 AOS 13 45	10	6	3/8"	M 24 x 1.5	16	99,0	32,0	30	12.0 x 2.0
PN 13 AOS 10 45	12	8	1/2"	M 22 x 1.5	14	97,0	30,0	27	10.0 x 2.0
PN 13 AOS 45	12	8	1/2"	M 24 x 1.5	16	82,0	21,0	30	12.0 x 2.0
PN 16 AOS 13 45	16	10	5/8"	M 24 x 1.5	16	103,0	33,0	30	12.0 x 2.0
PN 16 AOS 45	16	10	5/8"	M 30 x 2	20	98,5	27,5	36	16.0 x 2.5
PN 16 AOS 20 45	16	10	5/8"	M 36 x 2	25	125,0	40,0	45	20.0 x 2.5
PN 20 AOS 16 45	19	12	3/4"	M 30 x 2	20	109,0	30,0	36	16.0 x 2.5
PN 20 AOS 45	19	12	3/4"	M 36 x 2	25	109,5	30,5	46	20.0 x 2.5

PN AOS 45 (Continuation) Swage nipple, DKOS angle 45°

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PN 20 AOS 45 SW41	19	12	3/4"	M 36 x 2	25	109,5	30,5	41	20.0 x 2.5
PN 25 AOS 20 45	25	16	1"	M 36 x 2	25	141,5	39,5	46	20.0 x 2.5
PN 25 AOS 45	25	16	1"	M 42 x 2	30	135,5	33,0	50	25.0 x 2.5
PN 32 AOS 45	31	20	1.1/4"	M 52 x 2	38	161,5	40,5	60	33.0 x 2.5
PN 40 AOS 32 45	38	24	1.1/2"	M 52 x 2	38	177,0	52,0	60	33.0 x 2.5

Choose the appropriate ferrule based on the hose type.

PN AOS 90 Swage nipple, DKOS angle 90°



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 24° outer cone with O-ring
Standard code: DKOS
Surface protection: electro galvanised

Connection 1: metric nut thread
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Material: Steel
Series: heavy

Product versions: PN AOS 90 VA, Swage nipple, DKOS angle 90°, Stainless steel

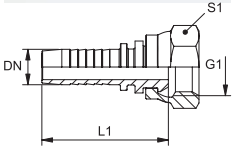
Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PN 04 AOS 90	5	3	3/16"	M 16 x 1.5	8	48,5	29,5	19	6.0 x 1.5
PN 04 AOS 90 L 37	5	3	3/16"	M 16 x 1.5	8	56,0	37,0	19	6.0 x 1.5
PN 06 AOS 03 90	6	4	1/4"	M 14 x 1.5	6	59,0	31,0	17	4.0 x 1.5
PN 06 AOS 04 90	6	4	1/4"	M 16 x 1.5	8	55,0	32,5	19	6.0 x 1.5
PN 06 AOS 90	6	4	1/4"	M 18 x 1.5	10	55,0	33,5	22	7.5 x 1.5
PN 06 AOS 08 90	6	4	1/4"	M 20 x 1.5	12	73,0	50,0	24	9.0 x 1.5
PN 08 AOS 06 90	8	5	5/16"	M 18 x 1.5	10	82,0	25,0	22	7.5 x 1.5
PN 08 AOS 90	8	5	5/16"	M 20 x 1.5	12	58,0	34,0	24	9.0 x 1.5
PN 08 AOS 90 L 45	8	5	5/16"	M 20 x 1.5	12	70,0	50,0	24	9.0 x 1.5
PN 10 AOS 06 90	10	6	3/8"	M 18 x 1.5	10	64,0	38,0	22	7.5 x 1.5
PN 10 AOS 08 90	10	6	3/8"	M 20 x 1.5	12	64,0	37,5	24	9.0 x 1.5
PN 10 AOS 90	10	6	3/8"	M 22 x 1.5	14	64,0	38,5	27	10.0 x 2.0
PN 10 AOS 13 90	10	6	3/8"	M 24 x 1.5	16	85,0	63,0	30	12.0 x 2.0
PN 13 AOS 10 90	12	8	1/2"	M 22 x 1.5	14	74,0	49,0	27	10.0 x 2.0
PN 13 AOS 90	12	8	1/2"	M 24 x 1.5	16	72,5	43,0	30	12.0 x 2.0
PN 13 AOS 16 90	12	8	1/2"	M 30 x 2	20	87,0	59,0	36	16.0 x 2.5
PN 16 AOS 13 90	16	10	5/8"	M 24 x 1.5	16	88,0	63,0	30	12.0 x 2.0
PN 16 AOS 90	16	10	5/8"	M 30 x 2	20	88,0	55,0	36	16.0 x 2.5
PN 16 AOS 90 L 100	16	10	5/8"	M 30 x 2	20	91,0	100,0	36	16.0 x 2.5
PN 16 AOS 20 90	16	10	5/8"	M 36 x 2	25	104,0	75,0	46	20.0 x 2.5
PN 20 AOS 16 90	19	12	3/4"	M 30 x 2	20	99,5	58,5	36	16.0 x 2.5
PN 20 AOS 90	19	12	3/4"	M 36 x 2	25	99,5	59,5	46	20.0 x 2.5
PN 20 AOS 90 SW41	19	12	3/4"	M 36 x 2	25	99,5	59,5	41	20.0 x 2.5
PN 20 AOS 90 L 110	19	12	3/4"	M 36 x 2	25	109,0	110,0	46	20.0 x 2.5
PN 20 AOS 90 L 130	19	12	3/4"	M 36 x 2	25	109,0	130,0	46	20.0 x 2.5
PN 20 AOS 90 L 150	19	12	3/4"	M 36 x 2	25	109,0	150,0	46	20.0 x 2.5
PN 20 AOS 25 90	19	12	3/4"	M 42 x 2	30	121,0	85,0	50	25.0 x 2.5
PN 25 AOS 20 90	25	16	1"	M 36 x 2	25	126,0	80,5	46	20.0 x 2.5

PN AOS 90 (Continuation) Swage nipple, DKOS angle 90°

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PN 25 AOS 90	25	16	1"	M 42 x 2	30	127,0	71,0	50	25.0 x 2.5
PN 32 AOS 25 90	31	20	1.1/4"	M 42 x 2	30	132,0	85,0	50	25.0 x 2.5
PN 32 AOS 90	31	20	1.1/4"	M 52 x 2	38	151,5	85,0	60	33.0 x 2.5
PN 40 AOS 32 90	38	24	1.1/2"	M 52 x 2	38	147,0	96,0	60	33.0 x 2.5

Choose the appropriate ferrule based on the hose type.

PN A Swage nipple, DKM



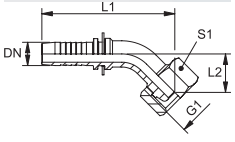
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 60° sealing head
Standard code: DKM
Surface protection: electro galvanised
Product versions: PN A VA, Swage nipple, DKM, Stainless steel

Connection 1: metric nut thread
Standard: DIN 3863
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 20 A	19	12	3/4"	M 30 x 1.5	65,5	36
PN 25 A	25	16	1"	M 38 x 1.5	75,5	46
PN 25 A 32	25	16	1"	M 45 x 1.5	76,0	50
PN 32 A	31	20	1.1/4"	M 45 x 1.5	85,0	50
PN 40 A	38	24	1.1/2"	M 52 x 1.5	89,0	60
PN 50 A	51	32	2"	M 65 x 2	107,0	75
PN 60 A	60	40	2.1/2"	M 78 x 2	112,0	90

Choose the appropriate ferrule based on the hose type.

PN A 45 Swage nipple, DKM angle 45°



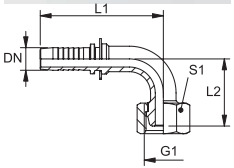
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 60° sealing head
Standard code: DKM
Surface protection: electro galvanised
Product versions: PN A 45 VA, Swage nipple, DKM angle 45°, Stainless steel

Connection 1: metric nut thread
Standard: DIN 3863
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 20 A 45	19	12	3/4"	M 30 x 1.5	119,0	29,0	36
PN 25 A 45	25	16	1"	M 38 x 1.5	148,0	39,0	46
PN 32 A 45	31	20	1.1/4"	M 45 x 1.5			
PN 40 A 45	38	24	1.1/2"	M 52 x 1.5	172,0	44,0	60
PN 50 A 45	51	32	2"	M 65 x 2	209,0	53,0	75

Choose the appropriate ferrule based on the hose type.

PN A 90 — Swage nipple, DKM angle 90°



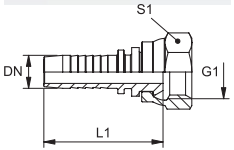
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 60° sealing head
Standard code: DKM
Surface protection: electro galvanised
Product versions: PN A 90 VA, Swage nipple, DKM angle 90°, Stainless steel

Connection 1: metric nut thread
Standard: DIN 3863
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 20 A 90	19	12	3/4"	M 30 x 1.5	109,0	61,0	36
PN 25 A 90	25	16	1"	M 38 x 1.5	125,0	71,0	46
PN 25 A 32 90	25	16	1"	M 45 x 1.5	125,0	74,0	50
PN 32 A 90	31	20	1.1/4"	M 45 x 1.5	144,0	83,0	50
PN 40 A 90	38	24	1.1/2"	M 52 x 1.5	159,0	94,0	60
PN 50 A 90	51	32	2"	M 65 x 2	199,0	118,0	75

Choose the appropriate ferrule based on the hose type.

PN AM — Swage nipple, DKM-Flat



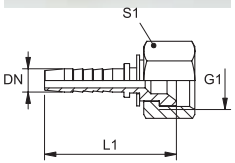
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: flat sealing
Material: Steel

Connection 1: metric nut thread
Standard code: DKM flat
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 13 AM	12	8	1/2"	M 22 x 1.5	55,0	27

Choose the appropriate ferrule based on the hose type.

PN ALI — Swage nipple, JIS



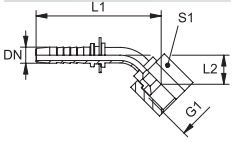
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 60° inner cone
suitable for: Komatsu
Surface protection: electro galvanised

Connection 1: metric nut thread
Standard: JIS 8363
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 06 ALI	6	4	1/4"	M 14 x 1.5	44,0	19
PN 06 ALI 08	6	4	1/4"	M 16 x 1.5	45,0	22
PN 08 ALI	8	5	5/16"	M 16 x 1.5	44,0	22
PN 10 ALI 06	10	6	3/8"	M 14 x 1.5	48,0	19
PN 10 ALI 08	10	6	3/8"	M 16 x 1.5	47,5	22
PN 10 ALI	10	6	3/8"	M 18 x 1.5	47,8	24
PN 13 ALI	12	8	1/2"	M 22 x 1.5	50,5	27
PN 13 ALI 16	12	8	1/2"	M 24 x 1.5	50,5	30
PN 16 ALI	16	10	5/8"	M 24 x 1.5	55,0	30
PN 20 ALI	19	12	3/4"	M 30 x 1.5	63,0	36
PN 25 ALI	25	16	1"	M 33 x 1.5	71,6	41
PN 32 ALI	31	20	1.1/4"	M 36 x 1.5	84,0	46
PN 40 ALI	38	24	1.1/2"	M 42 x 1.5	90,5	50

Choose the appropriate ferrule based on the hose type.

PN ALI 45 — Swage nipple, JIS angle 45°



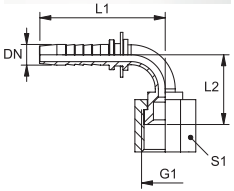
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 60° inner cone
suitable for: Komatsu
Surface protection: electro galvanised

Connection 1: metric nut thread
Standard: JIS 8363
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 10 ALI 06 45	10	6	3/8"	M 14 x 1.5	77,0	18,0	19
PN 10 ALI 08 45	10	6	3/8"	M 16 x 1.5	90,0	25,0	22
PN 10 ALI 45	10	6	3/8"	M 18 x 1.5	91,0	25,0	22
PN 13 ALI 45	12	8	1/2"	M 22 x 1.5	99,0	29,0	27
PN 16 ALI 45	16	10	5/8"	M 24 x 1.5			
PN 20 ALI 45	19	12	3/4"	M 30 x 1.5	124,0	34,0	36
PN 25 ALI 45	25	16	1"	M 33 x 1.5	146,0	41,0	41

Choose the appropriate ferrule based on the hose type.

PN ALI 90 — Swage nipple, JIS angle 90°



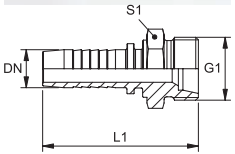
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 60° inner cone
suitable for: Komatsu
Surface protection: electro galvanised

Connection 1: metric nut thread
Standard: JIS 8363
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 06 ALI 90	6	4	1/4"	M 14 x 1.5	63,0	31,0	17
PN 08 ALI 90	8	5	5/16"	M 16 x 1.5	70,0	42,0	19
PN 10 ALI 06 90	10	6	3/8"	M 14 x 1.5	64,0	31,0	19
PN 10 ALI 08 90	10	6	3/8"	M 16 x 1.5	72,0	42,0	22
PN 10 ALI 90	10	6	3/8"	M 18 x 1.5	73,0	42,0	22
PN 10 ALI 13 90	10	6	3/8"	M 22 x 1.5	89,0	58,0	27
PN 13 ALI 90	12	8	1/2"	M 22 x 1.5	88,0	58,0	27
PN 16 ALI 90	16	10	5/8"	M 24 x 1.5	92,0	58,0	30
PN 20 ALI 90	19	12	3/4"	M 30 x 1.5	109,0	67,0	36
PN 25 ALI 90	25	16	1"	M 33 x 1.5	118,0	70,0	41

Choose the appropriate ferrule based on the hose type.

PN HL — Swage nipple, CEL



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 24° inner cone
Standard code: CEL
Surface protection: electro galvanised

Product versions: PN HL VA, Swage nipple, CEL, Stainless steel

Connection 1: metric cylindrical outer thread
Standard: DIN 3861
DIN ISO 12151-2
Material: Steel
Series: light

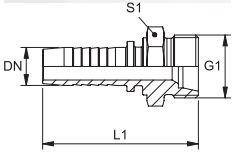
Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
PN 04 HL	5	3	3/16"	M 12 x 1.5	6	43,0	14
PN 06 HL 04	6	4	1/4"	M 12 x 1.5	6	49,0	14
PN 06 HL	6	4	1/4"	M 14 x 1.5	8	49,0	17
PN 06 HL 08	6	4	1/4"	M 16 x 1.5	10	50,0	17
PN 06 HL 10	6	4	1/4"	M 18 x 1.5	12	51,0	19
PN 08 HL	8	5	5/16"	M 16 x 1.5	10	50,0	17
PN 08 HL 10	8	5	5/16"	M 18 x 1.5	12	51,0	19
PN 08 HL 13	8	5	5/16"	M 22 x 1.5	15	52,0	24
PN 10 HL 08	10	6	3/8"	M 16 x 1.5	10	52,5	17
PN 10 HL	10	6	3/8"	M 18 x 1.5	12	52,5	19
PN 10 HL 13	10	6	3/8"	M 22 x 1.5	15	53,5	24
PN 13 HL 10	12	8	1/2"	M 18 x 1.5	12	53,5	22
PN 13 HL	12	8	1/2"	M 22 x 1.5	15	54,5	24
PN 13 HL 16	12	8	1/2"	M 26 x 1.5	18	55,5	27
PN 16 HL 13	16	10	5/8"	M 22 x 1.5	15	59,0	24
PN 16 HL	16	10	5/8"	M 26 x 1.5	18	60,0	27
PN 16 HL 20	16	10	5/8"	M 30 x 2	22	62,0	32
PN 20 HL 16	19	12	3/4"	M 26 x 1.5	18	66,5	27

PN HL (Continuation) Swage nipple, CEL

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
PN 20 HL	19	12	3/4"	M 30 x 2	22	68,5	32
PN 20 HL 25	19	12	3/4"	M 36 x 2	28	70,0	41
PN 25 HL	25	16	1"	M 36 x 2	28	77,5	41
PN 32 HL	31	20	1.1/4"	M 45 x 2	35	91,0	46
PN 40 HL	38	24	1.1/2"	M 52 x 2	42	95,5	55

Choose the appropriate ferrule based on the hose type.

PN HS Swage nipple, CES



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 24° inner cone
Standard code: CES
Surface protection: electro galvanised

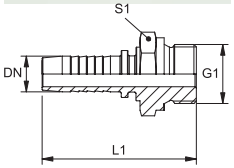
Connection 1: metric cylindrical outer thread
Standard: DIN 3861
DIN 3865
DIN ISO 12151-2
Material: Steel
Series: heavy

Product versions: PN HS VA, Swage nipple, CES, Stainless steel

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
PN 04 HS	5	3	3/16"	M 16 x 1.5	8	48,0	17
PN 06 HS 03	6	4	1/4"	M 14 x 1.5	6	52,0	14
PN 06 HS 04	6	4	1/4"	M 16 x 1.5	8	54,0	17
PN 06 HS	6	4	1/4"	M 18 x 1.5	10	54,0	19
PN 08 HS 06	8	5	5/16"	M 18 x 1.5	10	54,0	19
PN 08 HS	8	5	5/16"	M 20 x 1.5	12	56,0	22
PN 08 HS 13	8	5	5/16"	M 24 x 1.5	16	58,0	27
PN 10 HS 06	10	6	3/8"	M 18 x 1.5	10	55,5	19
PN 10 HS 08	10	6	3/8"	M 20 x 1.5	12	57,5	22
PN 10 HS	10	6	3/8"	M 22 x 1.5	14	59,5	24
PN 10 HS 13	10	6	3/8"	M 24 x 1.5	16	59,5	27
PN 13 HS 10	12	8	1/2"	M 22 x 1.5	14	60,5	24
PN 13 HS	12	8	1/2"	M 24 x 1.5	16	60,5	27
PN 13 HS 16	12	8	1/2"	M 30 x 2	20	64,5	32
PN 16 HS	16	10	5/8"	M 30 x 2	20	69,0	32
PN 20 HS 16	19	12	3/4"	M 30 x 2	20	75,5	32
PN 20 HS	19	12	3/4"	M 36 x 2	25	79,5	36
PN 25 HS 20	25	16	1"	M 36 x 2	25	87,5	36
PN 25 HS	25	16	1"	M 42 x 2	30	89,5	46
PN 32 HS	31	20	1.1/4"	M 52 x 2	38	104,0	55
PN 40 HS 32	38	24	1.1/2"	M 52 x 2	38	107,5	55

Choose the appropriate ferrule based on the hose type.

PN HM — Swage nipple, AGM-Flat



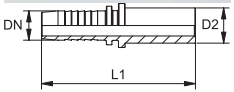
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: flat sealing
Standard code: AGM
Surface protection: electro galvanised

Connection 1: metric cylindrical outer thread
Standard: DIN 3852
ISO 724
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 06 HM 02	6	4	1/4"	M 10 x 1	50,5	14
PN 06 HM	6	4	1/4"	M 14 x 1.5	53,0	19
PN 08 HM	8	5	5/16"	M 16 x 1.5	54,5	22
PN 08 HM 10	8	5	5/16"	M 18 x 1.5	56,0	24
PN 10 HM 08	10	6	3/8"	M 16 x 1.5	55,5	22
PN 10 HM	10	6	3/8"	M 18 x 1.5	57,0	24
PN 13 HM	12	8	1/2"	M 22 x 1.5	59,5	27
PN 16 HM	16	10	5/8"	M 26 x 1.5	65,0	32
PN 20 HM	19	12	3/4"	M 30 x 1.5	74,5	36
PN 25 HM	25	16	1"	M 38 x 1.5	83,0	46
PN 32 HM	31	20	1.1/4"	M 45 x 1.5	95,0	55
PN 40 HM	38	24	1.1/2"	M 52 x 1.5	101,0	60

Choose the appropriate ferrule based on the hose type.

PN FL — Swage nipple, BEL



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: Cutting ring connection
Standard code: BEL
Surface protection: electro galvanised
Product versions: PN FL VA, Swage nipple, BEL, Stainless steel
PN FL MG, Swage nipple, BEL, Brass
Spare parts: VOM, Pre-assembly sockets

Connection 1: Pipe sockets
Standard: ISO 8434-1
Material: Steel
Series: light

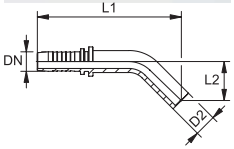
Identification	DN	Size	Inches	D2 mm	L1 mm
PN 04 FL	5	3	3/16"	6,0	50,5
PN 06 FL 04	6	4	1/4"	6,0	57,5
PN 06 FL	6	4	1/4"	8,0	58,5
PN 08 FL 06	8	5	5/16"	8,0	58,0
PN 08 FL	8	5	5/16"	10,0	59,5
PN 10 FL 08	10	6	3/8"	10,0	62,0
PN 10 FL	10	6	3/8"	12,0	62,5
PN 10 FL 13	10	6	3/8"	15,0	61,0
PN 13 FL 10	12	8	1/2"	12,0	60,0
PN 13 FL	12	8	1/2"	15,0	63,0
PN 13 FL 16	12	8	1/2"	18,0	65,0
PN 16 FL	16	10	5/8"	18,0	69,5
PN 16 FL 20	16	10	5/8"	22,0	71,5
PN 20 FL 16	19	12	3/4"	18,0	74,5
PN 20 FL	19	12	3/4"	22,0	79,0
PN 20 FL 25	19	12	3/4"	28,0	79,0
PN 25 FL	25	16	1"	28,0	87,0

PN FL (Continuation) Swage nipple, BEL

Identification	DN	Size	Inches	D2 mm	L1 mm
PN 32 FL	31	20	1.1/4"	35,0	103,0
PN 40 FL	38	24	1.1/2"	42,0	110,5

Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...).Do not use for new designs; we recommend: PN...AOL.Choose the appropriate ferrule based on the hose type.

PN FL 45 Swage nipple, BEL angle 45°



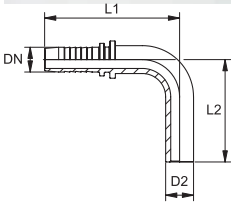
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: Cutting ring connection
Standard code: BEL
Surface protection: electro galvanised
Product versions: PN FL 45 VA, Swage nipple, BEL angle 45°, Stainless steel
Spare parts: VOM, Pre-assembly sockets

Connection 1: Pipe sockets
Standard: ISO 8434-1
Material: Steel
Series: light

Identification	DN	Size	Inches	D2 mm	L1 mm	L2 mm
PN 04 FL 45	5	3	3/16"	6,0	64,0	19,0
PN 06 FL 04 45	6	4	1/4"	6,0	72,0	21,0
PN 06 FL 45	6	4	1/4"	8,0	68,0	19,0
PN 08 FL 06 45	8	5	5/16"	8,0	68,0	19,0
PN 08 FL 45	8	5	5/16"	10,0	79,0	22,0
PN 10 FL 08 45	10	6	3/8"	10,0	81,0	26,0
PN 10 FL 45	10	6	3/8"	12,0	85,0	24,0
PN 10 FL 13 45	10	6	3/8"	15,0	99,0	30,0
PN 13 FL 10 45	12	8	1/2"	12,0	87,0	22,0
PN 13 FL 45	12	8	1/2"	15,0	102,0	35,0
PN 13 FL 16 45	12	8	1/2"	18,0	98,0	32,0
PN 16 FL 45	16	10	5/8"	18,0	109,0	34,0
PN 16 FL 20 45	16	10	5/8"	22,0	120,0	41,0
PN 20 FL 16 45	19	12	3/4"	18,0	109,0	35,0
PN 20 FL 45	19	12	3/4"	22,0	127,0	41,0
PN 25 FL 45	25	16	1"	28,0	146,0	43,0
PN 32 FL 45	31	20	1.1/4"	35,0	155,0	41,0
PN 40 FL 45	38	24	1.1/2"	42,0	189,0	56,0

Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...).Choose the appropriate ferrule based on the hose type.Do not use for new designs; we recommend: PN...AOL...45.

PN FL 90 — Swage nipple, BEL angle 90°



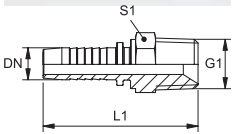
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: Cutting ring connection
Standard code: BEL
Surface protection: electro galvanised
Product versions: PN FL 90 VA, Swage nipple, BEL angle 90°, Stainless steel
Spare parts: VOM, Pre-assembly sockets

Connection 1: Pipe sockets
Standard: ISO 8434-1
Material: Steel
Series: light

Identification	DN	Size	Inches	D2 mm	L1 mm	L2 mm
PN 04 FL 90	5	3	3/16"	6,0	47,5	41,5
PN 06 FL 04 90	6	4	1/4"	6,0	56,5	42,5
PN 06 FL 90	6	4	1/4"	8,0	56,5	43,5
PN 08 FL 06 90	8	5	5/16"	8,0	63,0	44,0
PN 08 FL 90	8	5	5/16"	10,0	58,5	44,0
PN 10 FL 08 90	10	6	3/8"	10,0	61,5	53,5
PN 10 FL 90	10	6	3/8"	12,0	63,0	51,0
PN 10 FL 13 90	10	6	3/8"	15,0	92,0	70,0
PN 13 FL 10 90	12	8	1/2"	12,0	79,0	51,0
PN 13 FL 90	12	8	1/2"	15,0	71,5	56,0
PN 13 FL 16 90	12	8	1/2"	18,0	71,5	59,5
PN 16 FL 90	16	10	5/8"	18,0	83,0	70,0
PN 16 FL 20 90	16	10	5/8"	22,0	83,0	74,0
PN 20 FL 16 90	19	12	3/4"	18,0	93,0	56,0
PN 20 FL 90	19	12	3/4"	22,0	100,0	73,5
PN 25 FL 90	25	16	1"	28,0	127,5	84,5
PN 32 FL 90	31	20	1.1/4"	35,0	149,5	106,0
PN 40 FL 90	38	24	1.1/2"	42,0	188,0	140,0

Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...).Choose the appropriate ferrule based on the hose type.Do not use for new designs; we recommend: PN...AOL...90.

PN HN — Swage nipple, AGN



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: thread seal, additional 60° inner cone.
Standard code: AGN
Surface protection: electro galvanised
Product versions: PN HN VA, Swage nipple, AGN, Stainless steel

Connection 1: NPT external threads
Standard: SAE J516
SAE J514
Material: Steel

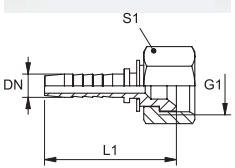
Identification	DN	Size	Inches	G1	L1 mm	S1
PN 04 HN	5	3	3/16"	1/8" -27 NPT	44,0	12
PN 04 HN 06	5	3	3/16"	1/4" -18 NPT	47,5	14
PN 06 HN 02	6	4	1/4"	1/8" -27 NPT	50,0	12
PN 06 HN	6	4	1/4"	1/4" -18 NPT	53,5	14
PN 06 HN 10	6	4	1/4"	3/8" -18 NPT	54,0	19
PN 08 HN 06	8	5	5/16"	1/4" -18 NPT	53,5	14
PN 08 HN 10	8	5	5/16"	3/8" -18 NPT	54,0	19
PN 10 HN 06	10	6	3/8"	1/4" -18 NPT	55,0	16
PN 10 HN	10	6	3/8"	3/8" -18 NPT	56,5	19
PN 10 HN 13	10	6	3/8"	1/2" -14 NPT	61,0	22
PN 13 HN 10	12	8	1/2"	3/8" -18 NPT	57,5	19

PN HN (Continuation) Swage nipple, AGN

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 13 HN	12	8	1/2"	1/2" -14 NPT	62,0	22
PN 13 HN 20	12	8	1/2"	3/4" -14 NPT	64,5	27
PN 16 HN 13	16	10	5/8"	1/2" -14 NPT	68,0	24
PN 16 HN 20	16	10	5/8"	3/4" -14 NPT	68,0	27
PN 20 HN 13	19	12	3/4"	1/2" -14 NPT	74,5	27
PN 20 HN	19	12	3/4"	3/4" -14 NPT	76,5	27
PN 20 HN 25	19	12	3/4"	1" -11.5 NPT	80,5	36
PN 25 HN 20	25	16	1"	3/4" -14 NPT	84,5	36
PN 25 HN	25	16	1"	1" -11.5 NPT	88,5	36
PN 25 HN 32	25	16	1"	1.1/4" -11.5 NPT	91,5	46
PN 32 HN	31	20	1.1/4"	1.1/4" -11.5 NPT	101,0	46
PN 40 HN	38	24	1.1/2"	1.1/2" -11.5 NPT	105,5	50
PN 50 HN	51	32	2"	2" -11.5 NPT	127,5	65

Choose the appropriate ferrule based on the hose type.

PN AJ Swage nipple, DKJ



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 74° inner cone
Standard code: DKJ
Surface protection: electro galvanised

Product versions: PN AJ VA, Swage nipple, DKJ, Stainless steel

Connection 1: UN/UNF nut threads
Standard: SAE J514
ISO 8434-2
SAE J515
Material: Steel

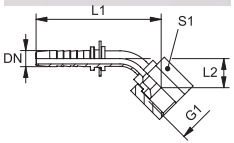
Identification	DN	Size	Inches	G1	L1 mm	S1
PN 04 AJ 06	5	3	3/16"	7/16"-20 UNF	36,0	14
PN 06 AJ	6	4	1/4"	7/16"-20 UNF	42,0	14
PN 06 AJ 08	6	4	1/4"	1/2"-20 UNF	43,0	17
PN 06 AJ 10	6	4	1/4"	9/16"-18 UNF	44,5	19
PN 06 AJ 3/8	6	4	1/4"	3/8"-24 UNF	43,5	14
PN 08 AJ	8	5	5/16"	1/2"-20 UNF	43,0	17
PN 08 AJ 10	8	5	5/16"	9/16"-18 UNF	45,0	19
PN 08 AJ 13	8	5	5/16"	3/4"-16 UNF	46,5	24
PN 10 AJ 08	10	6	3/8"	1/2"-20 UNF	47,0	17
PN 10 AJ	10	6	3/8"	9/16"-18 UNF	46,0	19
PN 10 AJ 13	10	6	3/8"	3/4"-16 UNF	48,5	24
PN 10 AJ 16	10	6	3/8"	7/8"-14 UNF	49,5	27
PN 13 AJ	12	8	1/2"	3/4"-16 UNF	48,0	24
PN 13 AJ 10	12	8	1/2"	9/16"-18 UNF	49,0	19
PN 13 AJ 16	12	8	1/2"	7/8"-14 UNF	50,5	27
PN 13 AJ 20	12	8	1/2"	1.1/16" -12 UN	51,0	32
PN 16 AJ	16	10	5/8"	7/8"-14 UNF	53,5	27
PN 16 AJ 20	16	10	5/8"	1.1/16" -12 UN	56,0	32
PN 20 AJ 14	19	12	3/4"	1.3/16" -12 UN	64,0	36
PN 20 AJ 16	19	12	3/4"	7/8"-14 UNF	62,5	27
PN 20 AJ	19	12	3/4"	1.1/16" -12 UN	63,0	32

PN AJ (Continuation) Swage nipple, DKJ

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 20 AJ 25	19	12	3/4"	1.5/16" -12 UN	64,0	41
PN 25 AJ 20	25	16	1"	1.1/16" -12 UN	71,0	32
PN 25 AJ	25	16	1"	1.5/16" -12 UN	72,0	41
PN 25 AJ 32	25	16	1"	1.5/8" -12 UN	74,0	50
PN 32 AJ 25	31	20	1.1/4"	1.5/16" -12 UN	83,5	41
PN 32 AJ	31	20	1.1/4"	1.5/8" -12 UN	82,0	50
PN 32 AJ 40	31	20	1.1/4"	1.7/8" -12 UN	84,0	60
PN 40 AJ 32	38	24	1.1/2"	1.5/8" -12 UN	88,0	50
PN 40 AJ	38	24	1.1/2"	1.7/8" -12 UN	87,5	60
PN 50 AJ	51	32	2"	2.1/2" -12 UN	108,0	75

Choose the appropriate ferrule based on the hose type.

PN AJ 45 Swage nipple, DKJ angle 45°



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 74° inner cone
Standard code: DKJ
Surface protection: electro galvanised

Connection 1: UN/UNF nut threads
Standard: SAE J514
ISO 8434-2
SAE J515
Material: Steel

Product versions: PN AJ 45 VA, Swage nipple, DKJ angle 45°, Stainless steel

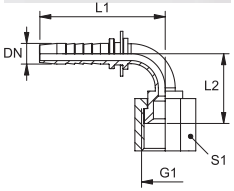
Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 04 AJ 06 45	5	3	3/16"	7/16"-20 UNF	65,0	16,0	14
PN 06 AJ 45	6	4	1/4"	7/16"-20 UNF	62,5	14,0	14
PN 06 AJ 08 45	6	4	1/4"	1/2"-20 UNF	62,0	13,0	17
PN 06 AJ 10 45	6	4	1/4"	9/16"-18 UNF	62,5	14,0	19
PN 08 AJ 45	8	5	5/16"	1/2"-20 UNF	76,0	18,0	17
PN 08 AJ 10 45	8	5	5/16"	9/16"-18 UNF	65,0	16,5	19
PN 10 AJ 08 45	10	6	3/8"	1/2"-20 UNF	77,0	18,0	17
PN 10 AJ 45	10	6	3/8"	9/16"-18 UNF	73,5	21,0	19
PN 10 AJ 13 45	10	6	3/8"	3/4"-16 UNF	76,0	23,0	24
PN 10 AJ 16 45	10	6	3/8"	7/8"-14 UNF	74,0	25,0	27
PN 13 AJ 45	12	8	1/2"	3/4"-16 UNF	80,5	20,5	24
PN 13 AJ 16 45	12	8	1/2"	7/8"-14 UNF	81,5	21,5	27
PN 13 AJ 20 45	12	8	1/2"	1.1/16" -12 UN	82,5	22,5	32
PN 16 AJ 14 45	16	10	5/8"	1.3/16" -12 UN	93,5	30,0	36
PN 16 AJ 45	16	10	5/8"	7/8"-14 UNF	96,5	25,5	27
PN 16 AJ 20 45	16	10	5/8"	1.1/16" -12 UN	97,0	26,0	32
PN 20 AJ 14 45	19	12	3/4"	1.3/16" -12 UN	107,5	24,5	36
PN 20 AJ 45	19	12	3/4"	1.1/16" -12 UN	113,0	30,5	32
PN 20 AJ 25 45	19	12	3/4"	1.5/16" -12 UN	108,5	29,0	41
PN 25 AJ 14 45	25	16	1"	1.3/16" -12 UN	118,0	33,0	36
PN 25 AJ 45	25	16	1"	1.5/16" -12 UN	134,5	32,5	41
PN 25 AJ 32 45	25	16	1"	1.5/8" -12 UN	135,5	34,0	50
PN 32 AJ 45	31	20	1.1/4"	1.5/8" -12 UN	161,0	41,0	50
PN 32 AJ 40 45	31	20	1.1/4"	1.7/8" -12 UN	167,0	47,0	55

PN AJ 45 (Continuation) Swage nipple, DKJ angle 45°

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 40 AJ 45	38	24	1.1/2"	1.7/8" -12 UN	189,5	52,0	55
PN 50 AJ 45	51	32	2"	2.1/2" -12 UN	229,0	62,0	70

Choose the appropriate ferrule based on the hose type.

PN AJ 90 Swage nipple, DKJ angle 90°



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 74° inner cone
Standard code: DKJ
Surface protection: electro galvanised

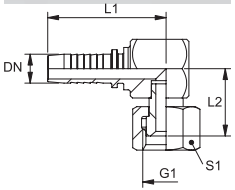
Connection 1: UN/UNF nut threads
Standard: SAE J514
ISO 8434-2
SAE J515
Material: Steel

Product versions: PN AJ 90 VA, Swage nipple, DKJ angle 90°, Stainless steel

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 04 AJ 06 90	5	3	3/16"	7/16"-20 UNF	47,5	26,0	14
PN 06 AJ 90	6	4	1/4"	7/16"-20 UNF	57,0	26,0	14
PN 06 AJ 08 90	6	4	1/4"	1/2"-20 UNF	57,0	27,0	17
PN 06 AJ 10 90	6	4	1/4"	9/16"-18 UNF	57,0	28,0	19
PN 08 AJ 90	8	5	5/16"	1/2"-20 UNF	63,0	31,0	17
PN 08 AJ 10 90	8	5	5/16"	9/16"-18 UNF	57,5	30,5	19
PN 10 AJ 08 90	10	6	3/8"	1/2"-20 UNF	64,0	31,0	17
PN 10 AJ 90	10	6	3/8"	9/16"-18 UNF	63,0	35,0	19
PN 10 AJ 13 90	10	6	3/8"	3/4"-16 UNF	63,0	37,0	24
PN 10 AJ 16 90	10	6	3/8"	7/8"-14 UNF	63,0	38,0	27
PN 13 AJ 90	12	8	1/2"	3/4"-16 UNF	71,5	42,5	24
PN 13 AJ 16 90	12	8	1/2"	7/8"-14 UNF	71,5	43,5	27
PN 13 AJ 20 90	12	8	1/2"	1.1/16" -12 UN	71,5	45,0	32
PN 16 AJ 90	16	10	5/8"	7/8"-14 UNF	87,0	54,0	27
PN 16 AJ 20 90	16	10	5/8"	1.1/16" -12 UN	87,0	54,5	32
PN 16 AJ 20 90 L 105	16	10	5/8"	1.1/16" -12 UN	87,0	105,0	32
PN 20 AJ 90	19	12	3/4"	1.1/16" -12 UN	99,0	57,5	32
PN 20 AJ 90 L 100	19	12	3/4"	1.1/16" -12 UN	98,0	100,0	32
PN 20 AJ 14 90	19	12	3/4"	1.3/16" -12 UN	98,5	58,5	36
PN 20 AJ 25 90	19	12	3/4"	1.5/16" -12 UN	104,5	57,0	41
PN 25 AJ 14 90	25	16	1"	1.3/16" -12 UN	106,0	50,0	36
PN 25 AJ 90	25	16	1"	1.5/16" -12 UN	126,0	70,5	41
PN 25 AJ 32 90	25	16	1"	1.5/8" -12 UN	127,5	77,5	50
PN 32 AJ 90	31	16	1.1/4"	1.5/8" -12 UN	150,5	86,0	50
PN 32 AJ 40 90	31	20	1.1/4"	1.7/8" -12 UN	149,5	94,5	55
PN 40 AJ 90	38	24	1.1/2"	1.7/8" -12 UN	175,5	100,5	60
PN 50 AJ 90	51	32	2"	2.1/2" -12 UN	219,0	129,0	70

Choose the appropriate ferrule based on the hose type.

PN AJK 90 — Swage nipple, DKJ Comp. angle 90°



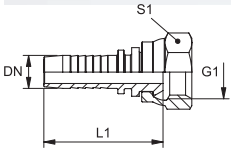
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 74° inner cone
Standard: SAE J514
Material: Steel

Connection 1: UN/UNF nut threads
Supplementary design information: Compact form
Standard code: DKJ
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 06 AJK 90	6	4	1/4"	7/16"-20 UNF	50,0	17,0	14
PN 06 AJK 08 90	6	4	1/4"	1/2"-20 UNF	51,1	19,0	17
PN 06 AJK 10 90	6	4	1/4"	9/16"-18 UNF	53,5	20,0	19
PN 08 AJK 10 90	8	5	5/16"	9/16"-18 UNF	54,0	20,0	19
PN 10 AJK 90	10	6	3/8"	9/16"-18 UNF	55,5	20,0	19
PN 10 AJK 13 90	10	6	3/8"	3/4"-16 UNF	57,6	21,0	24
PN 13 AJK 90	12	8	1/2"	3/4"-16 UNF	59,6	21,0	24
PN 13 AJK 16 90	12	8	1/2"	7/8"-14 UNF	59,6	25,0	27
PN 16 AJK 90	16	10	5/8"	7/8"-14 UNF	64,1	25,0	27
PN 16 AJK 20 90	16	10	5/8"	1.1/16" -12 UN	69,8	28,0	32
PN 20 AJK 90	19	12	3/4"	1.1/16" -12 UN	74,8	28,0	32
PN 25 AJK 90	25	16	1"	1.5/16" -12 UN	92,2	34,0	41

Choose the appropriate ferrule based on the hose type.

PN AJF — Swage nipple, ORFS



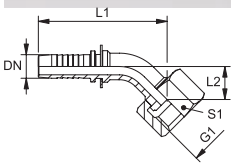
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: flat sealing
Standard code: ORFS
Surface protection: electro galvanised
Product versions: PN AJF VA, Swage nipple, ORFS, Stainless steel

Connection 1: UN/UNF nut threads
Standard: SAE J1453
ISO 8434-3
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 06 AJF	6	4	1/4"	9/16"-18 UNF	49,5	17
PN 06 AJF 10	6	4	1/4"	11/16" -16 UN	51,5	22
PN 08 AJF 10	8	5	5/16"	11/16" -16 UN	51,5	22
PN 10 AJF	10	6	3/8"	11/16" -16 UN	53,0	22
PN 10 AJF 13	10	6	3/8"	13/16" -16 UN	56,0	24
PN 13 AJF	12	8	1/2"	13/16" -16 UN	57,0	24
PN 13 AJF 16	12	8	1/2"	1" -14 UNS	61,0	30
PN 13 AJF 20	12	8	1/2"	1.3/16" -12 UN	65,5	36
PN 16 AJF	16	10	5/8"	1" -14 UNS	65,5	30
PN 16 AJF 20	16	10	5/8"	1.3/16" -12 UN	70,0	36
PN 20 AJF 16	19	12	3/4"	1" -14 UNS	76,0	30
PN 20 AJF	19	12	3/4"	1.3/16" -12 UN	74,5	36
PN 20 AJF 25	19	12	3/4"	1.7/16" -12 UN	77,5	41
PN 25 AJF	25	16	1"	1.7/16" -12 UN	83,5	41
PN 32 AJF	31	20	1.1/4"	1.11/16" -12 UN	92,5	50
PN 40 AJF	38	24	1.1/2"	2" -12 UN	96,0	60

Choose the appropriate ferrule based on the hose type.

PN AJF 45 — Swage nipple, ORFS angle 45°



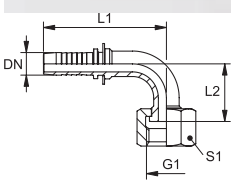
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: flat sealing
Standard code: ORFS
Surface protection: electro galvanised

Connection 1: UN/UNF nut threads
Standard: SAE J1453
ISO 8434-3
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 06 AJF 45	6	4	1/4"	9/16"-18 UNF	60,0	12,0	17
PN 06 AJF 10 45	6	4	1/4"	11/16" -16 UN	61,0	13,5	22
PN 08 AJF 10 45	8	5	5/16"	11/16" -16 UN	83,0	21,0	22
PN 10 AJF 45	10	6	3/8"	11/16" -16 UN	69,0	16,0	22
PN 10 AJF 13 45	10	6	3/8"	13/16" -16 UN	69,5	16,5	24
PN 13 AJF 45	12	8	1/2"	13/16" -16 UN	78,0	17,0	24
PN 13 AJF 16 45	12	8	1/2"	1" -14 UNS	80,5	19,5	30
PN 16 AJF 45	16	10	5/8"	1" -14 UNS	93,5	22,5	30
PN 20 AJF 45	19	12	3/4"	1.3/16" -12 UN	104,0	25,0	36
PN 25 AJF 45	25	16	1"	1.7/16" -12 UN	130,5	27,5	41
PN 32 AJF 45	31	20	1.1/4"	1.11/16" -12 UN	155,0	34,0	50
PN 40 AJF 45	38	24	1.1/2"	2" -12 UN	177,0	38,0	60

Choose the appropriate ferrule based on the hose type.

PN AJF 90 — Swage nipple, ORFS angle 90°



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: flat sealing
Standard code: ORFS
Surface protection: electro galvanised

Connection 1: UN/UNF nut threads
Standard: SAE J1453
ISO 8434-3
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 06 AJF 90	6	4	1/4"	9/16"-18 UNF	55,0	26,5	17
PN 06 AJF 90 L 58	6	4	1/4"	9/16"-18 UNF	59,0	58,0	17
PN 06 AJF 10 90	6	4	1/4"	11/16" -16 UN	55,0	28,0	22
PN 08 AJF 10 90	8	5	5/16"	11/16" -16 UN	58,0	28,0	22
PN 10 AJF 90	10	6	3/8"	11/16" -16 UN	64,0	32,0	22
PN 10 AJF 90 L 69	10	6	3/8"	11/16" -16 UN	72,0	69,0	22
PN 10 AJF 13 90	10	6	3/8"	13/16" -16 UN	64,0	33,0	24
PN 13 AJF 90	12	8	1/2"	13/16" -16 UN	72,5	37,0	24
PN 13 AJF 90 L 82	12	8	1/2"	13/16" -16 UN	75,0	82,0	24
PN 13 AJF 16 90	12	8	1/2"	1" -14 UNS	72,5	41,0	30
PN 13 AJF 20 90	12	8	1/2"	1.3/16" -12 UN	71,5	43,5	36
PN 16 AJF 90	16	10	5/8"	1" -14 UNS	88,0	47,5	30
PN 16 AJF 90 L 94	16	10	5/8"	1" -14 UNS	92,0	94,0	30
PN 16 AJF 20 90	16	10	5/8"	1.3/16" -12 UN	91,0	51,0	36
PN 20 AJF 90	19	12	3/4"	1.3/16" -12 UN	99,5	52,0	36
PN 20 AJF 90 L 96	19	12	3/4"	1.3/16" -12 UN	98,0	96,0	36
PN 20 AJF 25 90	19	12	3/4"	1.7/16" -12 UN	98,5	56,0	41
PN 25 AJF 90	25	16	1"	1.7/16" -12 UN	127,0	63,5	41
PN 25 AJF 90 L 114	25	16	1"	1.7/16" -12 UN	114,0	114,0	41
PN 32 AJF 90	31	20	1.1/4"	1.11/16" -12 UN	151,5	76,0	50

PN AJF 90 (Continuation) Swage nipple, ORFS angle 90°

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 32 AJF 90 L 129	31	20	1.1/4"	1.11/16" -12 UN	132,0	129,0	50
PN 40 AJF 90	38	24	1.1/2"	2" -12 UN	176,5	89,0	60
PN 40 AJF 90 L 146	38	24	1.1/2"	2" -12 UN	176,5	146,0	60

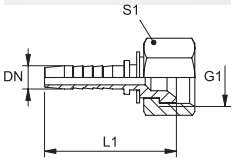
Choose the appropriate ferrule based on the hose type.

PN ASA Swage nipple, DKJ

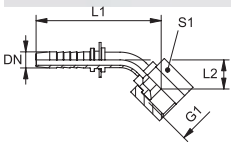
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 45° inner cone
Material: Steel
Connection 1: UN/UNF nut threads
Standard: SAE J516/J513
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 06 ASA 10	6	4	1/4"	5/8"-18 UNF	43,7	22
PN 10 ASA	10	6	3/8"	5/8"-18 UNF	45,7	22

Choose the appropriate ferrule based on the hose type.



PN ASA 45 — Swage nipple, DKJ angle 45°



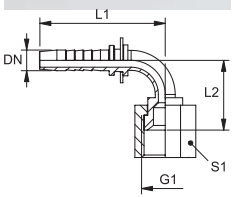
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 45° inner cone
Material: Steel

Connection 1: UN/UNF nut threads
Standard: SAE J516/J513
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 10 ASA 45	10	6	3/8"	5/8"-18 UNF	88,0	23,0	22

Choose the appropriate ferrule based on the hose type.

PN ASA 90 — Swage nipple, DKJ angle 90°



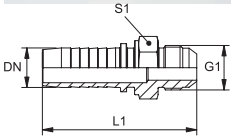
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 45° inner cone
Material: Steel

Connection 1: UN/UNF nut threads
Standard: SAE J516/J513
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 10 ASA 90	10	6	3/8"	5/8"-18 UNF	72,0	40,0	22

Choose the appropriate ferrule based on the hose type.

PN HJ Swage nipple, AGJ



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: 74° outer cone
Standard code: AGJ
Surface protection: electro galvanised

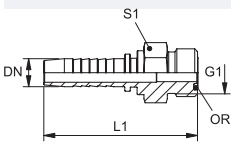
Product versions: PN HJ VA, Swage nipple, AGJ, Stainless steel

Connection 1: UN/UNF external threads
Standard: SAE J514
ISO 8434-2
SAE J516
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 04 HJ 06	5	3	3/16"	7/16"-20 UNF	47,5	14
PN 06 HJ	6	4	1/4"	7/16"-20 UNF	53,5	14
PN 06 HJ 08	6	4	1/4"	1/2"-20 UNF	54,0	17
PN 06 HJ 10	6	4	1/4"	9/16"-18 UNF	53,5	17
PN 08 HJ	8	5	5/16"	1/2"-20 UNF	53,5	14
PN 08 HJ 10	8	5	5/16"	9/16"-18 UNF	53,5	19
PN 08 HJ 13	8	5	5/16"	3/4"-16 UNF	58,5	22
PN 10 HJ 08	10	6	3/8"	1/2"-20 UNF	55,0	17
PN 10 HJ	10	6	3/8"	9/16"-18 UNF	55,5	19
PN 10 HJ 13	10	6	3/8"	3/4"-16 UNF	59,0	22
PN 10 HJ 16	10	6	3/8"	7/8"-14 UNF	62,5	24
PN 13 HJ	12	8	1/2"	3/4"-16 UNF	60,0	22
PN 13 HJ 16	12	8	1/2"	7/8"-14 UNF	63,5	24
PN 13 HJ 20	12	8	1/2"	1.1/16" -12 UN	67,5	27
PN 16 HJ 14	16	10	5/8"	1.3/16" -12 UN	74,5	36
PN 16 HJ	16	10	5/8"	7/8"-14 UNF	68,0	24
PN 16 HJ 20	16	10	5/8"	1.1/16" -12 UN	72,0	32
PN 20 HJ 14	19	12	3/4"	1.3/16" -12 UN	79,5	32
PN 20 HJ 16	19	12	3/4"	7/8"-14 UNF	77,0	27
PN 20 HJ	19	12	3/4"	1.1/16" -12 UN	79,0	27
PN 20 HJ 25	19	12	3/4"	1.5/16" -12 UN	80,0	34
PN 25 HJ 14	25	16	1"	1.3/16" -12 UN	89,0	36
PN 25 HJ 20	25	16	1"	1.1/16" -12 UN	87,0	34
PN 25 HJ	25	16	1"	1.5/16" -12 UN	88,5	36
PN 25 HJ 32	25	16	1"	1.5/8" -12 UN	90,0	42
PN 32 HJ	31	20	1.1/4"	1.5/8" -12 UN	100,5	46
PN 32 HJ 40	31	20	1.1/4"	1.7/8" -12 UN	105,0	50
PN 40 HJ	38	24	1.1/2"	1.7/8" -12 UN	109,0	50
PN 50 HJ	51	32	2"	2.1/2" -12 UN	133,5	65

Choose the appropriate ferrule based on the hose type.

PN HJOF — Swage nipple, AORFS



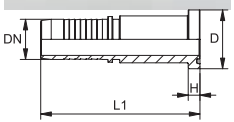
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: flat seal with O-ring
Standard code: ORFS
Surface protection: electro galvanised

Connection 1: UN/UNF external threads
Standard: SAE J1453
ISO 8434-3
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PN 06 HJOF	6	4	1/4"	9/16"-18 UNF	52,5	17	7.65 x 1.78
PN 06 HJOF 10	6	4	1/4"	11/16" -16 UN	54,0	19	9.25 x 1.78
PN 08 HJOF 10	8	5	5/16"	11/16" -16 UN	54,0	19	9.25 x 1.78
PN 10 HJOF	10	6	3/8"	11/16" -16 UN	56,0	19	9.25 x 1.78
PN 10 HJOF 13	10	6	3/8"	13/16" -16 UN	58,5	22	12.42 x 1.78
PN 10 HJOF 16	10	6	3/8"	1" -14 UNS	62,0	27	15.60 x 1.78
PN 13 HJOF	12	8	1/2"	13/16" -16 UN	60,0	22	12.42 x 1.78
PN 13 HJOF 16	12	8	1/2"	1" -14 UNS	63,5	27	15.60 x 1.78
PN 13 HJOF 20	12	8	1/2"	1.3/16" -12 UN	66,5	32	18.77 x 1.78
PN 16 HJOF	16	10	5/8"	1" -14 UNS	68,0	27	15.60 x 1.78
PN 16 HJOF 20	16	10	5/8"	1.3/16" -12 UN	71,0	32	18.77 x 1.78
PN 20 HJOF	19	12	3/4"	1.3/16" -12 UN	78,0	32	18.77 x 1.78
PN 20 HJOF 25	19	12	3/4"	1.7/16" -12 UN	82,5	41	23.52 x 1.78
PN 25 HJOF	25	16	1"	1.7/16" -12 UN	90,5	41	23.52 x 1.78
PN 32 HJOF	31	20	1.1/4"	1.11/16" -12 UN	101,5	46	29.87 x 1.78
PN 40 HJOF	38	24	1.1/2"	2" -12 UN	109,0	55	37.82 x 1.78

Choose the appropriate ferrule based on the hose type.

PN SF — Swage nipple, SFL



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: flat seal with SF O-ring
Standard code: SFL
Surface protection: electro galvanised
Product versions: PN SF VA, Swage nipple, SFL, Stainless steel

Connection 1: SAE flange connection 3000 PSI
Standard: SAE J518
ISO 6162-1/-2
Material: Steel

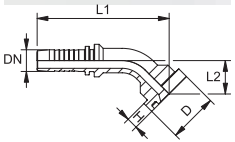
Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PN 13 SF	12	8	1/2"	1/2"	30,2	6,80	80,5
PN 13 SF 20	12	8	1/2"	3/4"	38,1	6,80	85,5
PN 16 SF 13	16	10	5/8"	1/2"	30,2	6,80	85,0
PN 16 SF 20	16	10	5/8"	3/4"	38,1	6,80	90,0
PN 16 SF 25	16	10	5/8"	1"	44,4	8,10	97,5
PN 20 SF	19	12	3/4"	3/4"	38,1	6,80	96,5
PN 20 SF 25	19	12	3/4"	1"	44,4	8,10	99,5
PN 25 SF 20	25	16	1"	3/4"	38,1	6,80	104,5
PN 25 SF	25	16	1"	1"	44,4	8,10	110,5
PN 25 SF 32	25	16	1"	1.1/4"	50,8	8,10	113,5
PN 32 SF 25	31	20	1.1/4"	1"	44,4	8,10	118,0
PN 32 SF	31	20	1.1/4"	1.1/4"	50,8	8,10	125,5
PN 32 SF 40	31	20	1.1/4"	1.1/2"	60,3	8,10	128,5
PN 40 SF 32	38	24	1.1/2"	1.1/4"	50,8	8,10	129,0
PN 40 SF	38	24	1.1/2"	1.1/2"	60,3	8,10	135,0

PN SF (Continuation) Swage nipple, SFL

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PN 40 SF 50	38	24	1.1/2"	2"	71,4	9,60	138,0
PN 50 SF 40	51	32	2"	1.1/2"	60,3	8,10	149,5
PN 50 SF	51	32	2"	2"	71,4	9,60	153,0
PN 50 SF 60	51	32	2"	2.1/2"	84,0	9,60	156,0
PN 60 SF 50	60	40	2.1/2"	2"	71,4	9,60	155,5
PN 60 SF	60	40	2.1/2"	2.1/2"	84,0	9,60	158,5
PN 76 SF	76	48	3"	3"	101,6	9,53	150,0
PN 76 SF 60	76	48	3"	2.1/2"	84,0	9,53	166,0

Choose the appropriate ferrule based on the hose type.

PN SF 45 Swage nipple, SFL angle 45°



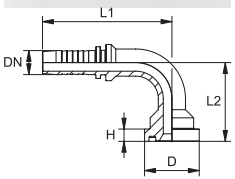
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: flat seal with SF O-ring
Standard code: SFL
Surface protection: electro galvanised
Product versions: PN SF 45 VA, Swage nipple, SFL angle 45°, Stainless steel

Connection 1: SAE flange connection 3000 PSI
Standard: SAE J518
ISO 6162-1/-2
Material: Steel

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PN 13 SF 45	12	8	1/2"	1/2"	30,2	6,70	81,0	21,0
PN 13 SF 20 45	12	8	1/2"	3/4"	38,1	6,70	84,5	24,0
PN 16 SF 13 45	16	10	5/8"	1/2"	30,2	6,70	101,0	28,0
PN 16 SF 20 45	16	10	5/8"	3/4"	38,1	6,70	96,5	28,5
PN 20 SF 45	19	12	3/4"	3/4"	38,1	6,70	107,5	28,0
PN 20 SF 25 45	19	12	3/4"	1"	44,4	8,00	110,0	28,0
PN 25 SF 20 45	25	16	1"	3/4"	38,1	6,70	128,0	33,0
PN 25 SF 45	25	16	1"	1"	44,4	8,00	132,0	30,5
PN 25 SF 32 45	25	16	1"	1.1/4"	50,8	8,00	135,0	31,0
PN 32 SF 25 45	31	20	1.1/4"	1"	44,4	8,00	157,0	41,0
PN 32 SF 45	31	20	1.1/4"	1.1/4"	50,8	8,00	154,0	34,0
PN 32 SF 40 45	31	20	1.1/4"	1.1/2"	60,3	8,00	160,0	40,0
PN 40 SF 45	38	24	1.1/2"	1.1/2"	60,3	8,00	179,5	42,0
PN 40 SF 50 45	38	24	1.1/2"	2"	71,4	9,50	184,0	46,0
PN 50 SF 40 45	51	32	2"	1.1/2"	60,3	8,00	207,0	54,0
PN 50 SF 45	51	32	2"	2"	71,4	9,50	217,0	50,0
PN 50 SF 60 45	51	32	2"	2.1/2"	84,0	9,50	210,0	56,0
PN 60 SF 45	60	40	2.1/2"	2.1/2"	84,0	9,50	239,0	51,0
PN 60 SF 45 L 60	60	40	2.1/2"	2.1/2"	84,0	9,50	237,0	60,0
PN 76 SF 60 45	76	48	3"	2.1/2"	84,0	9,53	238,0	70,0
PN 76 SF 45	76	48	3"	3"	101,6	9,53	225,0	53,0

Choose the appropriate ferrule based on the hose type.

PN SF 90 Swage nipple, SFL angle 90°



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: flat seal with SF O-ring
Standard code: SFL
Surface protection: electro galvanised
Product versions: PN SF 90 VA, Swage nipple, SFL angle 90°, Stainless steel

Connection 1: SAE flange connection 3000 PSI
Standard: SAE J518
ISO 6162-1/-2
Material: Steel

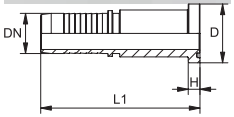
Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PN 13 SF 90	12	8	1/2"	1/2"	30,2	6,70	71,5	43,5
PN 13 SF 20 90	12	8	1/2"	3/4"	38,1	6,70	72,5	47,5
PN 13 SF 25 90	12	8	1/2"	1"	44,5	8,00	87,0	63,0
PN 16 SF 13 90	16	10	5/8"	1/2"	30,2	6,70	91,0	58,0
PN 16 SF 20 90	16	10	5/8"	3/4"	38,1	6,70	87,0	55,0
PN 16 SF 25 90	16	10	5/8"	1"	44,5	8,00	104,0	67,0
PN 20 SF 90	19	12	3/4"	3/4"	38,1	6,70	100,0	58,0
PN 20 SF 25 90	19	12	3/4"	1"	44,5	8,00	99,0	60,0
PN 20 SF 32 90	19	12	3/4"	1.1/4"	50,8	8,00	121,0	75,0
PN 25 SF 20 90	25	16	1"	3/4"	38,1	6,70	114,0	63,0
PN 25 SF 90	25	16	1"	1"	44,5	8,00	126,0	67,5
PN 25 SF 90 L 142	25	16	1"	1"	44,5	8,00	126,0	142,0
PN 25 SF 32 90	25	16	1"	1.1/4"	50,8	8,00	126,0	70,0
PN 25 SF 40 90	25	16	1"	1.1/2"	60,3	8,00	148,0	95,0
PN 32 SF 25 90	31	20	1.1/4"	1"	44,5	8,00	132,0	75,0
PN 32 SF 90	31	20	1.1/4"	1.1/4"	50,8	8,00	150,5	79,0
PN 32 SF 90 L 88	31	20	1.1/4"	1.1/4"	50,8	8,00	114,0	88,0
PN 32 SF 90 L 120	31	20	1.1/4"	1.1/4"	50,8	8,00	144,0	120,0
PN 32 SF 90 L 155	31	20	1.1/4"	1.1/4"	50,8	8,00	144,0	155,0
PN 32 SF 40 90	31	20	1.1/4"	1.1/2"	60,3	8,00	150,5	84,5
PN 40 SF 90	38	24	1.1/2"	1.1/2"	60,3	8,00	175,5	94,0
PN 40 SF 90 L 80	38	24	1.1/2"	1.1/2"	60,3	8,00	159,0	80,0
PN 40 SF 90 L 100	38	24	1.1/2"	1.1/2"	60,3	8,00	159,0	100,0
PN 40 SF 90 L 124	38	24	1.1/2"	1.1/2"	60,3	8,00	159,0	124,0
PN 40 SF 90 L 144	38	24	1.1/2"	1.1/2"	60,3	8,00	183,0	144,0
PN 40 SF 90 L 150	38	24	1.1/2"	1.1/2"	60,3	8,00	159,0	150,0
PN 40 SF 50 90	38	24	1.1/2"	2"	71,4	9,50	175,5	100,0
PN 40 SF 50 90 L 150	38	24	1.1/2"	2"	71,4	9,50	183,0	150,0
PN 50 SF 40 90	51	32	2"	1.1/2"	60,3	8,00	199,0	123,0
PN 50 SF 40 90 L 115	51	32	2"	1.1/2"	60,3	8,00	197,0	115,0
PN 50 SF 90	51	32	2"	2"	71,4	9,50	217,0	118,0
PN 50 SF 90 L 120	51	32	2"	2"	71,4	9,50	197,0	120,0
PN 50 SF 90 L 140	51	32	2"	2"	71,4	9,50	197,0	140,0
PN 50 SF 90 L 160	51	32	2"	2"	71,4	9,50	197,0	160,0
PN 50 SF 90 L 170	51	32	2"	2"	71,4	9,50	197,0	170,0
PN 50 SF 90 L 220	51	32	2"	2"	71,4	9,50	197,0	220,0
PN 50 SF 60 90	51	32	2"	2.1/2"	84,0	9,50	197,0	122,0
PN 50 SF 60 90 L 200	51	32	2"	2.1/2"	84,1	9,50	197,0	200,0
PN 60 SF 50 90	60	40	2.1/2"	2"	71,4	9,50	201,0	122,0
PN 60 SF 90	60	40	2.1/2"	2.1/2"	84,0	9,50	240,0	130,0
PN 60 SF 90 L 118	60	40	2.1/2"	2.1/2"	84,0	9,50	240,0	118,0

PN SF 90 (Continuation) Swage nipple, SFL angle 90°

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PN 76 SF 90	76	48	3"	3"	101,6	9,53	230,0	135,0
PN 76 SF 90 L 120	76	48	3"	3"	101,6	9,53	240,0	120,0

Choose the appropriate ferrule based on the hose type.

PN SF6 Swage nipple, SFS



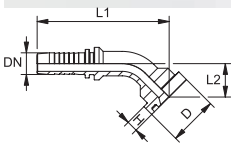
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: flat seal with SF O-ring
Standard code: SFS
Surface protection: electro galvanised
Product versions: PN SF6 VA, Swage nipple, SFS, Stainless steel

Connection 1: SAE flange connection 6000 PSI
Standard: SAE J518
ISO 6162-1/-2
Material: Steel

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PN 13 SF6	12	8	1/2"	1/2"	31,8	7,8	81,5
PN 13 SF6 20	12	8	1/2"	3/4"	41,3	8,8	89,5
PN 16 SF6 13	16	10	5/8"	1/2"	31,8	7,8	86,0
PN 16 SF6 20	16	10	5/8"	3/4"	41,3	8,8	97,0
PN 16 SF6 25	16	10	5/8"	1"	47,6	9,6	104,0
PN 20 SF6 13	19	12	3/4"	1/2"	31,8	7,8	93,5
PN 20 SF6	19	12	3/4"	3/4"	41,3	8,8	104,5
PN 20 SF6 25	19	12	3/4"	1"	47,6	9,6	109,5
PN 25 SF6 20	25	16	1"	3/4"	41,3	8,8	112,5
PN 25 SF6	25	16	1"	1"	47,6	9,6	121,5
PN 25 SF6 32	25	16	1"	1.1/4"	54,0	10,4	126,0
PN 32 SF6 25	31	20	1.1/4"	1"	47,6	9,6	131,5
PN 32 SF6	31	20	1.1/4"	1.1/4"	54,0	10,4	138,0
PN 32 SF6 40	31	20	1.1/4"	1.1/2"	63,5	12,7	142,5
PN 40 SF6	38	24	1.1/2"	1.1/2"	63,5	12,7	150,5
PN 40 SF6 32	38	24	1.1/2"	1.1/4"	54,0	10,4	141,5
PN 40 SF6 50	38	24	1.1/2"	2"	79,4	12,7	155,0
PN 50 SF6	51	32	2"	2"	79,4	12,7	174,0

Choose the appropriate ferrule based on the hose type.

PN SF6 45 — Swage nipple, SFS angle 45°



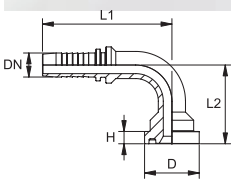
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: flat seal with SF O-ring
Standard code: SFS
Surface protection: electro galvanised
Product versions: PN SF6 45 VA, Swage nipple, SFS angle 45°, Stainless steel

Connection 1: SAE flange connection 6000 PSI
Standard: SAE J518
ISO 6162-1/-2
Material: Steel

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PN 13 SF6 45	12	8	1/2"	1/2"	31,8	7,8	82,0	22,0
PN 13 SF6 20 45	12	8	1/2"	3/4"	41,3	8,8	87,5	27,5
PN 16 SF6 13 45	16	10	5/8"	1/2"	31,8	7,8	102,0	29,0
PN 16 SF6 20 45	16	10	5/8"	3/4"	41,3	8,8	100,5	30,5
PN 16 SF6 25 45	16	10	5/8"	1"	47,6	9,6	120,0	35,0
PN 20 SF6 45	19	12	3/4"	3/4"	41,3	8,8	110,0	30,5
PN 20 SF6 25 45	19	12	3/4"	1"	47,6	9,6	114,5	35,0
PN 25 SF6 20 45	25	16	1"	3/4"	41,3	8,8	129,0	34,0
PN 25 SF6 45	25	16	1"	1"	47,6	9,6	137,0	35,5
PN 25 SF6 32 45	25	16	1"	1.1/4"	54,0	10,4	142,0	40,5
PN 32 SF6 45	31	20	1.1/4"	1.1/4"	54,0	10,4	164,0	44,0
PN 32 SF6 40 45	31	20	1.1/4"	1.1/2"	63,5	12,7	170,0	50,5
PN 40 SF6 32 45	38	24	1.1/2"	1.1/4"	54,0	10,4	174,0	49,0
PN 40 SF6 45	38	24	1.1/2"	1.1/2"	63,5	12,7	190,0	52,0
PN 40 SF6 50 45	38	24	1.1/2"	2"	79,4	12,7	201,0	63,5
PN 50 SF6 45	51	32	2"	2"	79,4	12,7	236,0	67,5

Choose the appropriate ferrule based on the hose type.

PN SF6 90 — Swage nipple, SFS angle 90°



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: flat seal with SF O-ring
Standard code: SFS
Surface protection: electro galvanised
Product versions: PN SF6 90 VA, Swage nipple, SFS angle 90°, Stainless steel

Connection 1: SAE flange connection 6000 PSI
Standard: SAE J518
ISO 6162-1/-2
Material: Steel

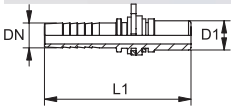
Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PN 13 SF6 90	12	8	1/2"	1/2"	31,8	7,8	71,5	44,5
PN 13 SF6 20 90	12	8	1/2"	3/4"	41,3	8,8	71,5	52,5
PN 16 SF6 13 90	16	10	5/8"	1/2"	31,8	7,8	91,0	59,0
PN 16 SF6 20 90	16	10	5/8"	3/4"	41,3	8,8	87,0	59,0
PN 16 SF6 25 90	16	10	5/8"	1"	47,6	9,6	106,0	72,0
PN 20 SF6 13 90	19	12	3/4"	1/2"	31,8	7,8	98,0	59,0
PN 20 SF6 90	19	12	3/4"	3/4"	41,3	8,8	99,0	61,0
PN 20 SF6 25 90	19	12	3/4"	1"	47,6	9,6	99,0	67,0
PN 25 SF6 20 90	25	16	1"	3/4"	41,3	8,8	114,0	68,0
PN 25 SF6 90	25	16	1"	1"	47,6	9,6	126,0	74,5
PN 25 SF6 32 90	25	16	1"	1.1/4"	54,0	10,4	126,0	81,5
PN 32 SF6 90 L 80	31	20	1.1/4"	1.1/4"	54,0	10,4	144,0	80,0
PN 32 SF6 25 90	31	20	1.1/4"	1"	47,6	9,6	132,0	76,0
PN 32 SF6 90	31	20	1.1/4"	1.1/4"	54,0	10,4	150,5	90,5

PN SF6 90 (Continuation) Swage nipple, SFS angle 90°

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PN 32 SF6 40 90	31	20	1.1/4"	1.1/2"	63,5	12,7	150,5	99,0
PN 40 SF6 32 90 L 120	38	24	1.1/2"	1.1/4"	54,0	10,4	147,0	120,0
PN 40 SF6 90	38	24	1.1/2"	1.1/2"	63,5	12,7	175,5	108,5
PN 40 SF6 50 90	38	24	1.1/2"	2"	79,4	12,7	175,5	124,5
PN 50 SF6 90	51	32	2"	2"	79,4	12,7	219,5	140,0

Choose the appropriate ferrule based on the hose type.

PN WEO S Swage nipple, WEO S



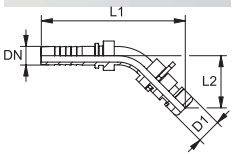
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: O-ring sealed pin
Surface protection: electro galvanised

Connection 1: WEO plug
Material: Steel

Identification	DN	Size	Inches	Working pressure bar	Size	Ø D1 mm	L1 mm
PN 04 WEO 10 S	5	3	3/16"	PN 350	3/16"	10,0	54,5
PN 06 WEO 10 S	6	4	1/4"	PN 350	1/4"	10,0	58,0
PN 06 WEO 13 S	6	4	1/4"	PN 350	3/8"	13,0	61,0
PN 08 WEO 13 S	8	5	5/16"	PN 350	3/8"	13,0	61,9
PN 10 WEO 13 S	10	6	3/8"	PN 350	3/8"	13,0	63,0
PN 10 WEO 16 S	10	6	3/8"	PN 350	1/2"	16,0	63,0
PN 13 WEO 16 S	12	8	1/2"	PN 350	1/2"	16,0	64,0
PN 13 WEO 23 S	12	8	1/2"	PN 350	3/4"	23,0	73,5
PN 16 WEO 23 S	16	10	5/8"	PN 350	3/4"	23,0	77,5
PN 20 WEO 23 S	19	12	3/4"	PN 350	3/4"	23,0	82,0
PN 25 WEO 30 S	25	16	1"	PN 250	1"	30,0	100,5

Choose the appropriate ferrule based on the hose type.

PN WEO S 45 — Swage nipple, WEO S angle 45°



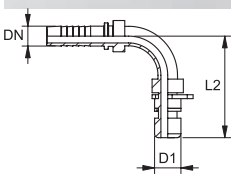
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: O-ring sealed pin
Surface protection: electro galvanised

Connection 1: WEO plug
Material: Steel

Identification	DN	Size	Inches	Working pressure bar	Size	Ø D1 mm	L2 mm
PN 06 WEO 10 S 45	6	4	1/4"	PN 350	1/4"	10,0	27,0
PN 06 WEO 13 S 45	6	4	1/4"	PN 350	3/8"	13,0	30,5
PN 08 WEO 13 S 45	8	5	5/16"	PN 350	3/8"	13,0	31,5
PN 10 WEO 13 S 45	10	6	3/8"	PN 350	3/8"	13,0	31,5
PN 10 WEO 16 S 45	10	6	3/8"	PN 350	1/2"	16,0	33,5
PN 13 WEO 16 S 45	12	8	1/2"	PN 350	1/2"	16,0	36,5
PN 13 WEO 23 S 45	12	8	1/2"	PN 350	3/4"	23,0	45,0
PN 16 WEO 23 S 45	16	10	5/8"	PN 350	3/4"	23,0	49,5
PN 20 WEO 23 S 45	19	12	3/4"	PN 350	3/4"	23,0	49,5

Choose the appropriate ferrule based on the hose type.

PN WEO S 90 — Swage nipple, WEO S angle 90°



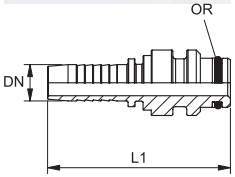
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: O-ring sealed pin
Surface protection: electro galvanised

Connection 1: WEO plug
Material: Steel

Identification	DN	Size	Inches	Working pressure bar	Size	Ø D1 mm	L2 mm
PN 06 WEO 10 S 90	6	4	1/4"	PN 350	1/4"	10,0	48,5
PN 06 WEO 13 S 90	6	4	1/4"	PN 350	3/8"	13,0	54,0
PN 08 WEO 13 S 90	8	5	5/16"	PN 350	3/8"	13,0	58,0
PN 10 WEO 13 S 90	10	6	3/8"	PN 350	3/8"	13,0	58,0
PN 10 WEO 16 S 90	10	6	3/8"	PN 350	1/2"	16,0	59,5
PN 13 WEO 16 S 90	12	8	1/2"	PN 350	1/2"	16,0	68,0
PN 13 WEO 23 S 90	12	8	1/2"	PN 350	3/4"	23,0	82,0
PN 16 WEO 23 S 90	16	10	5/8"	PN 350	3/4"	23,0	100,0
PN 20 WEO 23 S 90	19	12	3/4"	PN 350	3/4"	23,0	100,0

Choose the appropriate ferrule based on the hose type.

PN SO — Swage nipple, SO



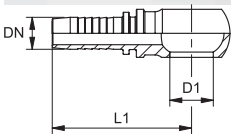
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: O-ring sealed pin
Surface protection: electro galvanised

Connection 1: Plug connection
Material: Steel

Identification	DN	Size	Inches	L1 mm	OR
PN 06 SO	6	4	1/4"	63,5	6.0 x 2.0
PN 10 SO	10	6	3/8"	65,5	10.0 x 2.0
PN 13 SO	12	8	1/2"	67,0	13.2 x 2.5
PN 16 SO	16	10	5/8"	71,5	16.0 x 2.5
PN 20 SO	19	12	3/4"	78,5	19.0 x 2.5
PN 25 SO	25	16	1"	92,5	25.0 x 2.5
PN 32 SO	31	20	1.1/4"	102,0	33.0 x 2.5
PN 40 SO	38	24	1.1/2"	110,5	40.0 x 3.0
PN 50 SO	51	32	2"	126,0	49.0 x 3.0

Choose the appropriate ferrule based on the hose type.

PN B — Swage nipple, RGN



Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: Sealed by copper ring
Standard code: RGN
Surface protection: electro galvanised
Product versions: PN B VA, Swage nipple, RGN, Stainless steel

Connection 1: Banjo for metric hollow screw
Standard: DIN 7642
Material: Steel

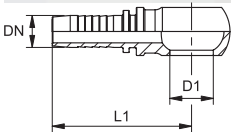
Identification	DN	Size	Inches	D1 mm	for hollow screw	L1 mm
PN 04 B	5	3	3/16"	10,1	M 10	42,0
PN 06 B 02	6	4	1/4"	8,1	M 8	48,0
PN 06 B 04	6	4	1/4"	10,1	M 10	48,0
PN 06 B	6	4	1/4"	12,1	M 12	46,5
PN 06 B 08	6	4	1/4"	14,1	M 14	49,5
PN 06 B 10	6	4	1/4"	16,1	M 16	52,5
PN 08 B 04	8	5	5/16"	10,1	M 10	48,0
PN 08 B 06	8	5	5/16"	12,1	M 12	54,5
PN 08 B	8	5	5/16"	14,1	M 14	54,5
PN 08 B 10	8	5	5/16"	16,1	M 16	52,5
PN 08 B 13	8	5	5/16"	18,1	M 18	55,5
PN 10 B 08	10	6	3/8"	14,1	M 14	56,0
PN 10 B	10	6	3/8"	16,1	M 16	54,0
PN 10 B 13	10	6	3/8"	18,1	M 18	57,0
PN 13 B	12	8	1/2"	18,1	M 18	58,0
PN 13 B 16	12	8	1/2"	22,1	M 22	60,5
PN 16 B 13	16	10	5/8"	18,1	M 18	68,5
PN 16 B	16	10	5/8"	22,1	M 22	69,5
PN 16 B 20	16	10	5/8"	26,1	M 26	72,0

PN B (Continuation) Swage nipple, RGN

Identification	DN	Size	Inches	D1 mm	for hollow screw	L1 mm
PN 20 B 16	19	12	3/4"	22,1	M 22	76,0
PN 20 B	19	12	3/4"	26,1	M 26	78,5
PN 20 B 25	19	12	3/4"	30,1	M 30	82,0
PN 25 B	25	16	1"	30,1	M 30	90,0

Choose the appropriate ferrule based on the hose type.

PN BR Swage nipple, RGN



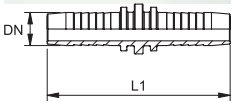
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Sealing form 1: Sealed by copper ring
Standard code: RNR
Surface protection: electro galvanised

Connection 1: Banjo for imperial hollow screw
Standard: DIN 7642
Material: Steel

Identification	DN	Size	Inches	D1 mm	for hollow screw	L1 mm
PN 04 BR	5	3	3/16"	9,8	R 1/8"	
PN 04 BR 06	5	3	3/16"	13,2	R 1/4"	43,5
PN 06 BR 02	6	4	1/4"	10,1	R 1/8"	48,5
PN 06 BR	6	4	1/4"	13,2	R 1/4"	49,5
PN 06 BR 10	6	4	1/4"	16,7	R 3/8"	52,5
PN 08 BR 06	8	5	5/16"	13,2	R 1/4"	59,5
PN 08 BR 10	8	5	5/16"	16,7	R 3/8"	52,5
PN 10 BR 06	10	6	3/8"	13,2	R 1/4"	58,5
PN 10 BR	10	6	3/8"	16,7	R 3/8"	54,0
PN 10 BR 13	10	6	3/8"	21,0	R 1/2"	59,5
PN 13 BR 10	12	8	1/2"	16,7	R 3/8"	58,0
PN 13 BR	12	8	1/2"	21,0	R 1/2"	60,5
PN 13 BR 16	12	8	1/2"	23,0	R 5/8"	63,0
PN 16 BR	16	10	5/8"	23,0	R 5/8"	67,5
PN 16 BR 20	16	10	5/8"	26,5	R 3/4"	72,0
PN 20 BR	19	12	3/4"	26,5	R 3/4"	78,5
PN 20 BR 25	19	12	3/4"	33,3	R 1"	87,0
PN 25 BR	25	16	1"	33,3	R 1"	95,0

Choose the appropriate ferrule based on the hose type.

PN VB — Swage nipple, VB



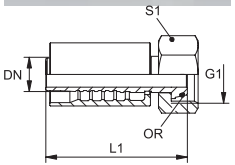
Application: Swage nipple for HD 100 to HD 400, KP and TE hoses
Material: Steel
Product versions: PN VB VA, Swage nipple, VB, Stainless steel

Connection 1: Hose connectors
Surface protection: electro galvanised

Identification	DN	Size	Inches	L1 mm
PN 04 VB	5	3	3/16"	53,4
PN 06 VB	6	4	1/4"	67,5
PN 08 VB	8	5	5/16"	67,5
PN 10 VB	10	6	3/8"	71,0
PN 13 VB	12	8	1/2"	73,5
PN 16 VB	16	10	5/8"	83,0
PN 20 VB	19	12	3/4"	97,0
PN 25 VB	25	16	1"	113,0
PN 32 VB	31	20	1.1/4"	131,0
PN 40 VB	38	24	1.1/2"	139,0
PN 50 VB	51	32	2"	171,0

Choose the appropriate ferrule based on the hose type.

PA 500 AOB A — Swage fitting, DKOR

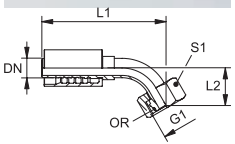


Application: for HD 500 hoses
Sealing form 1: 60° outer cone with O-ring
Standard: ISO 228-1
ISO 8434-6
BS 5200
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 500 AOB VA, Swage fitting, DKOR, Stainless steel

Connection 1: BSP nut thread
Design: Swage fitting for HD 500 hoses
Standard code: DKOR
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 720 AOB	19	12	3/4"	G 3/4" -14	96,5	32	17.1 x 1.6
PA 725 AOB	25	16	1"	G 1" -11	113,0	41	22.1 x 1.6
PA 532 AOB A	31	20	1.1/4"	G 1.1/4" -11	116,0	50	29.1 x 1.6
PA 540 AOB A	38	24	1.1/2"	G 1.1/2" -11	133,5	55	35.1 x 1.6
PA 550 AOB A	51	32	2"	G 2" -11	147,0	70	48.1 x 1.6

PA 500 AOB 45 A — Swage fitting, DKOR angle 45°

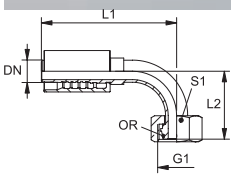


Application: for HD 500 hoses
Sealing form 1: 60° outer cone with O-ring
Standard: ISO 228-1
ISO 8434-6
BS 5200
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 500 AOB 45 VA, Swage fitting, DKOR angle 45°, Stainless steel

Connection 1: BSP nut thread
Design: Swage fitting for HD 500 hoses
Standard code: DKOR
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 720 AOB 45	19	12	3/4"	G 3/4" -14	140,0	34,5	32	17.1 x 1.6
PA 725 AOB 45	25	16	1"	G 1" -11	169,5	39,0	41	22.1 x 1.6
PA 532 AOB 45 A	31	20	1.1/4"	G 1.1/4" -11	201,0	51,5	50	29.1 x 1.6
PA 540 AOB 45 A	38	24	1.1/2"	G 1.1/2" -11	235,0	60,0	60	35.1 x 1.6
PA 550 AOB 45 A	51	32	2"	G 2" -11	279,0	68,5	70	48.1 x 1.6

PA 500 AOB 90 A — Swage fitting, DKOR angle 90°

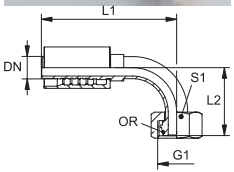


Application: for HD 500 hoses
Sealing form 1: 60° outer cone with O-ring
Standard: ISO 228-1
ISO 8434-6
BS 5200
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: BSP nut thread
Design: Swage fitting for HD 500 hoses
Standard code: DKOR
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 720 AOB 90	19	12	3/4"	G 3/4" -14	127,5	68,2	32	17.1 x 1.6
PA 725 AOB 90	25	16	1"	G 1" -11	158,0	81,7	41	22.1 x 1.6
PA 532 AOB 90 A	31	20	1.1/4"	G 1.1/4" -11	182,0	106,5	50	29.1 x 1.6
PA 540 AOB 90 A	38	24	1.1/2"	G 1.1/2" -11	215,5	123,5	60	35.1 x 1.6
PA 550 AOB 90 A	51	32	2"	G 2" -11	250,5	146,0	70	48.1 x 1.6

PA 500 AOL 90 A — Swage fitting DKOL W90°

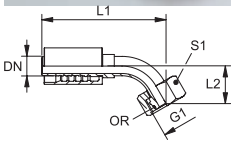


Application: for HD 500 hoses
Sealing form 1: 24° outer cone with O-ring
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: metric nut thread
Design: Swage fitting for HD 500 hoses
Standard code: DKOL
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PA 532 AOL 90 A	31	20	1.1/4"	M 45 x 2	35	170,0	88,0	50	32.0 x 2.5
PA 540 AOL 90 A	38	24	1.1/2"	M 52 x 2	42	193,0	99,0	60	38.0 x 2.5

PA 500 AOL 45 A — Swage fitting DKOL W45°

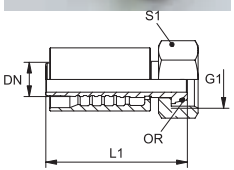


Application: for HD 500 hoses
Sealing form 1: 24° outer cone with O-ring
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: metric nut thread
Design: Swage fitting for HD 500 hoses
Standard code: DKOL
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PA 532 AOL 45 A	31	20	1.1/4"	M 45 x 2	35	194,0	47,0	50	32.0 x 2.5
PA 540 AOL 45 A	38	24	1.1/2"	M 52 x 2	42	210,0	48,0	60	38.0 x 2.5

PA 500 AOL A — Swage fitting, DKOL



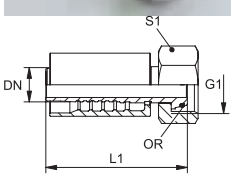
Application: for HD 500 hoses
Sealing form 1: 24° outer cone with O-ring
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 500 AOL VA, Swage fitting, DKOL, Stainless steel

Connection 1: metric nut thread
Design: Swage fitting for HD 500 hoses
Standard code: DKOL
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PA 540 AOL A	38	24	1.1/2"	M 52 x 2	42	145,0		38.0 x 2.5
PA 532 AOL A	31	20	1.1/4"	M 45 x 2	35	127,0	50	32.0 x 2.5

Data not completely maintained.

PA 500 AOS A — Swage fitting, DKOS

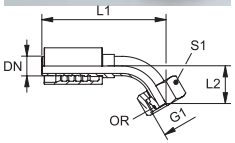


Application: for HD 500 hoses
Sealing form 1: 24° outer cone with O-ring
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 500 AOS VA, Swage fitting, DKOS, Stainless steel

Connection 1: metric nut thread
Design: Swage fitting for HD 500 hoses
Standard code: DKOS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PA 720 AOS 16	19	12	3/4"	M 30 x 2	20	101,8	36	17.5 x 2.5
PA 720 AOS	19	12	3/4"	M 36 x 2	25	105,5	46	20.0 x 2.5
PA 725 AOS 20	25	16	1"	M 36 x 2	25	143,5	46	22.0 x 2.5
PA 725 AOS	25	16	1"	M 42 x 2	30	120,0	50	25.0 x 2.5
PA 725 AOS 32	25	16	1"	M 52 x 2	38	136,5	60	33.0 x 2.5
PA 532 AOS 25 A	31	20	1.1/4"	M 42 x 2	30	120,0	50	25.0 x 2.5
PA 532 AOS A	31	20	1.1/4"	M 52 x 2	38	134,5	60	33.0 x 2.5

PA 500 AOS 45 A — Swage fitting, DKOS angle 45°

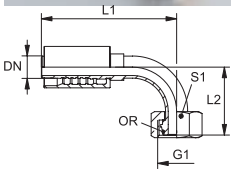


Application: for HD 500 hoses
Sealing form 1: 24° outer cone with O-ring
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 500 AOS 45 VA, Swage fitting, DKOS angle 45°, Stainless steel

Connection 1: metric nut thread
Design: Swage fitting for HD 500 hoses
Standard code: DKOS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PA 720 AOS 16 45	19	12	3/4"	M 30 x 2	20	132,8	26,9	36	16.0 x 2.5
PA 720 AOS 45	19	12	3/4"	M 36 x 2	25	136,0	30,2	46	20.0 x 2.5
PA 720 AOS 25 45	19	12	3/4"	M 42 x 2	30	150,5	35,0	50	27.0 x 2.5
PA 725 AOS 20 45	25	16	1"	M 36 x 2	25	157,0	35,5	41	22.0 x 2.5
PA 725 AOS 45	25	16	1"	M 42 x 2	30	164,0	34,5	50	25.0 x 2.5
PA 725 AOS 32 45	25	16	1"	M 52 x 2	38	175,0	41,0	60	33.0 x 2.5
PA 532 AOS 25 45 A	31	20	1"	M 42 x 2	30	175,0	39,5	50	27.0 x 2.5
PA 532 AOS 45 A	31	20	1.1/4"	M 52 x 2	38	192,5	41,2	60	33.0 x 2.5

PA 500 AOS 90 A — Swage fitting, DKOS angle 90°

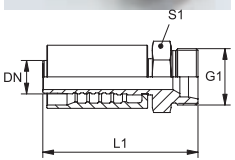


Application: for HD 500 hoses
Sealing form 1: 24° outer cone with O-ring
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 500 AOS 90 VA, Swage fitting, DKOS angle 90°, Stainless steel

Connection 1: metric nut thread
Design: Swage fitting for HD 500 hoses
Standard code: DKOS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PA 720 AOS 16 90	19	12	3/4"	M 30 x 2	20	126,5	65,0	36	17.5 x 2.5
PA 720 AOS 90	19	12	3/4"	M 36 x 2	25	126,5	58,5	46	22.0 x 2.5
PA 720 AOS 25 90	19	12	3/4"	M 42 x 2	30	139,5	71,5	50	27.0 x 2.5
PA 725 AOS 20 90	25	16	1"	M 36 x 2	25	149,5	71,0	46	22.0 x 2.5
PA 725 AOS 90	25	16	1"	M 42 x 2	30	148,5	73,0	50	27.0 x 2.5
PA 725 AOS 32 90	25	16	1"	M 52 x 2	38	154,0	84,5	60	33.0 x 2.5
PA 532 AOS 25 90 A	31	20	1.1/4"	M 42 x 2	30	162,0	82,0	50	27.0 x 2.5
PA 532 AOS 90 A	31	20	1.1/4"	M 52 x 2	38	182,0	91,0	60	33.0 x 2.5

PA 500 HS A — Swage fitting, CES

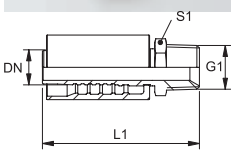


Application: for HD 500 hoses
Sealing form 1: 24° inner cone
Standard: DIN 3861
DIN 3865
DIN ISO 12151-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 500 HS VA, Swage fitting, CES,

Connection 1: metric cylindrical outer thread
Design: Swage fitting for HD 500 hoses
Standard code: CES
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Series	G1	for external pipe Ø mm	L1 mm	S1
PA 720 HS 16	19	12	3/4"	S	M 30 x 2	20	106,0	30
PA 720 HS	19	12	3/4"	S	M 36 x 2	25	104,0	36
PA 725 HS	25	16	1"	S	M 42 x 2	30	119,0	46
PA 532 HS A	31	20	1.1/4"	S	M 52 x 2	38	126,0	55

PA 500 HN A — Swage fitting, AGN

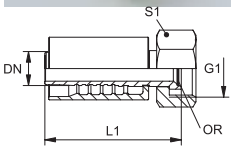


Application: for HD 500 hoses
Sealing form 1: thread seal, additional 60° inner cone.
Standard: SAE J516
SAE J514
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 500 HN VA, Swage fitting, AGN, Stainless steel

Connection 1: NPT external threads
Design: Swage fitting for HD 500 hoses
Standard code: AGN
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1
PA 720 HN	19	12	3/4"	3/4" -14 NPT	98,0	27
PA 725 HN	25	16	1"	1" -11.5 NPT	116,0	36
PA 725 HN 32	25	16	1"	1.1/4" -11.5 NPT	118,0	46
PA 532 HN A	31	20	1.1/4"	1.1/4" -11.5 NPT	124,5	46
PA 540 HN A	38	24	1.1/2"	1.1/2" -11.5 NPT	139,5	50
PA 550 HN A	51	32	2"	2" -11.5 NPT	157,0	65

PA 500 AOJ A — Swage fitting, DKOJ

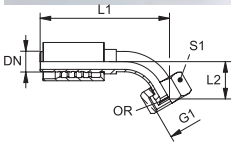


Application: for HD 500 hoses
Sealing form 1: 74° inner cone with O-ring
Standard: SAE J514
ISO 8434-2
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: UN/UNF nut threads
Design: Swage fitting for HD 500 hoses
Standard code: DKOJ
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 720 AOJ	19	12	3/4"	1.1/16" -12 UN	104,0	32	19.00 x 1.50
PA 725 AOJ	25	16	1"	1.5/16" -12 UN	119,0	41	25.00 x 1.50
PA 532 AOJ A	31	20	1.1/4"	1.5/8" -12 UN	129,0	50	31.47 x 1.78
PA 540 AOJ A	38	24	1.1/2"	1.7/8" -12 UN	152,0	55	37.82 x 1.78
PA 550 AOJ A	51	32	2"	2.1/2" -12 UN	170,0	75	50.00 x 2.00

PA 500 AOJ 45 A — Swage fitting, DKOJ angle 45°

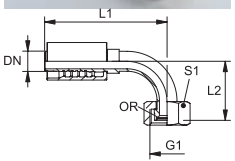


Application: for HD 500 hoses
Sealing form 1: 74° inner cone with O-ring
Standard: SAE J514
ISO 8434-2
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: UN/UNF nut threads
Design: Swage fitting for HD 500 hoses
Standard code: DKOJ
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 720 AOJ 45	19	12	3/4"	1.1/16" -12 UN	140,0	34,5	32	19.00 x 1.50
PA 725 AOJ 45	25	16	1"	1.5/16" -12 UN	169,5	39,0	41	25.00 x 1.50
PA 532 AOJ 45 A	31	20	1.1/4"	1.5/8" -12 UN	199,0	49,5	50	31.47 x 1.78
PA 540 AOJ 45 A	38	24	1.1/2"	1.7/8" -12 UN	233,0	58,0	55	37.82 x 1.78
PA 550 AOJ 45 A	51	32	2"	2.1/2" -12 UN	275,0	64,0	75	50.00 x 2.00

PA 500 AOJ 90 A — Swage fitting, DKOJ angle 90°

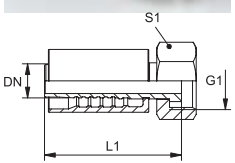


Application: for HD 500 hoses
Sealing form 1: 74° inner cone with O-ring
Standard: SAE J514
ISO 8434-2
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: UN/UNF nut threads
Design: Swage fitting for HD 500 hoses
Standard code: DKOJ
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 720 AOJ 90	19	12	3/4"	1.1/16" -12 UN	127,5	68,2	32	19.00 x 1.50
PA 725 AOJ 90	25	16	1"	1.5/16" -12 UN	158,0	81,7	41	25.00 x 1.50
PA 532 AOJ 90 A	31	20	1.1/4"	1.5/8" -12 UN	182,0	104,0	50	31.47 x 1.78
PA 540 AOJ 90 A	38	24	1.1/2"	1.7/8" -12 UN	215,5	120,5	55	37.82 x 1.78
PA 550 AOJ 90 A	51	32	2"	2.1/2" -12 UN	250,5	140,0	75	50.00 x 2.00

PA 500 AJF A — Swage fitting, ORFS

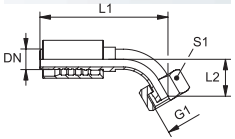


Application: for HD 500 hoses
Sealing form 1: flat sealing
Standard: SAE J1453
ISO 8434-3
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: UN/UNF nut threads
Design: Swage fitting for HD 500 hoses
Standard code: ORFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1
PA 720 AJF	19	12	3/4"	1.3/16" -12 UN	107,0	36
PA 720 AJF 25	19	12	3/4"	1.7/16" -12 UN	108,4	41
PA 725 AJF	25	16	1"	1.7/16" -12 UN	122,0	41
PA 532 AJF A	31	20	1.1/4"	1.11/16" -12 UN	129,0	50
PA 540 AJF A	38	24	1.1/2"	2" -12 UN	141,0	60

PA 500 AJF 45 A — Swage fitting, ORFS angle 45°

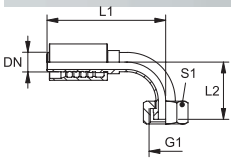


Application: for HD 500 hoses
Sealing form 1: flat sealing
Standard: SAE J1453
ISO 8434-3
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: UN/UNF nut threads
Design: Swage fitting for HD 500 hoses
Standard code: ORFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PA 720 AJF 45	19	12	3/4"	1.3/16" -12 UN	133,0	26,5	36
PA 725 AJF 45	25	16	1"	1.7/16" -12 UN	160,5	31,0	41
PA 532 AJF 45 A	31	20	1.1/4"	1.11/16" -12 UN	171,5	76,0	50
PA 540 AJF 45 A	38	24	1.1/2"	2" -12 UN	207,0	88,5	60

PA 500 AJF 90 A — Swage fitting, ORFS angle 90°

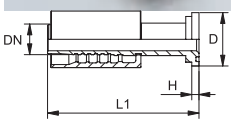


Application: for HD 500 hoses
Sealing form 1: flat sealing
Standard: SAE J1453
ISO 8434-3
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: UN/UNF nut threads
Design: Swage fitting for HD 500 hoses
Standard code: ORFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PA 720 AJF 90	19	12	3/4"	1.3/16" -12 UN	126,0	56,0	36
PA 725 AJF 90	25	16	1"	1.7/16" -12 UN	157,5	68,0	41
PA 532 AJF 90 A	31	20	1.1/4"	1.11/16" -12 UN	178,0	34,0	50
PA 540 AJF 90 A	38	24	1.1/2"	2" -12 UN	209,0	32,0	60

PA 500 SF A — Swage fitting, SFL

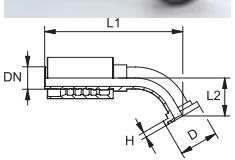


Application: for HD 500 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 500 SF VA, Swage fitting, SFL, Stainless steel

Connection 1: SAE flange connection 3000 PSI
Design: Swage fitting for HD 500 hoses
Standard code: SFL
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 720 SF	19	12	3/4"	3/4"	38,1	6,7	116,5
PA 720 SF 25	19	12	3/4"	1"	44,5	8,0	119,5
PA 725 SF 20	25	16	1"	3/4"	38,1	6,7	132,0
PA 725 SF	25	16	1"	1"	44,5	8,0	135,5
PA 725 SF 32	25	16	1"	1.1/4"	50,8	8,0	138,5
PA 532 SF 25 A	31	20	1.1/4"	1"	44,5	8,1	145,0
PA 532 SF A	31	20	1.1/4"	1.1/4"	50,8	8,1	148,5
PA 532 SF 40 A	31	20	1.1/4"	1.1/2"	60,3	8,1	151,5
PA 540 SF 32 A	38	24	1.1/2"	1.1/4"	50,8	8,1	158,0
PA 540 SF A	38	24	1.1/2"	1.1/2"	60,3	8,1	166,5
PA 540 SF 50 A	38	24	1.1/2"	2"	71,4	9,6	169,5
PA 550 SF A	51	32	2"	2"	71,4	9,6	183,5

PA 500 SF 45 A — Swage fitting, SFL angle 45°

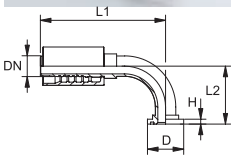


Application: for HD 500 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 500 SF 45 VA, Swage fitting, SFL angle 45°, Stainless steel

Connection 1: SAE flange connection 3000 PSI
Design: Swage fitting for HD 500 hoses
Standard code: SFL
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 720 SF 45	19	12	3/4"	3/4"	38,1	6,7	132,5	27,4
PA 720 SF 25 45	19	12	3/4"	1"	44,5	8,0	134,6	29,5
PA 725 SF 20 45	25	16	1"	3/4"	38,1	6,7	146,5	31,0
PA 725 SF 45	25	16	1"	1"	44,5	8,0	159,0	28,6
PA 725 SF 32 45	25	16	1"	1.1/4"	50,8	8,0	160,7	30,4
PA 532 SF 25 45 A	31	20	1.1/4"	1"	44,5	8,0	170,5	35,0
PA 532 SF 45 A	31	20	1.1/4"	1.1/4"	50,8	8,0	182,0	34,5
PA 532 SF 40 45 A	31	20	1.1/4"	1.1/2"	60,3	8,0	187,0	37,5
PA 540 SF 32 45 A	38	24	1.1/2"	1.1/4"	50,8	8,0	202,5	43,0
PA 540 SF 45 A	38	24	1.1/2"	1.1/2"	60,3	8,0	215,0	41,5
PA 540 SF 50 45 A	38	24	1.1/2"	2"	71,4	9,5	230,5	55,5
PA 550 SF 45 A	51	32	2"	2"	71,4	9,5	263,0	58,5

PA 500 SF 90 A — Swage fitting, SFL angle 90°

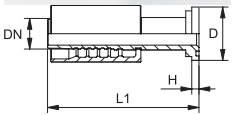


Application: for HD 500 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 500 SF 90 VA, Swage fitting, SFL angle 90°, Stainless steel

Connection 1: SAE flange connection 3000 PSI
Design: Swage fitting for HD 500 hoses
Standard code: SFL
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 720 SF 90	19	12	3/4"	3/4"	38,1	6,7	127,5	58,0
PA 720 SF 25 90	19	12	3/4"	1"	44,5	8,0	127,5	61,0
PA 725 SF 20 90	25	16	1"	3/4"	38,1	6,7	143,5	65,5
PA 725 SF 90	25	16	1"	1"	44,5	8,0	158,0	67,0
PA 725 SF 32 90	25	16	1"	1.1/4"	50,8	8,0	158,0	69,5
PA 532 SF 25 90 A	31	20	1.1/4"	1"	44,5	8,0	162,0	76,0
PA 532 SF 90 A	31	20	1.1/4"	1.1/4"	50,8	8,0	181,0	79,5
PA 532 SF 40 90 A	31	20	1.1/4"	1.1/2"	60,3	8,0	182,0	86,7
PA 540 SF 32 90 A	38	24	1.1/2"	1.1/4"	50,8	8,0	193,0	94,0
PA 540 SF 90 A	38	24	1.1/2"	1.1/2"	60,3	8,0	211,0	99,0
PA 540 SF 50 90 A	38	24	1.1/2"	2"	71,4	9,5	218,0	100,0
PA 550 SF 90 A	51	32	2"	2"	71,4	9,5	250,0	112,5

PA 500 SF6 A — Swage fitting, SFS

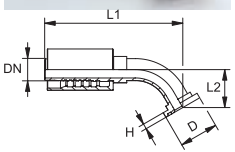


Application: for HD 500 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 500 SF6 VA, Swage fitting, SFS, Stainless steel

Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 500 hoses
Standard code: SFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 720 SF6	19	12	3/4"	3/4"	41,3	8,8	124,5
PA 720 SF6 25	19	12	3/4"	1"	47,6	9,5	129,0
PA 725 SF6 20	25	16	1"	3/4"	41,3	8,8	134,0
PA 725 SF6	25	16	1"	1"	47,6	9,5	146,5
PA 725 SF6 32	25	16	1"	1.1/4"	54,0	10,3	151,0
PA 532 SF6 25 A	31	20	1.1/4"	1"	47,6	9,5	
PA 532 SF6 A	31	20	1.1/4"	1.1/4"	54,0	10,4	162,5
PA 532 SF6 40 A	31	20	1.1/4"	1.1/2"	63,5	12,7	167,0
PA 540 SF6 32 A	38	24	1.1/2"	1.1/4"	54,0	10,4	162,0
PA 540 SF6 A	38	24	1.1/2"	1.1/2"	63,5	12,7	183,5
PA 540 SF6 50 A	38	24	1.1/2"	2"	79,4	12,7	188,0
PA 550 SF6 A	51	32	2"	2"	79,4	12,7	202,0

PA 500 SF6 45 A — Swage fitting, SFS angle 45°

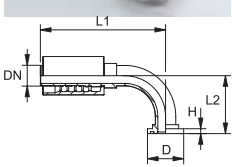


Application: for HD 500 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 500 SF6 45 VA, Swage fitting, SFS angle 45°, Stainless steel

Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 500 hoses
Standard code: SFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 720 SF6 45	19	12	3/4"	3/4"	41,3	8,8	135,3	30,2
PA 720 SF6 25 45	19	12	3/4"	1"	47,6	9,5	139,6	34,4
PA 725 SF6 45	25	16	1"	1"	47,6	9,5	136,9	33,6
PA 725 SF6 32 45	25	16	1"	1.1/4"	54,0	10,3	168,9	38,5
PA 532 SF6 25 45 A	31	20	1.1/4"	1"	47,6	9,5		
PA 532 SF6 45 A	31	20	1.1/4"	1.1/4"	54,0	10,3	191,0	41,5
PA 532 SF6 40 45 A	31	20	1.1/4"	1.1/2"	63,5	12,6	197,0	47,5
PA 540 SF6 45 A	38	24	1.1/2"	1.1/2"	63,5	12,6	222,5	49,0
PA 540 SF6 32 45 A	38	24	1.1/2"	1.1/4"	54,0	10,3		
PA 540 SF6 50 45 A	38	24	1.1/2"	2"	79,4	12,6	236,0	61,0
PA 550 SF6 45 A	51	32	2"	2"	79,4	12,6	275,0	64,5

PA 500 SF6 90 A — Swage fitting, SFS angle 90°

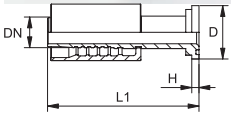


Application: for HD 500 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 500 SF6 90 VA, Swage fitting, SFS angle 90°, Stainless steel

Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 500 hoses
Standard code: SFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 720 SF6 90	19	12	3/4"	3/4"	41,3	8,8	127,5	62,0
PA 720 SF6 25 90	19	12	3/4"	1"	47,6	9,5	127,5	68,0
PA 725 SF6 20 90	25	16	1"	3/4"	41,3	8,8	143,5	67,5
PA 725 SF6 90	25	16	1"	1"	47,6	9,5	158,0	74,0
PA 532 SF6 25 90 A	31	20	1.1/4"	1"	47,6	9,5	162,0	80,0
PA 532 SF6 90 A	31	20	1.1/4"	1.1/4"	54,0	10,3	182,0	92,7
PA 532 SF6 40 90 A	31	20	1.1/4"	1.1/2"	63,5	12,6	182,0	101,2
PA 540 SF6 32 90 A	38	24	1.1/2"	1.1/4"	54,0	10,3	193,0	100,0
PA 540 SF6 90 A	38	24	1.1/2"	1.1/2"	63,5	12,6	215,5	110,0
PA 540 SF6 50 90 A	38	24	1.1/2"	2"	79,4	12,6	215,5	126,0
PA 550 SF6 90 A	51	32	2"	2"	79,4	12,6	250,5	141,0

PA 500 SF9 A — Swage fitting, SFS-CAT

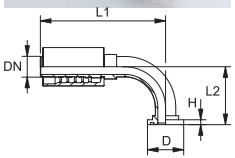


Application: for HD 500 hoses
Sealing form 1: flat seal with SF O-ring
Standard code: SFS-CAT
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 500 hoses
suitable for: Caterpillar
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 720 SF9	19	12	3/4"	3/4"	41,3	14,3	130,0
PA 720 SF9 25	19	12	3/4"	1"	47,6	14,3	155,0
PA 725 SF9 20	25	16	1"	3/4"	41,3	14,3	137,0
PA 725 SF9	25	16	1"	1"	47,6	14,3	150,0
PA 725 SF9 32	25	16	1"	1.1/4"	54,0	14,3	155,0
PA 532 SF9 25 A	31	20	1.1/4"	1"	47,6	14,6	150,0
PA 532 SF9 A	31	20	1.1/4"	1.1/4"	54,0	14,6	166,5
PA 532 SF9 40 A	31	20	1.1/4"	1.1/4"	63,5	14,6	168,5
PA 540 SF9 32 A	38	24	1.1/2"	1.1/4"	54,0	14,6	163,0
PA 540 SF9 A	38	24	1.1/2"	1.1/2"	63,5	14,6	185,0

PA 500 SF9 90 A — Swage fitting, SFS-CAT angle 90°



Application: for HD 500 hoses
Sealing form 1: flat seal with SF O-ring
Standard code: SFS-CAT
Integration: with pull-out protection (interlock)
Material: Steel

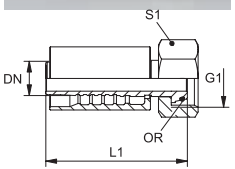
Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 500 hoses
suitable for: Caterpillar
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 720 SF9 90	19	12	3/4"	3/4"	41,3	14,0	127,5	67,5
PA 720 SF9 25 90	19	12	3/4"	1"	47,6	14,0	127,5	72,5
PA 725 SF9 20 90	25	16	1"	3/4"	41,3	14,0	142,5	71,5
PA 725 SF9 90	25	16	1"	1"	47,6	14,0	158,0	78,5
PA 725 SF9 32 90	25	16	1"	1.1/4"	54,0	14,0	158,0	85,0
PA 532 SF9 25 90 A	31	20	1.1/4"	1"	47,6	14,0	161,0	82,0
PA 532 SF9 90 A	31	20	1.1/4"	1.1/4"	54,0	14,0	182,0	97,0
PA 532 SF9 40 90 A	31	20	1.1/4"	1.1/2"	63,5	14,0	182,0	103,0
PA 540 SF9 32 90 A	38	24	1.1/2"	1.1/4"	54,0	14,0	192,0	100,0
PA 540 SF9 90 A	38	24	1.1/2"	1.1/2"	63,5	14,0	215,5	112,0

PA 600 AOB — Swage fitting, DKOR

Application: for HD 600 hoses
Sealing form 1: 60° outer cone with O-ring
Standard: ISO 228-1
ISO 8434-6
BS 5200
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 600 AOB VA, Swage fitting, DKOR, Stainless steel

Connection 1: BSP nut thread
Design: Swage fitting for HD 600 hoses
Standard code: DKOR
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

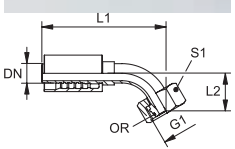


Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 650 AOB	51	32	2"	G 2" -11	163,0	70	48.1 x 1.6

PA 600 AOB 45 — Swage fitting, DKOR angle 45°

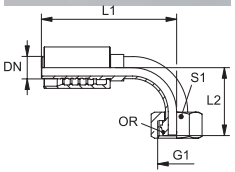
Application: for HD 600 hoses
Sealing form 1: 60° outer cone with O-ring
Standard: ISO 228-1
ISO 8434-6
BS 5200
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 600 AOB 45 VA, Swage fitting, DKOR angle 45°, Stainless steel

Connection 1: BSP nut thread
Design: Swage fitting for HD 600 hoses
Standard code: DKOR
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 650 AOB 45	51	32	2"	G 2" -11	279,0	68,5	70	48.1 x 1.6

PA 600 AOB 90 — Swage fitting, DKOR angle 90°

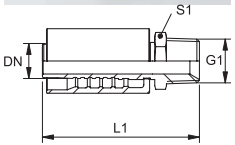


Application: for HD 600 hoses
Sealing form 1: 60° outer cone with O-ring
Standard: ISO 228-1
ISO 8434-6
BS 5200
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 600 AOB 90 VA, Swage fitting, DKOR angle 90°, Stainless steel

Connection 1: BSP nut thread
Design: Swage fitting for HD 600 hoses
Standard code: DKOR
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 650 AOB 90	51	32	2"	G 2" -11	250,0	146,0	70	48.1 x 1.6

PA 600 HN — Swage fitting, AGN

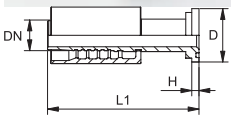


Application: for HD 600 hoses
Sealing form 1: thread seal, additional 60° inner cone.
Standard: SAE J516
SAE J514
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 600 HN VA, Swage fitting, AGN, Stainless steel

Connection 1: NPT external threads
Design: Swage fitting for HD 600 hoses
Standard code: AGN
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1
PA 650 HN	51	32	2"	2" -11.5 NPT	157,0	65

PA 600 SF — Swage fitting, SFL

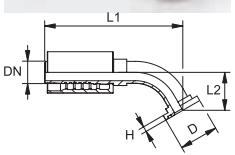


Application: for HD 600 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 600 SF VA, Swage fitting, SFL, Stainless steel

Connection 1: SAE flange connection 3000 PSI
Design: Swage fitting for HD 600 hoses
Standard code: SFL
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 650 SF	51	32	2"	2"	71,4	9,6	183,5

PA 600 SF 45 — Swage fitting, SFL angle 45°

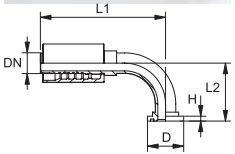


Application: for HD 600 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 600 SF 45 VA, Swage fitting, SFL angle 45°, Stainless steel

Connection 1: SAE flange connection 3000 PSI
Design: Swage fitting for HD 600 hoses
Standard code: SFL
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 650 SF 45	51	32	2"	2"	71,4	9,5	263,0	58,5

PA 600 SF 90 — Swage fitting, SFL angle 90°

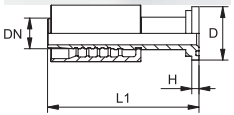


Application: for HD 600 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 600 SF 90 VA, Swage fitting, SFL angle 90°, Stainless steel

Connection 1: SAE flange connection 3000 PSI
Design: Swage fitting for HD 600 hoses
Standard code: SFL
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 650 SF 90	51	32	2"	2"	71,4	9,5	250,0	122,5

PA 600 SF6 — Swage fitting, SFS

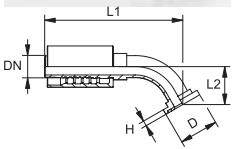


Application: for HD 600 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 600 SF6 VA, Swage fitting, SFS, Stainless steel

Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 600 hoses
Standard code: SFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 650 SF6	51	32	2"	2"	79,4	12,7	202,0

PA 600 SF6 45 — Swage fitting, SFS angle 45°

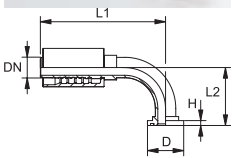


Application: for HD 600 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 600 SF6 45 VA, Swage fitting, SFS angle 45°, Stainless steel

Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 600 hoses
Standard code: SFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 650 SF6 45	51	32	2"	2"	79,4	12,6	275,0	64,5

PA 600 SF6 90 — Swage fitting, SFS angle 90°

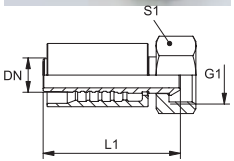


Application: for HD 600 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 600 SF6 90 VA, Swage fitting, SFS angle 90°, Stainless steel

Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 600 hoses
Standard code: SFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 650 SF6 90	51	32	2"	2"	79,4	12,6	250,0	141,0

PA 700 AB — Swage fitting, DKR

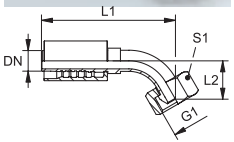


Application: for HD 700 hoses
Sealing form 1: 60° outer cone
Standard: ISO 228-1
ISO 8434-6
BS 5200
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: BSP nut thread
Design: Swage fitting for HD 700 hoses
Standard code: DKR
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	S1
PA 716 AB 13	16	10	5/8"	G 1/2" -14	27
PA 716 AB	16	10	5/8"	G 5/8" -14	30
PA 716 AB 20	16	10	5/8"	G 3/4" -14	32

PA 700 AB 45 — Swage fitting, DKR angle 45°

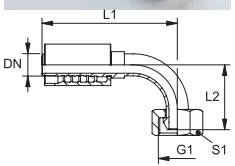


Application: for HD 700 hoses
Sealing form 1: 60° outer cone
Standard: ISO 228-1
ISO 8434-6
BS 5200
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: BSP nut thread
Design: Swage fitting for HD 700 hoses
Standard code: DKR
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	S1
PA 716 AB 45	16	10	5/8"	G 5/8" -14	30
PA 716 AB 20 45	16	10	5/8"	G 3/4" -14	32

PA 700 AB 90 — Swage fitting, DKR angle 90°

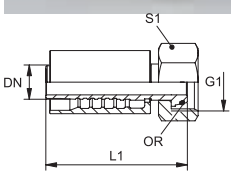


Application: for HD 700 hoses
Sealing form 1: 60° outer cone
Standard: ISO 228-1
ISO 8434-6
BS 5200
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: BSP nut thread
Design: Swage fitting for HD 700 hoses
Standard code: DKR
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	SW mm	S1
PA 716 AB 90	16	10	5/8"	G 5/8" -14	115,0	50,0	50	30
PA 716 AB 20 90	16	10	5/8"	G 3/4" -14	115,0	54,0		32

PA 700 AOB — Swage fitting, DKOR

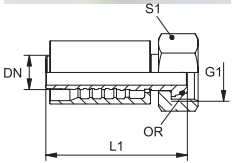


Application: for HD 700 hoses
Sealing form 1: 60° outer cone with O-ring
Standard: ISO 228-1
ISO 8434-6
BS 5200
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 AOB VA, Swage fitting, DKOR, Stainless steel

Connection 1: BSP nut thread
Design: Swage fitting for HD 700 hoses
Standard code: DKOR
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 713 AOB	12	8	1/2"	G 1/2" -14	69,3	27	12.1 x 1.6
PA 720 AOB	19	12	3/4"	G 3/4" -14	96,5	32	17.1 x 1.6
PA 725 AOB	25	16	1"	G 1" -11	113,0	41	22.1 x 1.6
PA 732 AOB	31	20	1.1/4"	G 1.1/4" -11	126,0	50	29.1 x 1.6
PA 740 AOB	38	24	1.1/2"	G 1.1/2" -11	146,0	55	35.1 x 1.6
PA 740 AOB 50	38	24	1.1/2"	G 2" -11	144,5	70	48.1 x 1.6

PA 700 AOB H — Swage fitting, DKOR

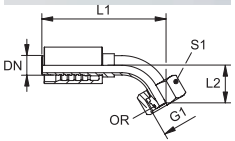


Application: for HD 700 hoses
Sealing form 1: 60° outer cone with O-ring
Standard: ISO 228-1
ISO 8434-6
BS 5200
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: BSP nut thread
Design: Swage fitting for HD 700 hoses
Standard code: DKOR
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 720 AOB H	19	12	3/4"	G 3/4" -14	96,5	32	17.1 x 1.6
PA 725 AOB H	25	16	1"	G 1" -11	103,0	41	22.1 x 1.6

PA 700 AOB 45 — Swage fitting, DKOR angle 45°

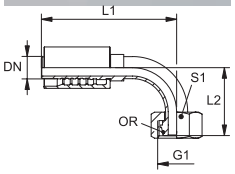


Application: for HD 700 hoses
Sealing form 1: 60° outer cone with O-ring
Standard: ISO 228-1
ISO 8434-6
BS 5200
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 AOB 45 VA, Swage fitting, DKOR angle 45°, Stainless steel

Connection 1: BSP nut thread
Design: Swage fitting for HD 700 hoses
Standard code: DKOR
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 713 AOB 45	12	8	1/2"	G 1/2" -14	91,5	20,0	27	12.1 x 1.6
PA 720 AOB 45	19	12	3/4"	G 3/4" -14	140,0	34,5	32	17.1 x 1.6
PA 725 AOB 45	25	16	1"	G 1" -11	169,5	39,0	41	22.1 x 1.6
PA 732 AOB 45	31	20	1.1/4"	G 1.1/4" -11	201,0	51,5	50	29.1 x 1.6
PA 740 AOB 45	38	24	1.1/2"	G 1.1/2" -11	235,0	60,0	60	35.1 x 1.6

PA 700 AOB 90 — Swage fitting, DKOR angle 90°

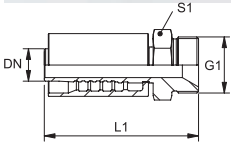


Application: for HD 700 hoses
Sealing form 1: 60° outer cone with O-ring
Standard: ISO 228-1
ISO 8434-6
BS 5200
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 AOB 90 VA, Swage fitting, DKOR angle 90°, Stainless steel

Connection 1: BSP nut thread
Design: Swage fitting for HD 700 hoses
Standard code: DKOR
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 713 AOB 90	12	8	1/2"	G 1/2" -14	87,0	40,5	27	12.1 x 1.6
PA 720 AOB 90	19	12	3/4"	G 3/4" -14	127,5	68,2	32	17.1 x 1.6
PA 725 AOB 90	25	16	1"	G 1" -11	158,0	81,7	41	22.1 x 1.6
PA 732 AOB 90	31	20	1.1/4"	G 1.1/4" -11	182,0	106,5	50	29.1 x 1.6
PA 740 AOB 90	38	24	1.1/2"	G 1.1/2" -11	215,5	123,5	60	35.1 x 1.6

PA 700 HB — Swage fitting, AGR

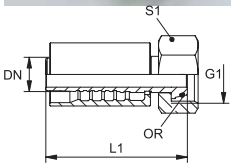


Application: for HD 700 hoses
Sealing form 1: 60° inner cone
Standard: ISO 228-1
ISO 8434-6
BS 5200
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 HB VA, Swage fitting, AGR, Stainless steel

Connection 1: BSP external thread, cylindrical
Design: Swage fitting for HD 700 hoses
Standard code: AGR
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1
PA 713 HB	12	8	1/2"	G 1/2" -14	79,3	27
PA 716 HB	16	10	5/8"	G 5/8" -14	92,8	30
PA 720 HB	19	12	3/4"	G 3/4" -14	97,5	32
PA 725 HB	25	16	1"	G 1" -11	114,5	41
PA 732 HB	31	20	1.1/4"	G 1.1/4" -11	125,5	50
PA 740 HB	38	24	1.1/2"	G 1.1/2" -11	143,5	55
PA 750 HB	51	32	2"	G 2" -11		

PA 700 AOL — Swage fitting, DKOL

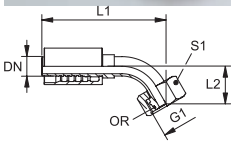


Application: for HD 700 hoses
Sealing form 1: 24° outer cone with O-ring
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 AOL VA, Swage fitting, DKOL, Stainless steel

Connection 1: metric nut thread
Design: Swage fitting for HD 700 hoses
Standard code: DKOL
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	OR
PA 710 AOL	10	6	3/8"	M 18 x 1.5	12	9.0 x 1.5
PA 713 AOL	12	8	1/2"	M 22 x 1.5	15	12.0 x 2.0
PA 716 AOL	16	10	5/8"	M 26 x 1.5	18	15.0 x 2.0
PA 716 AOL 20	16	10	5/8"	M 30 x 2	22	20.0 x 2.0

PA 700 AOL 45 — Swage fitting, DKOL angle 45°

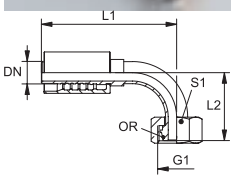


Application: for HD 700 hoses
Sealing form 1: 24° outer cone with O-ring
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 AOL 45 VA, Swage fitting, DKOL angle 45°, Stainless steel

Connection 1: metric nut thread
Design: Swage fitting for HD 700 hoses
Standard code: DKOL
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	OR
PA 710 AOL 45	10	6	3/8"	M 18 x 1.5	12			9.0 x 1.5
PA 713 AOL 45	12	8	1/2"	M 22 x 1.5	15			12.0 x 2.0
PA 716 AOL 45	16	10	5/8"	M 26 x 1.5	18	124,0	28,0	15.0 x 2.0

PA 700 AOL 90 — Swage fitting, DKOL angle 90°

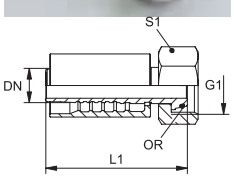


Application: for HD 700 hoses
Sealing form 1: 24° outer cone with O-ring
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 AOL 90 VA, Swage fitting, DKOL angle 90°, Stainless steel

Connection 1: metric nut thread
Design: Swage fitting for HD 700 hoses
Standard code: DKOL
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	OR
PA 710 AOL 90	10	6	3/8"	M 18 x 1.5	12	9.0 x 1.5
PA 713 AOL 90	12	8	1/2"	M 22 x 1.5	15	12.0 x 2.0
PA 716 AOL 90	16	10	5/8"	M 26 x 1.5	18	15.0 x 2.0

PA 700 AOS — Swage fitting, DKOS

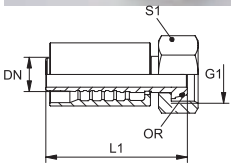


Application: for HD 700 hoses
Sealing form 1: 24° outer cone with O-ring
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 AOS VA, Swage fitting, DKOS, Stainless steel

Connection 1: metric nut thread
Design: Swage fitting for HD 700 hoses
Standard code: DKOS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PA 710 AOS 08	10	6	3/8"	M 20 x 1.5	12		24	10.0 x 1.5
PA 710 AOS	10	6	3/8"	M 22 x 1.5	14	67,6	27	12.0 x 2.0
PA 713 AOS	12	8	1/2"	M 24 x 1.5	16	72,8	30	13.0 x 2.0
PA 713 AOS 16	12	8	1/2"	M 30 x 2	20	75,8	36	17.5 x 2.5
PA 716 AOS 13	16	10	5/8"	M 24 x 1.5	16	83,5	30	13.0 x 2.0
PA 716 AOS	16	10	5/8"	M 30 x 2	20	86,0	36	17.5 x 2.5
PA 716 AOS 20	16	10	5/8"	M 36 x 2	25	89,0	46	20.0 x 2.5
PA 720 AOS 16	19	12	3/4"	M 30 x 2	20	101,0	36	16.0 x 2.5
PA 720 AOS	19	12	3/4"	M 36 x 2	25	105,5	46	20.0 x 2.5
PA 720 AOS SW41	19	12	3/4"	M 36 x 2	25	105,5	41	20.0 x 2.5
PA 720 AOS 25	19	12	3/4"	M 42 x 2	30	107,0	50	25.0 x 2.5
PA 725 AOS 20	25	16	1"	M 36 x 2	25	118,5	46	20.0 x 2.5
PA 725 AOS	25	16	1"	M 42 x 2	30	120,0	50	25.0 x 2.5
PA 725 AOS 32	25	16	1"	M 52 x 2	38	127,5	60	33.0 x 2.5
PA 732 AOS 25 S	31	20	1.1/4"	M 42 x 2	30	151,0	50	27.0 x 2.5
PA 732 AOS S	31	20	1.1/4"	M 52 x 2	38	112,5	60	33.0 x 2.5
PA 740 AOS 32	38	24	1.1/2"	M 52 x 2	38	146,5	60	33.0 x 2.5

PA 700 AOS H — Swage fitting, DKOS

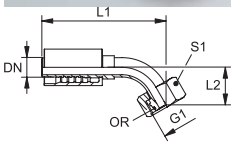


Application: for HD 700 hoses
Sealing form 1: 24° outer cone with O-ring
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: metric nut thread
Design: Swage fitting for HD 700 hoses
Standard code: DKOS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PA 720 AOS H	19	12	3/4"	M 36 x 2	25	104,0	46	20.0 x 2.5
PA 725 AOS H	25	16	1"	M 42 x 2	30	111,0	50	25.0 x 2.5
PA 732 AOS SH	31	20	1.1/4"	M 52 x 2	38	114,0	60	33.0 x 2.5

PA 700 AOS 45 — Swage fitting, DKOS angle 45°

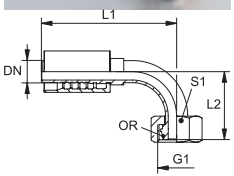


Application: for HD 700 hoses
Sealing form 1: 24° outer cone with O-ring
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 AOS 45 VA, Swage fitting, DKOS angle 45°, Stainless steel

Connection 1: metric nut thread
Design: Swage fitting for HD 700 hoses
Standard code: DKOS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	L2 mm	OR
PA 710 AOS 08 45	10	6	3/8"	M 20 x 1.5	12		24		10.0 x 1.5
PA 710 AOS 45	10	6	3/8"	M 22 x 1.5	14	94,2	27		12.0 x 2.0
PA 713 AOS 45	12	8	1/2"	M 24 x 1.5	16	95,0	30	21,5	13.0 x 2.0
PA 713 AOS 16 45	12	8	1/2"	M 30 x 2	20	108,0	36	27,0	17.5 x 2.5
PA 716 AOS 45	16	10	3/8"	M 30 x 2	20	118,0	36	27,0	17.5 x 2.5
PA 720 AOS 16 45	19	12	3/4"	M 30 x 2	20	132,8	36	26,9	16.0 x 2.5
PA 720 AOS 45 SW41	19	12	3/4"	M 36 x 2	25	148,5	41	29,0	20.0 x 2.5
PA 720 AOS 45	19	12	3/4"	M 36 x 2	25	136,0	46	30,2	20.0 x 2.5
PA 720 AOS 25 45	19	12	3/4"	M 42 x 2	30	150,5	50	35,0	27.0 x 2.5
PA 725 AOS 20 45	25	16	1"	M 36 x 2	25	157,0	41	35,5	20.0 x 2.5
PA 725 AOS 45	25	16	1"	M 42 x 2	30	164,0	50	34,5	25.0 x 2.5
PA 725 AOS 32 45	25	16	1"	M 52 x 2	38	175,0	60	41,0	33.0 x 2.5
PA 732 AOS 25 45 S	31	20	1.1/4"	M 42 x 2	30	175,0	50	39,5	27.0 x 2.5
PA 732 AOS 45 S	31	20	1.1/4"	M 52 x 2	38	200,0	60	43,0	33.0 x 2.5

PA 700 AOS 90 — Swage fitting, DKOS angle 90°

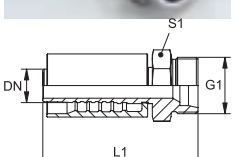


Application: for HD 700 hoses
Sealing form 1: 24° outer cone with O-ring
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 AOS 90 VA, Swage fitting, DKOS angle 90°, Stainless steel

Connection 1: metric nut thread
Design: Swage fitting for HD 700 hoses
Standard code: DKOS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	L2 mm	OR
PA 710 AOS 08 90	10	6	3/8"	M 20 x 1.5	12		24		10.0 x 1.5
PA 710 AOS 90	10	6	3/8"	M 22 x 1.5	14	71,7	27		12.0 x 2.0
PA 713 AOS 90	12	8	1/2"	M 24 x 1.5	16	87,0	30	45,0	13.0 x 2.0
PA 713 AOS 16 90	12	8	1/2"	M 30 x 2	20	86,5	36	49,5	17.5 x 2.5
PA 716 AOS 90	16	10	3/8"	M 30 x 2	20	106,5	36	49,5	17.5 x 2.5
PA 720 AOS 16 90	19	12	3/4"	M 30 x 2	20	126,5	36	65,0	17.5 x 2.5
PA 720 AOS 90	19	12	3/4"	M 36 x 2	25	126,5	46	58,5	22.0 x 2.5
PA 720 AOS 90 SW41	19	12	3/4"	M 36 x 2	25	125,0	41	59,5	22.0 x 2.5
PA 720 AOS 25 90	19	12	3/4"	M 42 x 2	30	139,5	50	71,5	27.0 x 2.5
PA 725 AOS 20 90	25	16	1"	M 36 x 2	25	149,5	46	71,0	22.0 x 2.5
PA 725 AOS 90	25	16	1"	M 42 x 2	30	148,5	50	73,0	27.0 x 2.5
PA 725 AOS 32 90	25	16	1"	M 52 x 2	38	154,0	60	84,5	33.0 x 2.5
PA 732 AOS 25 90 S	31	20	1.1/4"	M 42 x 2	30	162,0	50	82,0	27.0 x 2.5
PA 732 AOS 90 S	31	20	1.1/4"	M 52 x 2	38	235,0	60	95,0	33.0 x 2.5

PA 700 HL / PA 700 HS — Swage fitting, CEL/CES

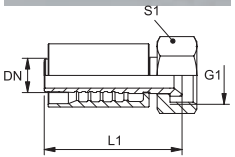


Application: for HD 700 hoses
Sealing form 1: 24° inner cone
Standard: DIN 3861
DIN ISO 12151-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 HS VA, Swage fitting, CES, Stainless steel

Connection 1: metric cylindrical outer thread
Design: Swage fitting for HD 700 hoses
Standard code: CEL / CES
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Series	G1	for external pipe Ø mm	L1 mm	S1
PA 710 HL	10	6	3/8"	L	M 18 x 1.5	12		
PA 713 HL	12	8	1/2"	L	M 22 x 1.5	15		
PA 716 HL	16	10	5/8"	L	M 26 x 1.5	18		
PA 710 HS 08	10	6	3/8"	S	M 20 x 1.5	12	67,8	22
PA 710 HS	10	6	3/8"	S	M 22 x 1.5	14	69,7	22
PA 713 HS	12	8	1/2"	S	M 24 x 1.5	16	75,0	24
PA 713 HS 16	12	8	1/2"	S	M 30 x 2	20		
PA 716 HS	16	10	5/8"	S	M 30 x 2	20	90,5	30
PA 720 HS 16	19	12	3/4"	S	M 30 x 2	20	97,0	32
PA 720 HS	19	12	3/4"	S	M 36 x 2	25	99,0	41
PA 725 HS	25	16	1"	S	M 42 x 2	30	117,0	46
PA 732 HS S	31	20	1.1/4"	S	M 52 x 2	38	123,0	55

PA 700 AJ — Swage fitting, DKJ

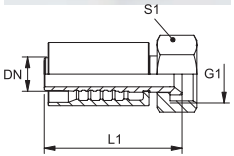


Application: for HD 700 hoses
Sealing form 1: 74° inner cone
Standard: SAE J514
ISO 8434-2
SAE J515
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 AJ VA, Swage fitting, DKJ, Stainless steel

Connection 1: UN/UNF nut threads
Design: Swage fitting for HD 700 hoses
Standard code: DKJ
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1
PA 713 AJ	12	8	1/2"	3/4"-16 UNF	67,4	24
PA 713 AJ 16	12	8	1/2"	7/8"-14 UNF	66,5	25
PA 716 AJ	16	10	5/8"	7/8"-14 UNF	79,5	25
PA 716 AJ 20	16	10	5/8"	1.1/16" -12 UN	81,0	30

PA 700 AJ H — Swage fitting, DKJ

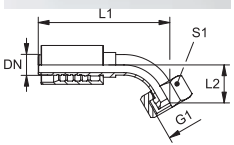


Application: for HD 700 hoses
Sealing form 1: 74° inner cone
Standard: SAE J514
ISO 8434-2
SAE J515
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: UN/UNF nut threads
Design: Swage fitting for HD 700 hoses
Standard code: DKJ
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1
PA 720 AJ H	19	12	3/4"	1.1/16" -12 UN	91,5	32
PA 725 AJ H	25	16	1"	1.5/16" -12 UN	98,2	41
PA 725 AJ 32 H	25	16	1"	1.5/8" -12 UN	111,0	50

PA 700 AJ 45 — Swage fitting, DKJ angle 45°

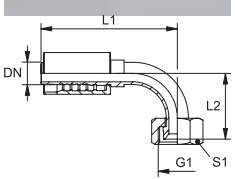


Application: for HD 700 hoses
Sealing form 1: 74° inner cone
Standard: SAE J514
ISO 8434-2
SAE J515
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 AJ 45 VA, Swage fitting, DKJ angle 45°, Stainless steel

Connection 1: UN/UNF nut threads
Design: Swage fitting for HD 700 hoses
Standard code: DKJ
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PA 713 AJ 45	12	8	1/2"	3/4"-16 UNF	92,8	21,5	24
PA 713 AJ 16 45	12	8	5/8"	7/8"-14 UNF	92,8	20,0	25
PA 716 AJ 45	16	10	5/8"	7/8"-14 UNF	116,5	25,0	25
PA 716 AJ 20 45	16	10	5/8"	1.1/16" -12 UN	114,0	23,5	32

PA 700 AJ 90 — Swage fitting, DKJ angle 90°

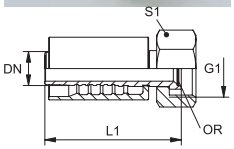


Application: for HD 700 hoses
Sealing form 1: 74° inner cone
Standard: SAE J514
ISO 8434-2
SAE J515
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 AJ 90 VA, Swage fitting, DKJ angle 90°, Stainless steel

Connection 1: UN/UNF nut threads
Design: Swage fitting for HD 700 hoses
Standard code: DKJ
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PA 713 AJ 90	12	8	1/2"	3/4"-16 UNF	87,0	43,5	24
PA 713 AJ 16 90	12	8	1/2"	7/8"-14 UNF	87,0	40,0	25
PA 716 AJ 90	16	10	5/8"	7/8"-14 UNF	109,0	51,0	25
PA 716 AJ 20 90	16	10	5/8"	1.1/16" -12 UN	107,5	50,0	32

PA 700 AOJ — Swage fitting, DKOJ

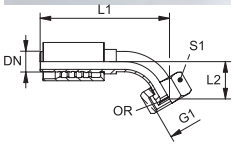


Application: for HD 700 hoses
Sealing form 1: 74° inner cone with O-ring
Standard: SAE J514
ISO 8434-2
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: UN/UNF nut threads
Design: Swage fitting for HD 700 hoses
Standard code: DKOJ
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 720 AOJ	19	12	3/4"	1.1/16" -12 UN	104,0	32	19.00 x 1.50
PA 725 AOJ	25	16	1"	1.5/16" -12 UN	119,0	41	25.00 x 1.50
PA 732 AOJ	31	20	1.1/4"	1.5/8" -12 UN	129,0	50	31.47 x 1.78
PA 740 AOJ	38	24	1.1/2"	1.7/8" -12 UN	152,0	55	37.82 x 1.78

PA 700 AOJ 45 — Swage fitting, DKOJ angle 45°

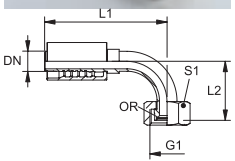


Application: for HD 700 hoses
Sealing form 1: 74° inner cone with O-ring
Standard: SAE J514
ISO 8434-2
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: UN/UNF nut threads
Design: Swage fitting for HD 700 hoses
Standard code: DKOJ
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 720 AOJ 45	19	12	3/4"	1.1/16" -12 UN	140,0	34,5	32	19.00 x 1.50
PA 725 AOJ 45	25	16	1"	1.5/16" -12 UN	169,5	39,0	41	25.00 x 1.50
PA 732 AOJ 45	31	20	1.1/4"	1.5/8" -12 UN	199,0	49,5	50	31.47 x 1.78
PA 740 AOJ 45	38	24	1.1/2"	1.7/8" -12 UN	233,0	58,0	55	37.82 x 1.78

PA 700 AOJ 90 — Swage fitting, DKOJ angle 90°

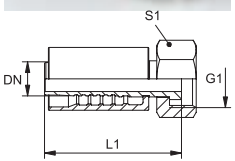


Application: for HD 700 hoses
Sealing form 1: 74° inner cone with O-ring
Standard: SAE J514
ISO 8434-2
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: UN/UNF nut threads
Design: Swage fitting for HD 700 hoses
Standard code: DKOJ
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 720 AOJ 90	19	12	3/4"	1.1/16" -12 UN	127,5	68,2	32	19.00 x 1.50
PA 725 AOJ 90	25	16	1"	1.5/16" -12 UN	158,0	81,7	41	25.00 x 1.50
PA 732 AOJ 90	31	20	1.1/4"	1.5/8" -12 UN	182,0	104,0	50	31.47 x 1.78
PA 740 AOJ 90	38	24	1.1/2"	1.7/8" -12 UN	215,5	120,5	55	37.82 x 1.78

PA 700 AJF — Swage fitting, ORFS

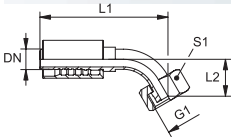


Application: for HD 700 hoses
Sealing form 1: flat sealing
Standard: SAE J1453
ISO 8434-3
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: UN/UNF nut threads
Design: Swage fitting for HD 700 hoses
Standard code: ORFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1
PA 713 AJF	12	8	1/2"	13/16" -16 UN	65,8	27
PA 716 AJF	16	10	5/8"	1" -14 UNS	82,0	30
PA 716 AJF 20	16	10	5/8"	1.3/16" -12 UN	82,0	36
PA 720 AJF	19	12	3/4"	1.3/16" -12 UN	107,0	36
PA 725 AJF	25	16	1"	1.7/16" -12 UN	122,0	41
PA 732 AJF	31	20	1.1/4"	1.11/16" -12 UN	129,0	50
PA 740 AJF	38	24	1.1/2"	2" -12 UN	141,0	60

PA 700 AJF 45 — Swage fitting, ORFS angle 45°

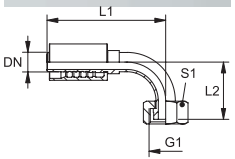


Application: for HD 700 hoses
Sealing form 1: flat sealing
Standard: SAE J1453
ISO 8434-3
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: UN/UNF nut threads
Design: Swage fitting for HD 700 hoses
Standard code: ORFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PA 713 AJF 45	12	8	1/2"	11/16" -16 UN	91,5	21,5	27
PA 716 AJF 45	16	10	5/8"	1" -14 UNS	111,0	20,0	30
PA 720 AJF 45	19	12	3/4"	1.3/16" -12 UN	133,0	26,5	36
PA 725 AJF 45	25	16	1"	1.7/16" -12 UN	160,5	31,0	41
PA 732 AJF 45	31	20	1.1/4"	1.11/16" -12 UN	178,0	34,0	50
PA 740 AJF 45	38	24	1.1/2"	2" -12 UN	209,0	32,0	60

PA 700 AJF 90 — Swage fitting, ORFS angle 90°

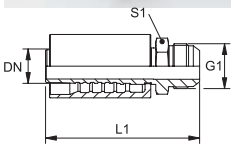


Application: for HD 700 hoses
Sealing form 1: flat sealing
Standard: SAE J1453
ISO 8434-3
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: UN/UNF nut threads
Design: Swage fitting for HD 700 hoses
Standard code: ORFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PA 713 AJF 90	12	8	1/2"	13/16" -16 UN	85,5	43,5	27
PA 716 AJF 90	16	10	5/8"	1" -14 UNS	106,5	47,5	30
PA 720 AJF 90	19	12	3/4"	1.3/16" -12 UN	126,0	56,0	36
PA 725 AJF 90	25	16	1"	1.7/16" -12 UN	157,5	68,0	41
PA 732 AJF 90	31	20	1.1/4"	1.11/16" -12 UN	171,5	76,0	50
PA 740 AJF 90	38	24	1.1/2"	2" -12 UN	207,0	88,5	60

PA 700 HJ — Swage fitting, AGJ

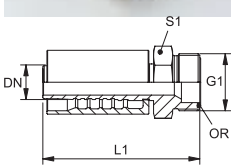


Application: for HD 700 hoses
Sealing form 1: 74° outer cone
Standard: SAE J514
ISO 8434-2
SAE J516
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 HJ VA, Swage fitting, AGJ, Stainless steel

Connection 1: UN/UNF external threads
Design: Swage fitting for HD 700 hoses
Standard code: AGJ
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1
PA 713 HJ	12	8	1/2"	3/4"-16 UNF	77,2	22
PA 713 HJ 16	12	8	1/2"	7/8"-14 UNF	80,4	24
PA 716 HJ	16	10	5/8"	7/8"-14 UNF	92,0	24
PA 720 HJ	19	12	3/4"	1.1/16" -12 UN	102,5	27
PA 725 HJ	25	16	1"	1.5/16" -12 UN	117,0	36
PA 732 HJ	31	20	1.1/4"	1.5/8" -12 UN	127,0	46
PA 740 HJ	38	24	1.1/2"	1.7/8" -12 UN	145,5	50

PA 700 HJOF — Swage fitting, ORFS

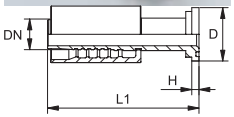


Application: for HD 700 hoses
Sealing form 1: flat seal with O-ring
Standard: SAE J1453
ISO 8434-3
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: UN/UNF external threads
Design: Swage fitting for HD 700 hoses
Standard code: ORFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 713 HJOF	12	8	1/2"	13/16" -16 UN	73,8	22	12.42 x 1.78
PA 716 HJOF	16	10	5/8"	1" -14 UNS	89,4	27	15.60 x 1.78
PA 720 HJOF	19	12	3/4"	1.3/16" -12 UN	107,0	32	18.77 x 1.78
PA 725 HJOF	25	16	1"	1.7/16" -12 UN	115,0	36	23.52 x 1.78

PA 700 SF — Swage fitting, SFL

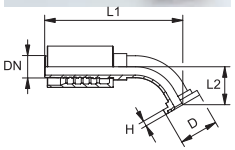


Application: for HD 700 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 SF VA, Swage fitting, SFL, Stainless steel

Connection 1: SAE flange connection 3000 PSI
Design: Swage fitting for HD 700 hoses
Standard code: SFL
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 713 SF	12	8	1/2"	1/2"	30,2	6,7	90,4
PA 713 SF 20	12	8	1/2"	3/4"	38,1	6,7	91,6
PA 716 SF 20	16	10	3/8"	3/4"	38,1	6,7	102,6
PA 720 SF	19	12	3/4"	3/4"	38,1	6,8	116,5
PA 720 SF 25	19	12	3/4"	1"	44,5	8,1	119,5
PA 725 SF 20	25	16	1"	3/4"	38,1	6,8	132,0
PA 725 SF	25	16	1"	1"	44,5	8,1	135,5
PA 725 SF 32	25	16	1"	1.1/4"	50,8	8,1	138,5
PA 732 SF 25 S	31	20	1.1/4"	1"	44,5	8,0	145,0
PA 732 SF 40 S	31	20	1.1/4"	1.1/2"	60,3	8,0	129,0
PA 732 SF S	31	20	1.1/4"	1.1/4"	50,8	8,0	144,5
PA 740 SF 32	38	24	1.1/2"	1.1/4"	50,8	8,1	158,0
PA 740 SF	38	24	1.1/2"	1.1/2"	60,3	8,1	166,5
PA 740 SF 50	38	24	1.1/2"	2"	71,4	9,6	169,5

PA 700 SF 45 — Swage fitting, SFL angle 45°

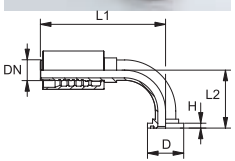


Application: for HD 700 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 SF 45 VA, Swage fitting, SFL angle 45°, Stainless steel

Connection 1: SAE flange connection 3000 PSI
Design: Swage fitting for HD 700 hoses
Standard code: SFL
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 713 SF 45	12	8	1/2"	1/2"	30,2	6,7	94,5	22,5
PA 713 SF 20 45	12	8	1/2"	3/4"	38,1	6,7	126,0	26,5
PA 720 SF 45	19	12	3/4"	3/4"	38,1	6,7	132,5	27,4
PA 720 SF 25 45	19	12	3/4"	1"	44,5	8,0	134,6	29,5
PA 725 SF 20 45	25	16	1"	3/4"	38,1	6,7	146,5	31,0
PA 725 SF 45	25	16	1"	1"	44,5	8,0	159,0	28,6
PA 725 SF 32 45	25	16	1"	1.1/4"	50,8	8,0	160,7	30,4
PA 732 SF 25 45 S	31	20	1.1/4"	1"	44,5	8,0	170,5	35,0
PA 732 SF 45 S	31	20	1.1/4"	1.1/4"	50,8	8,0	181,5	41,5
PA 732 SF 40 45 S	31	20	1.1/4"	1.1/2"	60,3	8,0	188,0	43,5
PA 740 SF 32 45	38	24	1.1/2"	1.1/4"	50,8	8,0	202,5	43,0
PA 740 SF 45	38	24	1.1/2"	1.1/2"	60,3	8,0	215,0	41,5
PA 740 SF 50 45	38	24	1.1/2"	2"	71,4	9,5	230,5	55,5

PA 700 SF 90 — Swage fitting, SFL angle 90°

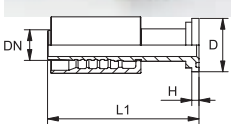


Application: for HD 700 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 SF 90 VA, Swage fitting, SFL angle 90°, Stainless steel

Connection 1: SAE flange connection 3000 PSI
Design: Swage fitting for HD 700 hoses
Standard code: SFL
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 713 SF 90	12	8	1/2"	1/2"	30,2	6,7	85,9	45,0
PA 713 SF 20 90	12	8	1/2"	3/4"	38,1	6,7	96,0	51,0
PA 720 SF 90	19	12	3/4"	3/4"	38,1	6,7	127,5	58,0
PA 720 SF 90 L 95	19	12	3/4"	3/4"	38,1	6,7	127,0	95,0
PA 720 SF 90 L 100	19	12	3/4"	3/4"	38,1	6,7	127,0	100,0
PA 720 SF 90 L 120	19	12	3/4"	3/4"	38,1	6,7	127,0	120,0
PA 720 SF 25 90	19	12	3/4"	1"	44,5	8,0	127,5	61,0
PA 720 SF 25 90 L 82	19	12	3/4"	1"	44,5	8,0	187,5	82,0
PA 725 SF 20 90	25	16	1"	3/4"	38,1	6,7	143,5	65,5
PA 725 SF 90	25	16	1"	1"	44,5	8,0	158,0	67,0
PA 725 SF 32 90	25	16	1"	1.1/4"	50,8	8,0	158,0	69,5
PA 732 SF 25 90 S	31	20	1.1/4"	1"	44,5	8,0	162,0	76,0
PA 732 SF 90 S	31	20	1.1/4"	1.1/4"	50,8	8,0	173,0	88,0
PA 732 SF 40 90 S	31	20	1.1/4"	1.1/2"	60,3	8,0	177,0	95,0
PA 740 SF 32 90	38	24	1.1/2"	1.1/4"	50,8	8,0	193,0	94,0
PA 740 SF 90	38	24	1.1/2"	1.1/2"	60,3	8,0	211,0	99,0
PA 740 SF 50 90	38	24	1.1/2"	2"	71,4	9,5	218,0	100,0

PA 700 SF6 — Swage fitting, SFS



Application: for HD 700 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 SF6 VA, Swage fitting, SFS, Stainless steel

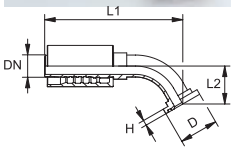
Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 700 hoses
Standard code: SFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 713 SF6	12	8	1/2"	1/2"	31,8	7,7	90,4
PA 713 SF6 20	12	8	1/2"	3/4"	41,3	8,8	93,9
PA 716 SF6 13	16	10	5/8"	1/2"	31,8	7,7	108,0
PA 716 SF6 20	16	10	5/8"	3/4"	41,3	8,8	102,0
PA 716 SF6 25	16	10	5/8"	1"	47,6	9,5	103,0
PA 720 SF6	19	12	3/4"	3/4"	41,3	8,8	124,5
PA 720 SF6 25	19	12	3/4"	1"	47,6	9,6	129,0
PA 725 SF6 20	25	16	1"	3/4"	41,3	8,8	134,0
PA 725 SF6	25	16	1"	1"	47,6	9,6	146,5
PA 725 SF6 32	25	16	1"	1.1/4"	54,0	10,4	151,0

PA 700 SF6 (Continuation) Swage fitting, SFS

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 732 SF6 S	31	20	1.1/4"	1.1/4"	54,0	10,3	147,6
PA 732 SF6 25 S	31	20	1.1/4"	1"	47,6	9,5	149,0
PA 732 SF6 40 S	31	20	1.1/4"	1.1/2"	63,5	12,6	162,0
PA 740 SF6 32	38	24	1.1/2"	1.1/4"	54,0	10,4	162,0
PA 740 SF6	38	24	1.1/2"	1.1/2"	63,5	12,7	183,5
PA 740 SF6 50	38	24	1.1/2"	2"	79,4	12,7	188,0
PA 750 SF6	51	32	2"	2"	79,4	12,6	233,0

PA 700 SF6 45 Swage fitting, SFS angle 45°

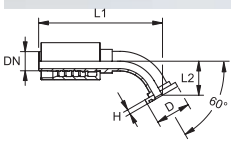


Application: for HD 700 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 SF6 45 VA, Swage fitting, SFS angle 45°, Stainless steel

Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 700 hoses
Standard code: SFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 713 SF6 45	12	8	1/2"	1/2"	31,8	7,7	95,5	23,0
PA 713 SF6 20 45	12	8	1/2"	3/4"	41,3	8,8	99,9	23,0
PA 716 SF6 13 45	16	10	5/8"	1/2"	31,8	7,7	114,0	21,5
PA 716 SF6 20 45	16	10	5/8"	3/4"	41,3	8,8	117,5	25,0
PA 716 SF6 25 45	16	10	5/8"	1"	47,6	9,5	121,0	29,0
PA 720 SF6 45	19	12	3/4"	3/4"	41,3	8,8	135,3	30,2
PA 720 SF6 45 L 52	19	12	3/4"	3/4"	41,3	8,8	160,0	52,0
PA 720 SF6 45 L 75	19	12	3/4"	3/4"	41,3	8,8	183,0	75,0
PA 720 SF6 45 L 100	19	12	3/4"	3/4"	41,3	8,8		100,0
PA 720 SF6 25 45	19	12	3/4"	1"	47,6	9,5	139,6	34,4
PA 725 SF6 20 45	25	16	1"	3/4"	41,3	8,8	154,0	32,5
PA 725 SF6 45	25	16	1"	1"	47,6	9,5	136,9	33,6
PA 725 SF6 32 45	25	16	1"	1.1/4"	54,0	10,3	168,9	38,5
PA 732 SF6 25 45 S	31	20	1.1/4"	1"	47,6	9,5	173,5	38,0
PA 732 SF6 45 S	31	20	1.1/4"	1.1/4"	54,0	10,3	187,0	44,0
PA 732 SF6 40 45 S	31	20	1.1/4"	1.1/2"	63,5	12,6	191,5	47,5
PA 740 SF6 32 45	38	24	1.1/2"	1.1/4"	54,0	10,3	193,0	100,0
PA 740 SF6 45	38	24	1.1/2"	1.1/2"	63,5	12,6	222,5	49,0
PA 740 SF6 50 45	38	24	1.1/2"	2"	79,4	12,6	236,0	61,0
PA 750 SF6 45	51	32	2"	2"	79,4	12,6	274,0	56,0

PA 700 SF6 60 — Swage fitting, SFS angle 60°

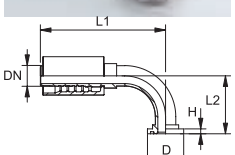


Application: for HD 700 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 700 hoses
Standard code: SFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm
PA 725 SF6 60	25	16	1"	1"	47,6	9,5

PA 700 SF6 90 — Swage fitting, SFS angle 90°



Application: for HD 700 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel
Product versions: PA 700 SF6 90 VA, Swage fitting, SFS angle 90°, Stainless steel

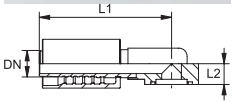
Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 700 hoses
Standard code: SFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 713 SF6 90	12	8	1/2"	1/2"	31,8	7,7	86,0	46,0
PA 713 SF6 20 90	12	8	1/2"	3/4"	41,3	8,8	92,5	46,0
PA 716 SF6 13 90	16	10	5/8"	1/2"	31,8	7,7	108,0	48,0
PA 716 SF6 20 90	16	10	5/8"	3/4"	41,3	8,8	107,5	52,5
PA 716 SF6 25 90	16	10	5/8"	1"	47,6	9,5	108,0	57,0
PA 720 SF6 13 90 L 80	19	12	3/4"	1/2"	31,8	7,7	119,0	80,0
PA 720 SF6 13 90 L 100	19	12	3/4"	1/2"	31,8	7,7	119,0	100,0
PA 720 SF6 25 90	19	12	3/4"	1"	47,6	9,5	127,5	68,0
PA 720 SF6 90	19	12	3/4"	3/4"	41,3	8,8	127,5	62,0
PA 720 SF6 90 L 52	19	12	3/4"	3/4"	41,3	8,8	119,0	52,0
PA 720 SF6 90 L 80	19	12	3/4"	3/4"	41,3	8,8	127,0	80,0
PA 720 SF6 90 L 85	19	12	3/4"	3/4"	41,3	8,8	127,0	85,0
PA 720 SF6 90 L 100	19	12	3/4"	3/4"	41,3	8,8	127,0	100,0
PA 720 SF6 90 L 150	19	12	3/4"	3/4"	41,3	8,8	127,0	150,0
PA 725 SF6 20 90	25	16	1"	3/4"	41,3	8,8	143,5	67,5
PA 725 SF6 90	25	16	1"	1"	47,6	9,5	158,0	74,0
PA 725 SF6 90 L 100	25	16	1"	1"	47,6	9,5	153,0	100,0
PA 725 SF6 90 L 200	25	16	1"	1"	47,6	9,5	153,0	200,0
PA 725 SF6 32 90	25	16	1"	1.1/4"	54,0	10,3	168,9	81,0

PA 700 SF6 90 (Continuation) Swage fitting, SFS angle 90°

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 732 SF6 25 90 S	31	20	1.1/4"	1"	47,6	9,5	162,0	80,0
PA 732 SF6 90 S	31	20	1.1/4"	1.1/4"	54,0	10,3	173,5	94,5
PA 732 SF6 90 L 120 S	31	20	1.1/4"	1.1/4"	54,0	10,3	173,5	120,0
PA 732 SF6 40 90 S	31	20	1.1/4"	1.1/2"	63,5	12,6	174,5	100,0
PA 740 SF6 32 90	38	24	1.1/2"	1.1/4"	54,0	10,3	193,0	100,0
PA 740 SF6 90	38	24	1.1/2"	1.1/2"	63,5	12,6	215,5	110,0
PA 740 SF6 50 90	38	24	1.1/2"	2"	79,4	12,6	215,5	126,0
PA 750 SF6 90	51	32	2"	2"	79,4	12,6	268,0	138,0

PA 700 SF6 90 4 K Swage fitting, SFS angle 90°

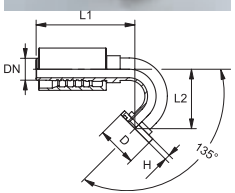


Application: for HD 700 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 700 hoses
Standard code: SFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size
PA 720 SF6 90 4 K	19	12	3/4"	-
PA 725 SF6 90 4 K	25	16	1"	-

PA 700 SF6 135 — Swage fitting, SFS angle 135°

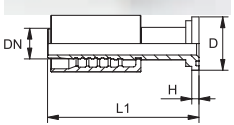


Application: for HD 700 hoses
Sealing form 1: flat seal with SF O-ring
Standard: SAE J518
ISO 6162-1/-2
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 700 hoses
Standard code: SFS
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 725 SF6 135	25	16	1"	1"	47,6	9,5	170,0	100,0

PA 700 SF9 — Swage fitting, SFS-CAT

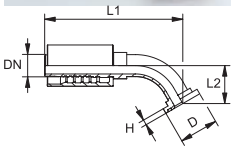


Application: for HD 700 hoses
Sealing form 1: flat seal with SF O-ring
Standard code: SFS-CAT
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 700 hoses
suitable for: Caterpillar
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 720 SF9	19	12	3/4"	3/4"	41,3	14,6	130,0
PA 720 SF9 25	19	12	3/4"	1"	47,6	14,6	133,5
PA 725 SF9 20	25	16	1"	3/4"	41,3	14,6	137,0
PA 725 SF9	25	16	1"	1"	47,6	14,6	150,0
PA 725 SF9 32	25	16	1"	1.1/4"	54,0	14,6	155,0
PA 732 SF9 25 S	31	20	1.1/4"	1"	47,6	14,6	150,0
PA 732 SF9 S	31	20	1.1/4"	1.1/4"	54,0	14,6	151,3
PA 732 SF9 40 S	31	20	1.1/4"	1.1/2"	63,5	14,6	140,0
PA 740 SF9 32	38	24	1.1/2"	1.1/4"	54,0	14,6	163,0
PA 740 SF9	38	24	1.1/2"	1.1/2"	63,5	14,6	185,0

PA 700 SF9 45 — Swage fitting, SFS-CAT angle 45°

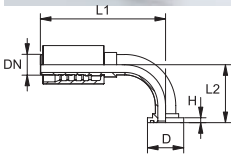


Application: for HD 700 hoses
Sealing form 1: flat seal with SF O-ring
Standard code: SFS-CAT
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 700 hoses
suitable for: Caterpillar
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 720 SF9 45	19	12	3/4"	3/4"	41,3	14,0	139,0	34,0
PA 720 SF9 25 45	19	12	3/4"	1"	47,6	14,0	143,0	37,5
PA 725 SF9 20 45	25	16	1"	3/4"	41,3	14,0	155,5	35,0
PA 725 SF9 45	25	16	1"	1"	47,6	14,0	167,0	36,5
PA 725 SF9 32 45	25	16	1"	1.1/4"	54,0	14,0	171,5	41,5
PA 732 SF9 25 45 S	31	20	1.1/4"	1"	47,6	14,0	174,0	39,5
PA 732 SF9 45 S	31	20	1.1/4"	1.1/4"	54,0	14,0	187,0	44,0
PA 732 SF9 40 45 S	31	20	1.1/4"	1.1/2"	63,5	14,0	195,5	52,0
PA 740 SF9 32 45	38	24	1.1/2"	1.1/4"	54,0	14,0	205,5	47,0
PA 740 SF9 45	38	24	1.1/2"	1.1/2"	63,5	14,0	226,0	51,0

PA 700 SF9 90 — Swage fitting, SFS-CAT angle 90°

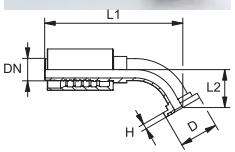


Application: for HD 700 hoses
Sealing form 1: flat seal with SF O-ring
Standard code: SFS-CAT
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 700 hoses
suitable for: Caterpillar
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 720 SF9 90	19	12	3/4"	3/4"	41,3	14,0	127,5	67,5
PA 720 SF9 25 90	19	12	3/4"	1"	47,6	14,0	127,5	72,5
PA 725 SF9 20 90	25	16	1"	3/4"	41,3	14,0	142,5	71,5
PA 725 SF9 90	25	16	1"	1"	47,6	14,0	158,0	78,5
PA 725 SF9 32 90	25	16	1"	1.1/4"	54,0	14,0	158,0	85,0
PA 732 SF9 25 90 S	31	20	1.1/4"	1"	47,6	14,0	161,0	82,0
PA 732 SF9 90 S	31	20	1.1/4"	1.1/4"	54,0	14,0	169,5	96,0
PA 732 SF9 40 90 S	31	20	1.1/4"	1.1/2"	63,5	14,0	177,0	107,0
PA 740 SF9 32 90	38	24	1.1/2"	1.1/4"	54,0	14,0	192,0	100,0
PA 740 SF9 90	38	24	1.1/2"	1.1/2"	63,5	14,0	215,5	112,0

PA 500 SF9 45 A — Swage fitting, SFS-CAT angle 45°

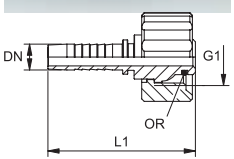


Application: for HD 500 hoses
Sealing form 1: flat seal with SF O-ring
Standard code: SFS-CAT
Integration: with pull-out protection (interlock)
Material: Steel

Connection 1: SAE flange connection 6000 PSI
Design: Swage fitting for HD 700 hoses
suitable for: Caterpillar
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 720 SF9 45	19	12	3/4"	3/4"	41,3	14,0	139,0	34,0
PA 720 SF9 25 45	19	12	3/4"	1"	47,6	14,0	143,0	37,5
PA 725 SF9 20 45	25	16	1"	3/4"	41,3	14,0	155,5	35,0
PA 725 SF9 45	25	16	1"	1"	47,6	14,0	167,0	36,5
PA 725 SF9 32 45	25	16	1"	1.1/4"	54,0	14,0	171,5	41,5
PA 532 SF9 25 45 A	31	20	1.1/4"	1"	47,6	14,0	174,0	39,5
PA 532 SF9 45 A	31	20	1.1/4"	1.1/4"	54,0	14,0	194,0	44,5
PA 532 SF9 40 45 A	31	20	1.1/4"	1.1/2"	63,5	14,0	198,0	48,5
PA 540 SF9 32 45 A	38	24	1.1/2"	1.1/4"	54,0	14,0	205,5	47,0
PA 540 SF9 45 A	38	24	1.1/2"	1.1/2"	63,5	14,0	226,0	51,0

PN KAE — Swage nipple, KAE



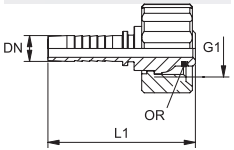
Application: for HF/HW 100 and HF/HW 200 hoses
Sealing form 1: Outer cone with O-ring
Material: Steel
Product versions: PN KAE VA, Swage nipple, KAE, Stainless steel

Connection 1: metric nut thread
suitable for: Kärcher high pressure cleaners (up to 12/1997)
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	OR
PN 06 KAE	6	4	1/4"	M 22 x 1.5	10.0 x 2.0
PN 08 KAE	8	5	5/16"	M 22 x 1.5	10.0 x 2.0
PN 10 KAE	10	6	3/8"	M 22 x 1.5	10.0 x 2.0

Choose the appropriate ferrule based on the hose type.

PN KAE 97 — Swage nipple, KAE 97



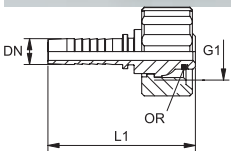
Application: for HF/HW 100 and HF/HW 200 hoses
Sealing form 1: Outer cone with O-ring
Material: Steel

Connection 1: metric nut thread
suitable for: Kärcher high pressure cleaners (from 12/1997)
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	OR
PN 06 KAE 97	6	4	1/4"	M 22 x 1.5	11.0 x 1.5
PN 08 KAE 97	8	5	5/16"	M 22 x 1.5	11.0 x 1.5
PN 10 KAE 97	10	6	3/8"	M 22 x 1.5	11.0 x 1.5

Choose the appropriate ferrule based on the hose type.

PN WAP — Swage nipple, WAP



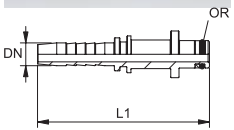
Application: for HF/HW 100 and HF/HW 200 hoses
Sealing form 1: Outer cone with O-ring
Material: Steel

Connection 1: metric nut thread
suitable for: WAP high pressure cleaners
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	OR
PN 08 WAP	8	5	5/16"	M 21 x 1.5	10.0 x 2.0
PN 10 WAP	10	6	3/8"	M 21 x 1.5	10.0 x 2.0

Choose the appropriate ferrule based on the hose type.

PN KAE ST — Swage nipple, KAE ST



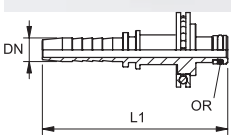
Application: for HF/HW 100 and HF/HW 200 hoses
Sealing form 1: O-ring sealed pin
Material: Steel

Connection 1: Plug connection
suitable for: Kärcher high pressure cleaners
Surface protection: electro galvanised

Identification	DN	Size	Inches	D1 mm	OR
PN 06 KAE ST	6	4	1/4"	10,0	6.75 x 1.78
PN 08 KAE ST	8	5	5/16"	10,0	6.75 x 1.78

Choose the appropriate ferrule based on the hose type.

PN KAE STD — Swage nipple, KAE STD



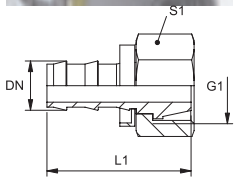
Application: for HF/HW 100 and HF/HW 200 hoses
Sealing form 1: O-ring sealed pin
Material: Steel

Connection 1: Plug connection
suitable for: Kärcher high pressure cleaners
Surface protection: electro galvanised

Identification	DN	Size	Inches	D1 mm	OR
PN 08 KAE STD	8	5	5/16"	11,0	7.65 x 1.78

Choose the appropriate ferrule based on the hose type.

ND AB — Plug-in nipple, DKR



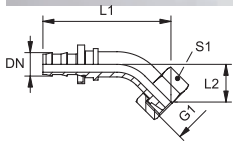
Connection 1: BSP external thread, cylindrical
Standard: ISO 228-1
ISO 8434-6
BS 5200
Material: Steel

Sealing form 1: 60° outer cone
Standard code: DKR
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1
ND 06 AB	6	4	1/4"	G 1/4" -19	33,0	17
ND 10 AB	10	6	3/8"	G 3/8" -19	37,0	19
ND 13 AB	12	8	1/2"	G 1/2" -14	42,0	27
ND 16 AB	16	10	5/8"	G 5/8" -14	53,0	30
ND 20 AB	19	12	3/4"	G 3/4" -14	58,0	32
ND 25 AB	25	16	1"	G 1" -11	57,0	41

Undamaged nipples can be reused.

ND AB 45 — Plug-in nipple, DKR angle 45°



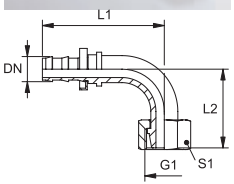
Connection 1: BSP nut thread
Standard: ISO 228-1
ISO 8434-6
BS 5200
Material: Steel

Sealing form 1: 60° outer cone
Standard code: DKR
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
ND 06 AB 45	6	4	1/4"	G 1/4" -19	51,0	16,0	17
ND 10 AB 45	10	6	3/8"	G 3/8" -19	58,0	18,0	19
ND 13 AB 45	12	8	1/2"	G 1/2" -14	68,0	19,0	27
ND 16 AB 45	16	10	5/8"	G 5/8" -14	81,0	21,0	30

Undamaged nipples can be reused.

ND AB 90 — Plug-in nipple, DKR angle 90°



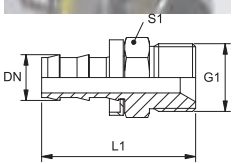
Connection 1: BSP nut thread
Standard: ISO 228-1
ISO 8434-6
BS 5200
Material: Steel

Sealing form 1: 60° outer cone
Standard code: DKR
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
ND 06 AB 90	6	4	1/4"	G 1/4" -19	42,0	29,0	17
ND 10 AB 90	10	6	3/8"	G 3/8" -19	49,0	33,0	19
ND 13 AB 90	12	8	1/2"	G 1/2" -14	60,0	39,0	27
ND 16 AB 90	16	10	5/8"	G 5/8" -14	74,0	43,0	30
ND 20 AB 90	19	12	3/4"	G 3/4" -14	88,0	53,0	32

Undamaged nipples can be reused.

ND HB — Plug-in nipple, AGR



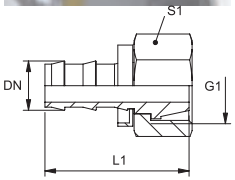
Connection 1: BSP external thread, cylindrical
Standard: ISO 228-1
ISO 8434-6
BS 5200
Material: Steel

Sealing form 1: 60° inner cone
Standard code: AGR
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1
ND 06 HB 02	6	4	1/4"	G 1/8" -28	36,0	17
ND 06 HB	6	4	1/4"	G 1/4" -19	41,0	19
ND 10 HB 06	10	6	3/8"	G 1/4" -19	44,0	19
ND 10 HB	10	6	3/8"	G 3/8" -19	45,0	22
ND 13 HB	12	8	1/2"	G 1/2" -14	53,0	27
ND 16 HB 13	16	10	5/8"	G 1/2" -14		
ND 16 HB	16	10	5/8"	G 5/8" -14	65,0	30
ND 20 HB	19	12	3/4"	G 3/4" -14	65,0	32

Undamaged nipples can be reused.

ND AFL — Plug-in nipple, DKL



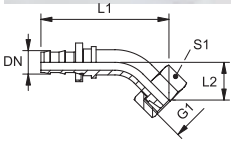
Connection 1: metric nut thread
Standard: DIN ISO 12151-2
Material: Steel

Sealing form 1: 24° outer cone
Standard code: DKL
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
ND 06 AFL 04	6	4	1/4"	M 12 x 1.5	6	33,0	14
ND 06 AFL	6	4	1/4"	M 14 x 1.5	8	33,0	17
ND 06 AFL 08	6	4	1/4"	M 16 x 1.5	10	34,0	19
ND 10 AFL 08	10	6	3/8"	M 16 x 1.5	10	38,0	19
ND 10 AFL	10	6	3/8"	M 18 x 1.5	12	38,0	22
ND 13 AFL 10	12	8	1/2"	M 18 x 1.5	12		
ND 13 AFL	12	8	1/2"	M 22 x 1.5	15	43,5	27
ND 16 AFL 13	16	10	5/8"	M 22 x 1.5	15	56,0	27
ND 16 AFL	16	10	5/8"	M 26 x 1.5	18	53,0	32
ND 20 AFL	19	12	3/4"	M 30 x 2	22	53,5	36
ND 25 AFL	25	16	1"	M 36 x 2	28	58,0	41

Undamaged nipples can be reused.

ND AFL 45 — Plug-in nipple, DKL angle 45°



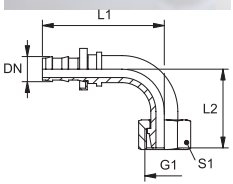
Connection 1: metric nut thread
Standard: DIN ISO 12151-2
Material: Steel

Sealing form 1: 24° outer cone
Standard code: DKL
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1
ND 06 AFL 04 45	6	4	1/4"	M 12 x 1.5	6	51,0	16,0	14
ND 06 AFL 45	6	4	1/4"	M 14 x 1.5	8	51,0	16,0	17
ND 10 AFL 08 45	10	6	3/8"	M 16 x 1.5	10	58,0	18,0	19
ND 10 AFL 45	10	6	3/8"	M 18 x 1.5	12	59,0	18,0	22
ND 13 AFL 45	12	8	1/2"	M 22 x 1.5	15	68,0	19,0	27
ND 16 AFL 45	16	10	5/8"	M 26 x 1.5	18	81,0	21,0	32
ND 20 AFL 45	19	12	3/4"	M 30 x 2	22	88,0	23,0	36
ND 25 AFL 45	25	16	1"	M 36 x 2	28	105,0	30,0	41

Undamaged nipples can be reused.

ND AFL 90 — Plug-in nipple, DKL angle 90°



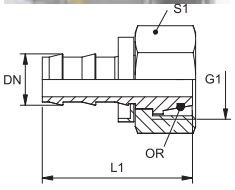
Connection 1: metric nut thread
Standard: DIN ISO 12151-2
Material: Steel

Sealing form 1: 24° outer cone
Standard code: DKL
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1
ND 06 AFL 04 90	6	4	1/4"	M 12 x 1.5	6	42,0	29,0	14
ND 06 AFL 90	6	4	1/4"	M 14 x 1.5	8	42,0	29,0	17
ND 06 AFL 08 90	6	4	1/4"	M 16 x 1.5	10	42,0	29,0	19
ND 10 AFL 08 90	10	6	3/8"	M 16 x 1.5	10	49,0	33,0	19
ND 10 AFL 90	10	6	3/8"	M 18 x 1.5	12	49,0	34,0	22
ND 13 AFL 90	12	8	1/2"	M 22 x 1.5	15	60,0	39,0	27
ND 16 AFL 90	16	10	5/8"	M 26 x 1.5	18	74,0	43,0	32
ND 20 AFL 90	19	12	3/4"	M 30 x 2	22	88,0	50,0	36
ND 25 AFL 90	25	16	1"	M 36 x 2	28	99,0	70,0	41

Undamaged nipples can be reused.

ND AOL — Plug-in nipple, DKOL



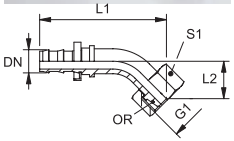
Connection 1: metric nut thread
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Material: Steel

Sealing form 1: 24° outer cone with O-ring
Standard code: DKOL
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
ND 06 AOL 04	6	4	1/4"	M 12 x 1.5	6	40,0	14	4.5 x 1.5
ND 06 AOL	6	4	1/4"	M 14 x 1.5	8	36,0	17	6.5 x 1.5
ND 06 AOL 08	6	4	1/4"	M 16 x 1.5	10	36,0	19	8.5 x 1.5
ND 10 AOL 08	10	6	3/8"	M 16 x 1.5	10	40,0	19	8.5 x 1.5
ND 10 AOL	10	6	3/8"	M 18 x 1.5	12	40,0	22	10.5 x 1.5
ND 13 AOL	12	8	1/2"	M 22 x 1.5	15	44,0	27	12.5 x 1.5
ND 16 AOL	16	10	5/8"	M 26 x 1.5	18	56,0	32	16.0 x 2.0
ND 20 AOL	19	12	3/4"	M 30 x 2	22	58,0	36	20.0 x 2.0

Undamaged nipples can be reused.

ND AOL 45 — Plug-in nipple, DKOL angle 45°



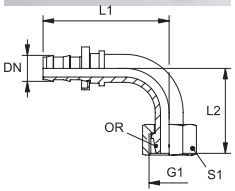
Connection 1: metric nut thread
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Material: Steel

Sealing form 1: 24° outer cone with O-ring
Standard code: DKOL
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
ND 10 AOL 08 45	10	6	3/8"	M 16 x 1.5	10	59,0	19,0	19	8.5 x 1.5
ND 10 AOL 45	10	6	3/8"	M 18 x 1.5	12	60,0	19,0	22	10.5 x 1.5
ND 13 AOL 45	12	8	1/2"	M 22 x 1.5	15	69,0	21,0	27	12.5 x 1.5

Undamaged nipples can be reused.

ND AOL 90 — Plug-in nipple, DKOL angle 90°



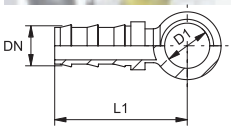
Connection 1: metric nut thread
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Material: Steel

Sealing form 1: 24° outer cone with O-ring
Standard code: DKOL
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
ND 06 AOL 04 90	6	4	1/4"	M 12 x 1.5	6	42,0	36,0	14	4.5 x 1.5
ND 10 AOL 08 90	10	6	3/8"	M 16 x 1.5	10	49,0	35,0	19	8.5 x 1.5
ND 10 AOL 90	10	6	3/8"	M 18 x 1.5	12	49,0	36,0	22	10.5 x 1.5
ND 13 AOL 90	12	8	1/2"	M 22 x 1.5	15	58,0	41,0	27	12.5 x 1.5
ND 16 AOL 90	16	10	5/8"	M 26 x 1.5	18	74,0	45,0	32	16.0 x 2.0

Undamaged nipples can be reused.

ND B — Plug-in nipple, RGN



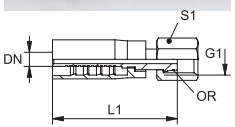
Connection 1: Banjo for metric hollow screw
Connection 2: Hose connection
Standard code: RGN
Surface protection: electro galvanised

Sealing form 1: Sealed by copper ring
Standard: DIN 7642
Material: Steel

Identification	DN	Size	Inches	D1 mm	for hollow screw	L1 mm
ND 06 B 02	6	4	1/4"	8,1	M 8	36,0
ND 06 B 04	6	4	1/4"	10,1	M 10	38,0
ND 06 B	6	4	1/4"	12,1	M 12	40,0
ND 06 B 08	6	4	1/4"	14,1	M 14	42,0
ND 10 B 06	10	6	3/8"	12,1	M 12	44,0
ND 10 B 08	10	6	3/8"	14,1	M 14	47,0
ND 10 B	10	6	3/8"	16,1	M 16	49,0
ND 13 B 08	12	8	1/2"	14,1	M 14	51,0
ND 13 B 16	12	8	1/2"	22,1	M 22	58,0
ND 16 B	16	10	5/8"	22,1	M 22	68,0

Undamaged nipples can be reused.

PAY 300 AOS — Swage fitting, DKOS

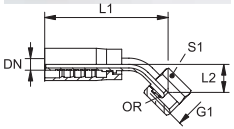


Connection 1: metric nut thread
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Sealing form 1: 24° outer cone with O-ring
Standard code: DKOS
Material: Steel

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PAY 306 AOS 04	6	4	1/4"	M 16 x 1.5	8	60,0	19	6.0 x 1.5
PAY 306 AOS	6	4	1/4"	M 18 x 1.5	10	65,0	22	7.5 x 1.5
PAY 308 AOS	8	5	5/16"	M 20 x 1.5	12	63,0	24	9.0 x 1.5
PAY 308 AOS 13	8	5	5/16"	M 24 x 1.5	16			12.0 x 2.0
PAY 310 AOS 08	10	6	3/8"	M 20 x 1.5	12			9.0 x 1.5
PAY 310 AOS	10	6	3/8"	M 22 x 1.5	14	71,0	27	12.0 x 2.0
PAY 313 AOS	12	8	1/2"	M 24 x 1.5	16	78,0	30	12.0 x 2.0
PAY 313 AOS 16	12	8	1/2"	M 30 x 2	20			16.0 x 2.5
PAY 316 AOS	16	10	5/8"	M 30 x 2	20	91,0	36	16.0 x 2.5
PAY 320 AOS	19	12	3/4"	M 36 x 2	25	96,0	46	20.0 x 2.5
PAY 325 AOS	25	16	1"	M 42 x 2	30	98,0	50	25.0 x 2.5
PAY 332 AOS	31	20	1.1/4"	M 52 x 2	38	113,0	60	33.0 x 2.5

PAY 300 AOS 45 — Swage fitting, DKOS angle 45°

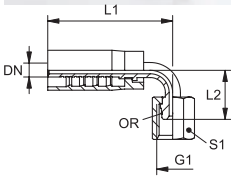


Connection 1: metric nut thread
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Sealing form 1: 24° outer cone with O-ring
Standard code: DKOS
Material: Steel

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PAY 306 AOS 45	6	4	1/4"	M 18 x 1.5	10	82,0	24,0	22	7.5 x 1.5
PAY 308 AOS 45	8	5	5/16"	M 20 x 1.5	12	76,0	20,0	24	9.0 x 1.5
PAY 310 AOS 08 45	10	6	3/8"	M 20 x 1.5	12	81,0	19,0	24	9.0 x 1.5
PAY 313 AOS 45	12	8	1/2"	M 24 x 1.5	16	96,0	23,0	30	12.0 x 2.0
PAY 316 AOS 45	16	10	5/8"	M 30 x 2	20	120,0	30,0	36	16.0 x 2.5
PAY 320 AOS 45	19	12	3/4"	M 36 x 2	25	137,0	37,0	46	20.0 x 2.5
PAY 325 AOS 45	25	16	1"	M 42 x 2	30	136,0	43,0	50	25.0 x 2.5

PAY 300 AOS 90 — Swage fitting, DKOS angle 90°



Connection 1: metric nut thread
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Sealing form 1: 24° outer cone with O-ring
Standard code: DKOS
Material: Steel

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PAY 308 AOS 90	8	5	5/16"	M 20 x 1.5	12	64,0	36,0	24	9.0 x 1.5
PAY 313 AOS 90	12	8	1/2"	M 24 x 1.5	16	85,0	44,0	30	12.0 x 2.0
PAY 316 AOS 90	16	10	5/8"	M 30 x 2	20	105,0	61,0	36	16.0 x 2.5

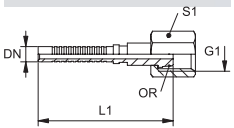
PNY 2100 AOS — Swage nipple, DKOS

Connection 1: metric nut thread
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Material: Steel

Sealing form 1: 24° outer cone with O-ring
Standard code: DKOS
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	S1	OR
PNY 2106 AOS 04	6	4	1/4"	M 16 x 1.5	8	19	6.0 x 1.5
PNY 2106 AOS	6	4	1/4"	M 18 x 1.5	10	22	7.5 x 1.5

Appropriate ferrule: PHY 2106.



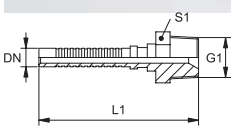
PNY 2100 HN — Swage nipple, AGN

Connection 1: NPT external threads
Standard: SAE J516
SAE J514
Material: Steel

Sealing form 1: thread seal, additional 60° inner cone.
Standard code: AGN
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	S1
PNY 2106 HN	6	4	1/4"	1/4" -18 NPT	14
PNY 2106 HN 10	6	4	1/4"	3/8" -18 NPT	19

Appropriate ferrule: PHY 2106.

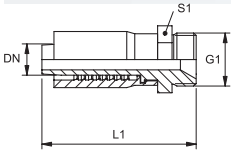


TRP HB — Swage fitting, AGR

Connection 1: BSP external thread, cylindrical
Standard: ISO 228-1
ISO 8434-6
BS 5200
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Sealing form 1: 60° inner cone
Standard code: AGR
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	S1
TRP 04 HB 02	5	3	3/16"	G 1/8" -28	49,0	14
TRP 13 HB	12	8	1/2"	G 1/2" -14	73,0	24

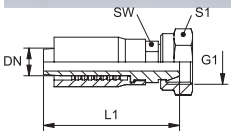


TRP A — Swage fitting, DKM

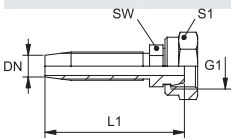
Connection 1: metric nut thread
Standard: DIN 3863
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised

Sealing form 1: 60° sealing head
Standard code: DKM
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	SW mm	S1
TRP 04 A	5	3	3/16"	M 12 x 1.5	55,0	10	17
TRP 04 A 08	5	3	3/16"	M 16 x 1.5	55,0	14	22
TRP 06 A	6	4	1/4"	M 14 x 1.5	61,0	14	19
TRP 06 A 08	6	4	1/4"	M 16 x 1.5	61,0	14	22
TRP 08 A	8	5	5/16"	M 16 x 1.5	64,0	17	22
TRP 10 A	10	6	3/8"	M 18 x 1.5	69,0	19	22
TRP 13 A	12	8	1/2"	M 22 x 1.5	75,0	24	27



TRN A — Screw nipple, DKM



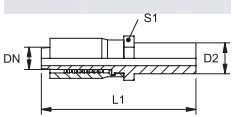
Connection 1: metric nut thread
Standard: DIN 3863
Material: Steel

Sealing form 1: 60° sealing head
Standard code: DKM
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	SW mm	S1
TRN 04 A	5	3	3/16"	M 12 x 1.5	42,5	10	17
TRN 06 A	6	4	1/4"	M 14 x 1.5	58,5	12	17
TRN 06 A 08	6	4	1/4"	M 16 x 1.5	59,5	14	19
TRN 08 A 10	8	5	5/16"	M 18 x 1.5	63,0	17	22
TRN 10 A	10	6	3/8"	M 18 x 1.5	69,5	17	22
TRN 10 A 13	10	6	3/8"	M 22 x 1.5	70,5	22	27

Choose the appropriate ferrule based on the hose type.

TRP FL — Swage fitting, BEL



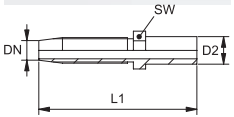
Connection 1: Pipe sockets
Standard: ISO 8434-1
Included in scope of supply: Swage nipple + swage ferrule
Surface protection: electro galvanised
Spare parts: VOM, Pre-assembly sockets

Sealing form 1: Cutting ring connection
Standard code: BEL
Material: Steel

Identification	DN	Size	Inches	Series	D2 mm	L1 mm	SW mm
TRP 04 FL	5	3	3/16"	L	6,0	57,0	10
TRP 10 FL 13	10	6	3/8"	L	15,0	77,0	19
TRP 13 FL	12	8	1/2"	L	15,0	83,0	24
TRP 13 FL 16	12	8	1/2"	L	18,0	83,0	24

Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...).

TRN FL / TRN FS — Screw nipple, BEL / BES



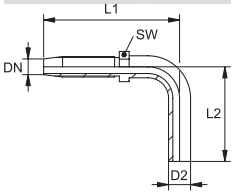
Connection 1: Pipe sockets
Standard: ISO 8434-1
Material: Steel
Spare parts: VOM, Pre-assembly sockets

Sealing form 1: Cutting ring connection
Standard code: BEL
Surface protection: electro galvanised

Identification	DN	Size	Inches	Series	D2 mm	L1 mm	SW mm
TRN 04 FL	5	3	3/16"	L	6,0	49,5	10
TRN 06 FL	6	4	1/4"	L	8,0	67,5	12
TRN 08 FL	8	5	5/16"	L	10,0	72,0	12
TRN 10 FL	10	6	3/8"	L	12,0	79,5	14
TRN 10 FL 13	10	6	3/8"	L	15,0	79,5	17
TRN 13 FL	12	8	1/2"	L	15,0	86,0	17
TRN 13 FL 16	12	8	1/2"	L	18,0	86,0	19
TRN 20 FL	19	10	5/8"	L	22,0	96,0	27
TRN 04 FS	5	3	3/16"	S	8,0	51,5	10
TRN 06 FS 04	6	4	1/4"	S	8,0	67,5	12
TRN 06 FS	6	4	1/4"	S	10,0	69,5	12
TRN 06 FS 08	6	4	1/4"	S	12,0	69,5	14
TRN 08 FS	8	5	5/16"	S	12,0	72,0	14
TRN 20 FS	19	12	3/4"	S	25,0	105,0	27

Choose the appropriate ferrule based on the hose type.Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...).

TRN FL 90 — Screw nipple, BEL angle 90°



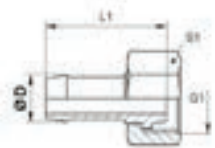
Connection 1: Pipe sockets
Standard: ISO 8434-1
Material: Steel
Spare parts: VOM, Pre-assembly sockets

Sealing form 1: Cutting ring connection
Standard code: BEL
Surface protection: electro galvanised

Identification	DN	Size	Inches	Series	D2 mm	L2 mm	L1 mm	SW mm
TRN 04 FL 90	5	3	3/16"	L	6,0	44,0	45,0	10

Choose the appropriate ferrule based on the hose type.Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...).

SIN AFL — Swage nipple, DKL



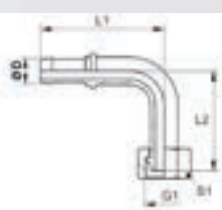
Connection 1: metric nut thread
Standard: similar to DIN 3863
Material: Steel

Sealing form 1: 24°/60° outer cone
Standard code: DKL
Surface protection: electro galvanised

Identification	DN	Size	Inches	Ø D mm	G1	L1 mm	S1
SIN 03 AFL 02	3	2	1/8"	5,0	M 10 x 1	27	12
SIN 04 AFL	4	3	3/16"	6,0	M 12 x 1.5	30	14
SIN 04 AFL 06	4	3	3/16"	6,0	M 14 x 1.5	31	17
SIN 04 AFL 08	4	3	3/16"	6,0	M 16 x 1.5	31	19
SIN 06 AFL	6	4	1/4"	8,0	M 14 x 1.5	32	17
SIN 06 AFL 08	6	4	1/4"	8,0	M 16 x 1.5	33	19
SIN 08 AFL	8	5	5/16"	10,0	M 16 x 1.5	33	19
SIN 08 AFL 10	8	5	5/16"	10,0	M 18 x 1.5	33	22
SIN 10 AFL	10	6	3/8"	12,0	M 18 x 1.5	35	22
SIN 13 AFL	12	8	1/2"	15,0	M 22 x 1.5	43	27
SIN 13 AFL 16	12	8	1/2"	15,0	M 26 x 1.5	41	32
SIN 16 AFL	16	10	5/8"	18,0	M 26 x 1.5	42	32

Choose the appropriate ferrule based on the hose type.

SIN AFL 90 — Swage nipple, DKL angle 90°



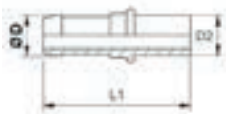
Connection 1: metric nut thread
Standard: similar to DIN 3863
Material: Steel

Sealing form 1: 24°/60° outer cone
Standard code: DKL
Surface protection: electro galvanised

Identification	DN	Size	Inches	Ø D mm	G1	L1 mm	L2 mm	S1
SIN 03 AFL 02 90	3	2	1/8"	5,0	M 10 x 1	37	27	12
SIN 04 AFL 90	4	3	3/16"	6,0	M 12 x 1.5	51	31	14
SIN 06 AFL 90	6	4	1/4"	8,0	M 14 x 1.5	52	38	17
SIN 08 AFL 90	8	5	5/16"	10,0	M 16 x 1.5	58	45	19
SIN 10 AFL 90	10	6	3/8"	12,0	M 18 x 1.5	66	49	22
SIN 13 AFL 90	12	8	1/2"	15,0	M 22 x 1.5	79	62	27

Choose the appropriate ferrule based on the hose type.

SIN FL — Swage nipple, BEL



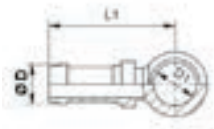
Connection 1: Pipe sockets
Standard: ISO 8434-1
Material: Steel
Spare parts: VOM, Pre-assembly sockets

Sealing form 1: Cutting ring connection
Standard code: BEL
Surface protection: electro galvanised

Identification	DN	Size	Inches	Ø D mm	Ø d2 mm	L1 mm
SIN 03 FL 02	3	2	1/8"		4	54
SIN 04 FL 03	4	3	3/16"	6,0	5	48
SIN 04 FL	4	3	3/16"	6,0	6	54
SIN 06 FL	6	4	1/4"	8,0	8	51
SIN 08 FL	8	5	5/16"	10,0	10	51
SIN 10 FL	10	6	3/8"	12,0	12	57
SIN 13 FL	12	8	1/2"	15,0	15	61
SIN 16 FL	16	10	5/8"	18,0	18	76

Do not use for new designs; we recommend: SIN...AFL.Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...).Choose the appropriate ferrule based on the hose type.

SIN B — Swage nipple, RGN



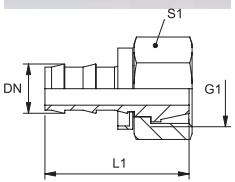
Connection 1: Banjo for metric hollow screw
Standard: DIN 7642
Material: Steel

Sealing form 1: Sealed by copper ring
Standard code: RGN
Surface protection: electro galvanised

Identification	DN	Size	Inches	Ø D mm	D1 mm	for hollow screw
SIN 03 B 02	3	2	1/8"	5,0	8	M 8
SIN 04 B	4	3	3/16"	6,0	10	M 10
SIN 04 B 06	4	3	3/16"	6,0	12	M 12
SIN 04 B 08	4	3	3/16"	6,0	14	M 14
SIN 06 B 04	6	4	1/4"	8,0	10	M 10
SIN 06 B	6	4	1/4"	8,0	12	M 12
SIN 06 B 08	6	4	1/4"	8,0	14	M 14
SIN 08 B 06	8	5	5/16"	10,0	12	M 12
SIN 08 B	8	5	5/16"	10,0	14	M 14
SIN 08 B 10	8	5	5/16"	10,0	16	M 16
SIN 08 B 13	8	5	5/16"	10,0	18	M 18
SIN 10 B	10	6	3/8"	12,0	16	M 16
SIN 10 B 13	10	6	3/8"	12,0	18	M 18
SIN 13 B	12	8	1/2"	15,0	18	M 18
SIN 13 B 16	12	8	1/2"	15,0	22	M 22
SIN 13 B 20	12	8	1/2"	15,0	26	M 26
SIN 16 B	16	10	5/8"	18,0	22	M 22
SIN 16 B 20	16	10	5/8"	18,0	26	M 26

Choose the appropriate ferrule based on the hose type.

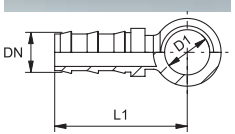
TR A — Drive type nipple, DKM



Connection 1: metric nut thread
Standard: DIN 3863
Surface protection: electro galvanised
Sealing form 1: 60° sealing head
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	S1
TR 04 A	5	3	3/16"	M 12 x 1.5	28	14
TR 06 A	6	4	1/4"	M 14 x 1.5	28	17
TR 06 A 08	6	4	1/4"	M 16 x 1.5	28	19
TR 08 A 06	8	5	5/16"	M 14 x 1.5	34	19
TR 08 A	8	5	5/16"	M 16 x 1.5	34	19
TR 10 A 08	10	6	3/8"	M 16 x 1.5	34	19
TR 10 A	10	6	3/8"	M 18 x 1.5	34	22
TR 13 A	12	8	1/2"	M 22 x 1.5	45	27

TR B — Drive type nipple, RGN



Connection 1: Metric banjos
Standard: DIN 7642
Material: Steel
Sealing form 1: Sealed by copper ring
Standard code: RGN
Surface protection: electro galvanised

Identification	DN	Size	Inches	D1 mm	L1 mm
TR 04 B 02	5	3	3/16"	8	24
TR 04 B	5	3	3/16"	10	26
TR 06 B 04	6	4	1/4"	10	26
TR 06 B	6	4	1/4"	12	28
TR 06 B 08	6	4	1/4"	14	28
TR 06 B 10	6	4	1/4"	16	30
TR 08 B 06	8	5	5/16"	12	34
TR 08 B	8	5	5/16"	14	34
TR 08 B 10	8	5	5/16"	16	36
TR 10 B 08	10	6	3/8"	14	34
TR 10 B	10	6	3/8"	16	36

KANA AB — Screw fitting for drain cleaning hose

Connection 1: BSP external thread, cylindrical
Standard code: DKR
Material: Steel
Standard: ISO 228-1
ISO 8434-6
BS 5200

Sealing form 1: 60° outer cone
Included in scope of supply: Screw nipple + screw mount
Surface protection: electro galvanised

Identification	DN*	Size	Inches	G1
KANA 13 AB	12	8	1/2"	G 1/2" -14
KANA 20 AB	19	12	3/4"	G 3/4" -14
KANA 20 AB 25	19	12	3/4"	G 1" -11
KANA 25 AB	25	16	1"	G 1" -11

DN = Nominal diameter, nominal width

KANA HB — Screw fitting for drain cleaning hose

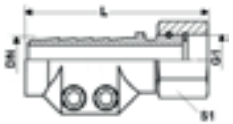
Connection 1: BSP external thread, cylindrical
Standard code: AGR
Material: Steel
Standard: ISO 228-1
ISO 8434-6
BS 5200

Sealing form 1: 60° inner cone
Included in scope of supply: Screw nipple + screw mount
Surface protection: electro galvanised

Identification	DN*	Size	Inches	G1
KANA 13 HB	12	8	1/2"	G 1/2" -14
KANA 20 HB	19	12	3/4"	G 3/4" -14
KANA 25 HB	25	16	1"	G 1" -11

DN = Nominal diameter, nominal width

DAMPF AR VA — Steam fittings AR, with stainless steel clamping shell



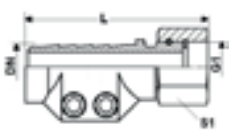
Application: Hot water or saturated steam applications
Sealing form 1: flat sealing
Standard: DIN EN 14423
thread standard ISO 228/DIN 2999
Included in scope of supply: with clamping shells and seal
Material: Stainless steel
Pressed brass clamping shells

Connection 1: BSP nut thread
Working pressure: up to 18 bar
Standard code: DKR flat
Temperature range: saturated steam up to +210 °C
hot water up to +120 °C

Identification	DN	Size	Inches	G1	L mm	Clamping range (mm)	S1 mm
DAMPF 13 AR VA	12	8	1/2"	G 1/2" -14	88,0	24 - 26	27
DAMPF 19 AR VA	19	12	3/4"	G 3/4" -14	92,0	32 - 34	32
DAMPF 25 AR VA	25	16	1"	G 1" -11	93,0	39 - 41	41
DAMPF 32 AR VA	31	20	1.1/4"	G 1.1/4" -11	97,5	47 - 50	
DAMPF 38 AR VA	38	24	1.1/2"	G 1.1/2" -11	120,0	53 - 56	55
DAMPF 50 AR VA	51	32	2"	G 2" -11	131,0	67 - 69	70

DN = Nominal diameter, nominal width

DAMPF AR MG — Steam fittings AR, with clamping brass shell



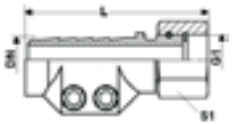
Application: Hot water or saturated steam applications
Sealing form 1: flat sealing
Standard: DIN EN 14423
thread standard ISO 228/DIN 2999
Included in scope of supply: with clamping shells and seal
Material: Brass
Pressed brass clamping shells

Connection 1: BSP nut thread
Working pressure: up to 18 bar
Standard code: DKR flat
Temperature range: saturated steam up to +210 °C
hot water up to +120 °C

Identification	DN	Size	Inches	G1	L mm	Clamping range (mm)	S1 mm
DAMPF 13 AR MG	12	8	1/2"	G 1/2" -14	88,0	24 - 26	27
DAMPF 19 AR MG	19	12	3/4"	G 3/4" -14	92,0	32 - 34	32
DAMPF 25 AR MG	25	16	1"	G 1" -11	93,0	39 - 41	41
DAMPF 32 AR MG	31	20	1.1/4"	G 1.1/4" -11	97,5	47 - 50	
DAMPF 38 AR MG	38	24	1.1/2"	G 1.1/2" -11	120,0	53 - 56	55
DAMPF 50 AR MG	51	32	2"	G 2" -11	131,0	67 - 69	70

DN = Nominal diameter, nominal width

DAMPF AR — Steam fittings AR, with steel clamping shell



Application: Hot water or saturated steam applications
Sealing form 1: flat sealing
Standard: DIN EN 14423
thread standard ISO 228/DIN 2999
Included in scope of supply: with clamping shells and seal
Material: Steel
Pressed brass clamping shells

Connection 1: BSP nut thread
Working pressure: up to 18 bar
Standard code: DKR flat
Temperature range: saturated steam up to +210 °C
hot water up to +120 °C
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L mm	Clamping range (mm)	S1 mm
DAMPF 13 AR	12	8	1/2"	G 1/2" -14	88,0	24 - 26	27
DAMPF 19 AR	19	12	3/4"	G 3/4" -14	92,0	32 - 34	32
DAMPF 25 AR	25	16	1"	G 1" -11	93,0	39 - 41	41
DAMPF 32 AR	31	20	1.1/4"	G 1.1/4" -11	97,5	47 - 50	50
DAMPF 38 AR	38	24	1.1/2"	G 1.1/2" -11	120,0	53 - 56	55
DAMPF 50 AR	51	32	2"	G 2" -11	131,0	67 - 69	70

DN = Nominal diameter, nominal width

DAMPF HR VA — Steam fittings HR, with steel clamping shell

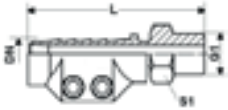
Application: Hot water or saturated steam applications
Sealing form 1: flat sealing
Standard: DIN EN 14423
thread standard ISO 228/DIN 2999
Included in scope of supply: with clamping shells
Material: Stainless steel
Pressed brass clamping shells

Connection 1: BSP external thread, cylindrical
Working pressure: up to 18 bar
Standard code: AGR-Flat
Temperature range: saturated steam up to +210 °C
hot water up to +120 °C

Identification	DN	Size	Inches	G1	L mm	Clamping range (mm)	S1 mm
DAMPF 13 HR VA	12	8	1/2"	G 1/2" -14	95,0	24 - 26	22
DAMPF 19 HR VA	19	12	3/4"	G 3/4" -14	95,0	32 - 34	27
DAMPF 25 HR VA	25	16	1"	G 1" -11	100,0	39 - 41	36
DAMPF 32 HR VA	31	20	1.1/4"	G 1.1/4" -11	105,0	47 - 50	46
DAMPF 38 HR VA	38	24	1.1/2"	G 1.1/2" -11	125,0	53 - 56	50
DAMPF 50 HR VA	51	32	2"	G 2" -11	140,0	67 - 69	60

DN = Nominal diameter, nominal width

DAMPF HR MG — Steam fittings HR, with brass clamping shell



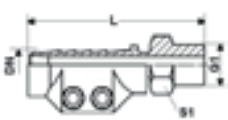
Application: Hot water or saturated steam applications
Sealing form 1: flat sealing
Standard: DIN EN 14423
thread standard ISO 228/DIN 2999
Included in scope of supply: with clamping shells
Material: Brass
Pressed brass clamping shells

Connection 1: BSP external thread, cylindrical
Working pressure: up to 18 bar
Standard code: AGR-Flat
Temperature range: saturated steam up to +210 °C
hot water up to +120 °C

Identification	DN	Size	Inches	G1	L mm	Clamping range (mm)	S1 mm
DAMPF 13 HR MG	12	8	1/2"	G 1/2" -14	95,0	24 - 26	22
DAMPF 19 HR MG	19	12	3/4"	G 3/4" -14	95,0	32 - 34	27
DAMPF 25 HR MG	25	16	1"	G 1" -11	100,0	39 - 41	36
DAMPF 32 HR MG	31	20	1.1/4"	G 1.1/4" -11	105,0	47 - 50	46
DAMPF 38 HR MG	38	24	1.1/2"	G 1.1/2" -11	125,0	53 - 56	50
DAMPF 50 HR MG	51	32	2"	G 2" -11	140,0	67 - 69	60

DN = Nominal diameter, nominal width

DAMPF HR — Steam fittings HR, with steel clamping shell



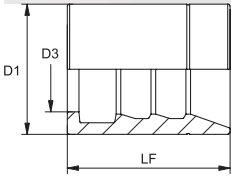
Application: Hot water or saturated steam applications
Sealing form 1: flat sealing
Standard: DIN EN 14423
thread standard ISO 228/DIN 2999
Included in scope of supply: with clamping shells
Material: Steel
Pressed brass clamping shells

Connection 1: BSP external thread, cylindrical
Working pressure: up to 18 bar
Standard code: AGR-Flat
Temperature range: saturated steam up to +210 °C
hot water up to +120 °C
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L mm	Clamping range (mm)	S1 mm
DAMPF 13 HR	12	8	1/2"	G 1/2" -14	95,0	24 - 26	22
DAMPF 19 HR	19	12	3/4"	G 3/4" -14	95,0	32 - 34	27
DAMPF 25 HR	25	16	1"	G 1" -11	100,0	39 - 41	36
DAMPF 32 HR	31	20	1.1/4"	G 1.1/4" -11	105,0	47 - 50	46
DAMPF 38 HR	38	24	1.1/2"	G 1.1/2" -11	125,0	53 - 56	50
DAMPF 50 HR	51	32	2"	G 2" -11	140,0	67 - 69	60

DN = Nominal diameter, nominal width

PHD 100 — Swage ferrule for braided hose

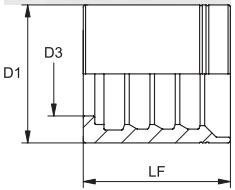


Ferrule type: Skive ferrule
Material: Steel
Surface protection: electro galvanised
Product versions: PHD 100 VA, Swage ferrule for braided hose, Stainless steel

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHD 104	5	3	3/16"	17	8,5	26,0
PHD 106	6	4	1/4"	20	10,9	31,0
PHD 108	8	5	5/16"	21	12,8	31,0
PHD 110	10	6	3/8"	24	14,0	31,0
PHD 113	12	8	1/2"	28	18,3	35,0
PHD 116	16	10	5/8"	31	21,6	36,0
PHD 120	19	12	3/4"	35	24,8	42,5
PHD 125	25	16	1"	42	30,5	50,5
PHD 132	31	20	1.1/4"	52	37,7	59,0
PHD 140	38	24	1.1/2"	58	44,2	63,0
PHD 150	51	32	2"	71	57,2	70,0

DN = Nominal diameter, nominal width
The ferrule assignment depends on the hose type.

PHD 200 — Swage ferrule for braided hose

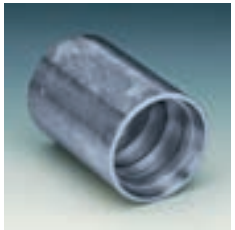


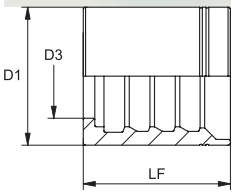
Ferrule type: Skive ferrule
Material: Steel
Surface protection: electro galvanised
Product versions: PHD 200 VA, Swage ferrule for braided hose, Stainless steel

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHD 204	5	3	3/16"	21	8,5	26,0
PHD 206	6	4	1/4"	22	11,4	30,0
PHD 208	8	5	5/16"	23	12,5	30,0
PHD 210	10	6	3/8"	26	14,5	31,0
PHD 213	12	8	1/2"	30	18,3	32,0
PHD 220	19	12	3/4"	38	24,4	42,5
PHD 225	25	16	1"	46	30,5	51,0
PHD 232	31	20	1.1/4"	57	38,0	58,0
PHD 240	38	24	1.1/2"	65	44,3	62,0
PHD 250	51	32	2"	79	57,0	73,5
PHD 260	60	40	2.3/8"	84	67,1	79,0
PHD 276	76	48	3"	105	81,8	80,0

DN = Nominal diameter, nominal width
The ferrule assignment depends on the hose type.

PHD 400 — Swage ferrule, 4 SP



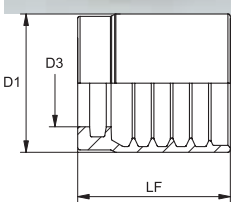


Ferrule type: Skive ferrule
Material: Steel
Surface protection: electro galvanised
Product versions: PHD 400 VA, Swage ferrule, 4 SP, Stainless steel

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHD 416	16	10	5/8"	33,0	21,7	38,0

DN = Nominal diameter, nominal width

PHN 200 — Swage ferrule for braided hose

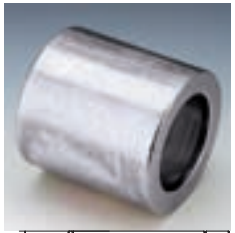


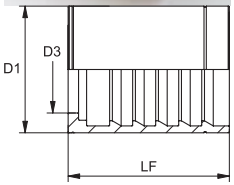
Ferrule type: Non-skive ferrule
Material: Steel
Surface protection: electro galvanised
Product versions: PHN 200 VA, Swage ferrule for braided hose, Stainless steel

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHN 204	5	3	3/16"	21,0	9,5	23,5
PHN 206	6	4	1/4"	23,0	11,4	30,0
PHN 208	8	5	5/16"	24,0	13,2	30,0
PHN 210	10	6	3/8"	26,0	14,5	31,0
PHN 213	12	8	1/2"	29,0	18,3	32,0
PHN 216	16	10	5/8"	33,0	21,6	36,0
PHN 220	19	12	3/4"	37,0	24,4	42,5
PHN 225	25	16	1"	46,0	31,0	51,0
PHN 232	31	20	1.1/4"	59,0	38,3	57,5
PHN 240	38	24	1.1/2"	67,0	44,0	60,5
PHN 250	51	32	2"	80,0	57,0	74,0

DN = Nominal diameter, nominal width
The ferrule assignment depends on the hose type.

PHT 200 Swage ferrule, 2 TE



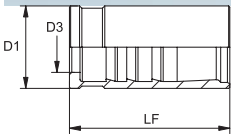


Ferrule type: Non-skive ferrule
Surface protection: electro galvanised
Material: Steel

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHT 204	5	3	3/16"	17,0	9,8	27,3
PHT 06	6	4	1/4"	19,0	11,6	28,0
PHT 08	8	5	5/16"	22,3	12,6	30,2
PHT 10	10	6	3/8"	23,0	14,9	29,5
PHT 13	12	8	1/2"	27,0	18,5	31,0
PHT 16	16	10	5/8"	32,0	21,8	33,0
PHT 20	19	12	3/4"	35,0	24,6	37,5
PHT 25	25	16	1"	42,0	30,8	45,5
PHT 32	31	20	1.1/4"	48,0	37,9	55,0
PHT 40	38	24	1.1/2"	57,2	44,2	63,2
PHT 50	51	32	2"	76,0	56,8	78,5

DN = Nominal diameter, nominal width
The ferrule assignment depends on the hose type.

PKN 100 Swage ferrule for braided hose

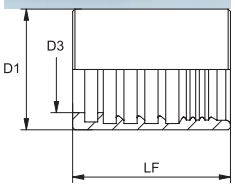


Ferrule type: Non-skive ferrule
Surface protection: electro galvanised
Material: Steel

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PKN 106	6	4	1/4"	18,0	11,2	30,5
PKN 108	8	5	5/16"	19,0	12,7	32,0
PKN 110	10	6	3/8"	22,0	14,5	33,0
PKN 113	12	8	1/2"	26,0	18,3	34,0

DN = Nominal diameter, nominal width
The ferrule assignment depends on the hose type.

PHY 100 — Swage ferrule, NY 100

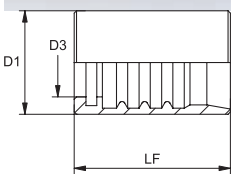


Ferrule type: Non-skive ferrule
Material: Steel
Surface protection: electro galvanised

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHY 104	5	3	3/16"	16,0	9,5	28,0
PHY 106	6	4	1/4"	19,0	11,6	29,5
PHY 108	8	5	5/16"	22,0	12,7	29,5
PHY 110	10	6	3/8"	23,0	14,3	32,8
PHY 113	12	8	1/2"	26,0	18,6	34,0
PHY 116	16	10	5/8"	30,0	22,0	36,5
PHY 120	19	12	3/4"	33,0	25,7	41,0
PHY 125	25	16	1"	40,0	31,8	41,0

DN = Nominal diameter, nominal width

PHY 700 N — Swage ferrule, NY 700

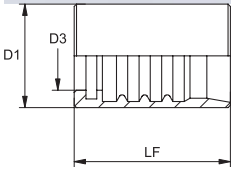


Ferrule type: Non-skive ferrule
Material: Steel
Surface protection: electro galvanised
Product versions: PHY 700 VA, Swage ferrule, NY 700, Stainless steel

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHY 704 N	5	3	3/16"	15,0	9,5	29,0
PHY 706 N	6	4	1/4"	18,0	10,8	31,0
PHY 708 N	8	5	5/16"	20,0	12,5	31,0
PHY 710 N	10	6	3/8"	22,0	14,6	33,2
PHY 713 N	12	8	1/2"	27,0	18,3	37,0

DN = Nominal diameter, nominal width

PHY 800 N — Swage ferrule, NY 800

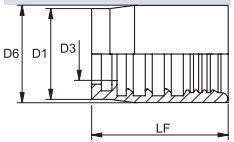


Ferrule type: Non-skive ferrule
Material: Steel
Surface protection: electro galvanised

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHY 806 N	6	4	1/4"	19,0	11,9	31,0
PHY 808 N	8	5	5/16"	21,0	12,7	31,0
PHY 810 N	10	6	3/8"	23,0	14,8	33,0

DN = Nominal diameter, nominal width

PHY 2100 — Swage ferrule, NY 2100

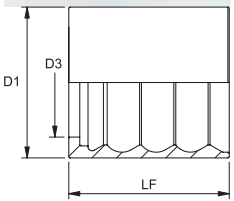


Ferrule type: Non-skive ferrule
Material: Steel
Surface protection: electro galvanised

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHY 2106	6	4	1/4"	22,0	9,2	43,0

DN = Nominal diameter, nominal width

PSGB 100 Swage ferrule, SGB 100

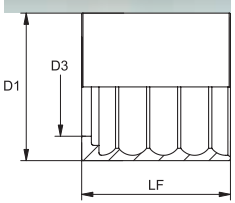


Ferrule type: Non-skive ferrule
Surface protection: electro galvanised
Material: Steel

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PSGB 120	19	12	3/4"	39,5	25,0	35,0
PSGB 125	25	16	1"	46,0	32,7	44,0
PSGB 132	31	20	1.1/4"	55,0	39,8	58,5
PSGB 140	38	24	1.1/2"	65,0	45,8	63,0
PSGB 150	51	32	2"	75,0	59,8	78,0
PSGB 160	60	40	2.3/8"	85,0	67,1	79,0

DN = Nominal diameter, nominal width

PSGD 100 Swage ferrule, SGD 100

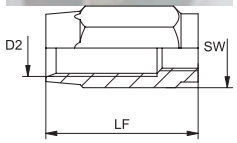


Ferrule type: Non-skive ferrule
Surface protection: electro galvanised
Material: Steel

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PSGD 125	25	16	1"	46,0	31,5	50,0
PSGD 150	51	32	2"	80,0	58,0	80,0
PSGD 176	76	48	3"	108,0	85,5	80,0

DN = Nominal diameter, nominal width

AFH 100 Screw ferrule, TAF 100

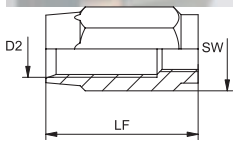


Ferrule type: Screw ferrule
Material: Steel
Surface protection: electro galvanised

Identification	DN*	Size	Inches	D2 mm	LF mm	SW mm
AFH 104	4	3	3/16"	7,9	25,0	12
AFH 106	6	4	1/4"	11,0	36,0	17
AFH 108	8	5	5/16"	13,0	38,0	19
AFH 110	10	6	3/8"	15,5	44,5	22
AFH 113	12	8	1/2"	20,1	51,0	27

DN = Nominal diameter, nominal width

BFH 200 Screw ferrule, TBF 200



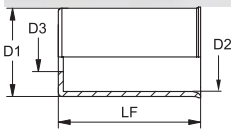
Ferrule type: Screw ferrule
Material: Steel
Surface protection: electro galvanised

Identification	DN*	Size	Inches	D2 mm	LF mm	SW mm
BFH 204	4	3	3/16"	8,8	25,0	12
BFH 206	6	4	1/4"	12,4	36,0	17
BFH 208	8	5	5/16"	14,0	38,0	19
BFH 210	10	6	3/8"	17,5	44,5	22
BFH 213	12	8	1/2"	21,0	51,0	27
BFH 220	19	12	3/4"	26,5	57,0	30

DN = Nominal diameter, nominal width

SIH 100 - SIH 700

Swage ferrule for SI + textile hose

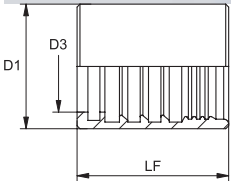


Ferrule type: Non-skive ferrule
Surface protection: electro galvanised
Material: Steel

Identification	DN*	Size	Inches	D1 mm	D2 mm	D3 mm	LF mm
SIH 103	3	2	-	11,3	10,0	6,5	17
SIH 104	4	3	3/16"	13,2	12,0	7,5	20
SIH 106	6	4	1/4"	14,8	13,5	10,0	20
SIH 108	8	5	5/16"	17,0	16,0	11,7	20
SIH 110	10	6	3/8"	20,6	19,0	13,8	26
SIH 113	12	8	1/2"	26,5	24,5	17,0	33
SIH 116	16	10	5/8"	30,0	28,0	20,5	34
SIH 204	4	3	3/16"	13,2	12,0	7,5	17
SIH 206	6	4	1/4"	14,8	13,5	10,0	20
SIH 304	4	3	3/16"	14,6	13,5	7,5	20
SIH 306	6	4	1/4"	16,3	15,0	10,0	20
SIH 308	8	5	5/16"	18,5	17,0	11,7	21
SIH 310	10	6	3/8"	23,9	22,0	15,6	32
SIH 404	4	3	3/16"	14,6	13,5	7,5	20
SIH 408	8	5	5/16"	19,6	18,0	13,8	21
SIH 413	12	8	1/2"	28,3	26,5	19,5	33
SIH 504	4	3	3/16"	10,3	10,3	5,5	17
SIH 510	10	6	3/8"	16,1	15,0	11,7	20
SIH 513	12	8	1/2"	19,6	18,0	13,8	21
SIH 605	4	3	3/16"	12,1	11,0	6,5	17
SIH 606	6	4	1/4"	14,6	13,5	7,5	20
SIH 706	6	4	1/4"	16,4	15,0	7,5	20
SIH 713	12	8	1/2"	25,0	23,0	17,0	32

DN = Nominal diameter, nominal width

PHF 100 — Swage ferrule, TF 100



Ferrule type: Non-skive ferrule
Surface protection: electro galvanised
Product versions: PHF 100 VA, Swage ferrule, TF 100, Stainless steel
Material: Steel

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHF 104	5	3	3/16"	13	8,3	30
PHF 106	6	4	1/4"	15	10,6	32
PHF 108	8	5	5/16"	17	12,2	33
PHF 110	10	6	3/8"	19	13,7	33
PHF 113	12	8	1/2"	24	18,0	37
PHF 116	16	10	5/8"	27	21,5	37
PHF 120	19	12	3/4"	32	25,0	41
PHF 125	25	16	1"	38	31,0	41

DN = Nominal diameter, nominal width

GKS — Rubber antikink protection

Application: High pressure cleaning equipment
Temperature max.: 135 °C
Temperature min.: -50 °C
Material: Rubber

Identification	DN*	Inches	Internal Ø mm	Length mm	Colour
GKS 06	6	1/4"	14,3	120	black
GKS 08	8	5/16"	17,0	148	black
GKS 08 BLAU	8	5/16"	17,0	148	blue
GKS 08 GELB	8	5/16"	17,0	148	yellow
GKS 08 GRAU	8	5/16"	17,0	148	grey
GKS 08 ORANGE	8	5/16"	17,0	148	orange
GKS 08 ROT	8	5/16"	17,0	148	red
GKS 10	10	3/8"	19,5	148	black
GKS 10 BLAU	10	3/8"	19,5	148	blue
GKS 10 GELB	10	3/8"	19,5	148	yellow
GKS 10 GRAU	10	3/8"	19,5	148	grey
GKS 10 ORANGE	10	3/8"	19,5	148	orange
GKS 10 ROT	10	3/8"	19,5	148	red
GKS 13 BLAU	12	1/2"	23,9	148	blue
GKS 13 GRAU	12	1/2"	23,9	148	grey

DN = Nominal diameter, nominal width

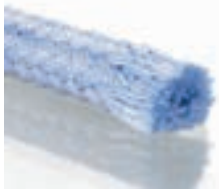
PKF — Antikink protection spring

Material: Spring steel

Surface protection: electro galvanised

Identification	Internal Ø mm	Length mm	Wire Ø mm
PKF 17	18,0	210	2,5
PKF 22	22,3	210	2,5
PKF 23	23,0	210	2,5
PKF 26	25,7	210	3,0
PKF 29	29,3	230	3,5
PKF 34	34,0	250	3,5
PKF 42	42,0	280	3,5
PKF 52	53,1	360	4,0

FBS — Silicate fabric heat protection hose



Description Abrasion resistant and tear proof insulating fabric, asbestos free, loss on ignition approx. 2%, good insulating properties due to low heat storage, excellent resistance to liquid metals, flying sparks, dross, resistant against oils, greases and solvents

Application: Foundries, steelworks, glassworks, shipyards etc.

Colour: bluish

Temperature max.: 750 °C

Application: as contact protection for hot and cold hoses for protection in the high temperature range, also particularly against liquid metals and splashed metal in the iron industry

Temperature min.: -25 °C

Material: Calcium silicate fibres

Identification	Internal Ø mm	Identification	Internal Ø mm
FBS 014	14	FBS 040	40
FBS 016	16	FBS 042	42
FBS 018	18	FBS 045	45
FBS 020	20	FBS 047	47
FBS 022	22	FBS 050	50
FBS 024	24	FBS 055	55
FBS 025	25	FBS 056	56
FBS 026	26	FBS 060	60
FBS 028	28	FBS 068	70
FBS 030	30	FBS 080	80
FBS 032	32	FBS 100	100
FBS 035	35	FBS 120	100
FBS 038	38	FBS 130	130

FBSB — Heat protection hose, silicate, silicone

Description As for FBS, but with additional silicone cover, good light, UV and weather proof, water and oil repellent effect. Provides outstanding protection against liquid metals and metal sprays.
Application: Foundries, steelworks, glassworks, shipyards etc.
Colour: smooth, rust red
Temperature min.: -65 °C
Temperature max.: 260 °C
Temperature: from inner diameter 6 mm to 127 mm: 1090°C for 15-20 min. ; 1650°C for 15-30 sec.

Identification	Internal Ø mm	Identification	Internal Ø mm
FBSB 006	6	FBSB 064	64
FBSB 008	8	FBSB 070	70
FBSB 010	10	FBSB 076	76
FBSB 013	13	FBSB 083	83
FBSB 016	16	FBSB 089	89
FBSB 019	19	FBSB 095	95
FBSB 022	22	FBSB 102	102
FBSB 025	25	FBSB 114	114
FBSB 029	29	FBSB 127	127
FBSB 032	32	FBSB 160	160
FBSB 035	35	FBSB 170	170
FBSB 038	38	FBSB 180	180
FBSB 041	41	FBSB 200	200
FBSB 044	44	FBSB 220	220
FBSB 051	51	FBSB 250	250
FBSB 057	57	FBSB 300	300

Permit from Germanischer Lloyd, DIN 5510-2; MSHA for internal diameter between 13 mm and 127 mmPermit from Germanischer Lloyd for internal diameter above 160 mmAbove internal diameter 160 mm: Max. temperature: 300 °C

FBSS — Heat protection hose, glass-fibre, silicone

Application: Foundries, steelworks, glassworks, shipyards etc.
Colour: brown
Temperature min.: -60 °C
Temperature max.: 250 °C

Identification	Internal Ø mm	External Ø mm	Wall thickness mm
FBSS 015	15	16,2	0,6
FBSS 018	18	18,4	0,7
FBSS 020	20	21,4	0,7
FBSS 025	25	26,4	0,7
FBSS 030	30	31,4	0,7
FBSS 035	35	36,4	0,7
FBSS 040	40	41,6	0,8
FBSS 042	42	43,6	0,8
FBSS 045	45	46,6	0,8
FBSS 050	50	51,6	0,8

SSK — Plastic abrasion protection

Application: Hose lines that are subjected to a shearing load during movement.
Temperature max.: 120 °C
Colour: black
Material: Polyamide 6

Identification	Internal Ø mm	External Ø mm
SSK 07	7,5	10,0
SSK 09	9,5	12,0
SSK 13	13,0	16,0
SSK 16	15,0	18,0
SSK 20	20,0	24,0
SSK 25	25,0	29,0
SSK 30	30,0	35,4

SSK C — Plastic abrasion protection

Application: Hose lines that are subjected to a shearing load during movement.
Temperature min.: -20 °C
Material: Hard PVC
Colour: black
Temperature max.: 60 °C

Identification	Internal Ø mm	External Ø mm	Wall thickness mm
SSK C 07	7,5		
SSK C 09	9,5		
SSK C 13	13,0	16,2	1,6
SSK C 16	16,0	19,5	1,7
SSK C 23	20,0	25,0	2,3
SSK C 30	27,0	32,2	2,6
SSK C 40	35,0	40,0	2,8
SSK C 50	43,5	49,5	3,0
SSK C 60	64,0	72,5	4,3
SSK C 80	81,0	91,0	5,0

SGF Protective braiding

Description Zinc-plated steel wire protective braiding protects the hose against external damage such as flying sparks.
Application: Foundries, steelworks, glassworks, shipyards etc.
Material: Steel
Surface protection: electro galvanised

Identification	Internal Ø mm	External Ø mm	Min. bending radius mm
SGF 06	6	8,0	20
SGF 08	8	10,0	25
SGF 10	10	13,0	25
SGF 13	13	16,0	35
SGF 15	15	18,0	40
SGF 18	18	21,3	45
SGF 20	20	24,0	50
SGF 22	23	27,0	55
SGF 24	25	29,0	60
SGF 28	28	32,0	63
SGF 30	30	34,0	65
SGF 35	35	39,5	80
SGF 42	42	47,5	88
SGF 44	44	49,5	90

Identification	Internal Ø mm	External Ø mm	Min. bending radius mm
SGF 45	45	50,5	90
SGF 48	48	53,5	95
SGF 50	50	56,0	115
SGF 52	52	58,0	115
SGF 55	55	61,0	115
SGF 58	58	64,0	117
SGF 60	60	66,0	120
SGF 62	62	69,0	125
SGF 65	65	72,0	130
SGF 70	70	77,0	150
SGF 72	72	79,0	160
SGF 76	76	83,0	166
SGF 80	80	87,0	170

SSF Abrasion protection, flat

Application: Hose lines that are subjected to a shearing load during movement.
Material: Steel
Surface protection: electro galvanised

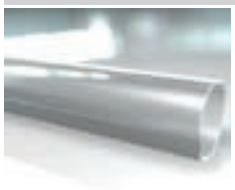
Identification	Internal Ø mm
SSF 13-1	13
SSF 15-1	15
SSF 17-1	17
SSF 19-1	19
SSF 21-1	21
SSF 23-1	23
SSF 26-1	26
SSF 29-1	29
SSF 33-1	34
SSF 41-1	41
SSF 48-1	48
SSF 54-1	54

SSR — Abrasion protection, round

Application: Hose lines that are subjected to a shearing load during movement.
Surface protection: electro galvanised
Product versions: SSR VA, Abrasion protection, round, VA, Stainless steel
Material: Steel

Identification	Internal Ø mm	External Ø mm	Wire Ø mm
SSR 14-2	14	18	2,0
SSR 18-2	18	22	2,0
SSR 20-2	20	24	2,0
SSR 23-2	23	27	2,0
SSR 25-2	25	29	2,0
SSR 27-2	27	31	2,0
SSR 27-2.5	27	32	2,5
SSR 30-2	30	34	2,0
SSR 34-3	34	40	3,0
SSR 41-3	41	47	3,0
SSR 48-3	48	54	3,0
SSR 51-3	51	57	3,0
SSR 52-3	52	58	3,0
SSR 54-3	54	60	3,0
SSR 56-3	56	62	3,0
SSR 68-3	68	74	3,0
SSR 73-3	73	79	3,0

SSTK-T — Shrink hose with adhesive coating



Colour: Transparent
Temperature max.: 110 °C
Temperature min.: -55 °C
Material: crosslinked modified polyolefin

Identification	Internal Ø mm	Wall thickness mm	Min. shrinkage Ø mm	Shrinking rate
SSTK 1906 T	19	2,25	6,0	3:1
SSTK 3208 T	32	2,54	8,0	4:1
SSTK 3913 T	39	2,54	13,0	3:1
SSTK 2408 T	24	2,54	8,0	3:1
SSTK 5213 T	52	2,54	13,0	4:1

ZURRGURT ROT — Red lashing strap

Application: Hose bundling
Additional feature: must not be used for lifting
Temperature max.: 100 °C
Colour: red
Temperature min.: -40 °C
Material: Polyester

Identification	Band width mm	Length mm
ZURRGURT 800 ROT	25	800

TGF ISO K — Hose bundling with velcro

Application: Hose bundling
Colour: black
Temperature max.: 100 °C
Inner layer: special nylon
Additional feature: with Velcro fastener

Identification	Internal Ø mm
TGF ISO K 050	50
TGF ISO K 075	75
TGF ISO K 100	100
TGF ISO K 125	125
TGF ISO K 150	150
TGF ISO K 175	175
TGF ISO K 200	200

Extremely abrasion resistant, flame retardant.

STOP FS — Stopflex hose clamp

Description High tensile steel clip with rubber insert for fitting on the hose.
Application: Personal protection against whipping hose
Surface protection: electro galvanised
Inner layer: Steel and rubber

Identification	Clamping range (mm)
STOP FS 11 11.5	11 - 11,5
STOP FS 12 12.5	12 - 12,5
STOP FS 13 13.5	13 -13,5
STOP FS 14 15	14 - 15
STOP FS 16 17	16 - 17
STOP FS 17 18	17 - 18
STOP FS 18 19	18 - 19
STOP FS 20 21	20 - 21
STOP FS 21 22	21 - 22
STOP FS 22 23	22 - 23
STOP FS 24 25	24 - 25
STOP FS 25 26	25 - 26
STOP FS 26 27	26 - 27
STOP FS 27 28	27 - 28
STOP FS 28 29	28 - 29
STOP FS 30 31	30 - 31
STOP FS 32 33	32 - 33
STOP FS 34 35	34 - 35
STOP FS 36 37	36 - 37
STOP FS 38 39	38 - 39
STOP FS 39 40	39 - 40
STOP FS 40 41	40 - 41

Identification	Clamping range (mm)
STOP FS 42 43	42 - 43
STOP FS 43 44	43 - 44
STOP FS 44 45	44 - 45
STOP FS 45 47	45 - 47
STOP FS 48 50	48 - 50
STOP FS 51 53	51 - 53
STOP FS 53 54	53 - 54
STOP FS 54 56	54 - 56
STOP FS 57 59	57 - 59
STOP FS 60 62	60 - 62
STOP FS 63 65	63 - 65
STOP FS 66 68	66 - 68
STOP FS 69 71	69 - 71
STOP FS 72 74	72 - 74
STOP FS 75 77	75 - 77
STOP FS 78 80	78 - 80
STOP FS 81 83	81 - 83
STOP FS 84 86	84 - 86
STOP FS 87 89	87 - 89
STOP FS 90 92	90 - 92
STOP FS 93 95	93 - 95

STOP ROV — Stopflex mounting, pipe fitting

Application: Personal protection against whipping hose
Material: Steel

Identification	Mounting hole mm	Length mm
STOP ROV 145 L 300	14,5	300
STOP ROV 170 L 300	17,0	300
STOP ROV 185 L 300	18,5	300
STOP ROV 205 L 300	20,5	300
STOP ROV 225 L 300	22,5	300
STOP ROV 245 L 300	24,5	300
STOP ROV 265 L 300	26,5	300
STOP ROV 305 L 300	30,5	300
STOP ROV 340 L 450	34,0	450
STOP ROV 365 L 450	36,5	450
STOP ROV 425 L 450	42,5	450
STOP ROV 455 L 450	45,5	450
STOP ROV 490 L 450	49,0	450
STOP ROV 525 L 450	52,5	450
STOP ROV 600 L 450	60,0	450

STOP SAE — Stopflex fittings, flange and others

Application: Personal protection against whipping hose

Material: Steel

Identification	Mounting hole mm	Length mm
STOP SAE 125 L 450	12,5	450
STOP SAE 130 L 450	13,0	450
STOP SAE 145 L 450	14,5	450
STOP SAE 165 L 450	16,5	450
STOP SAE 205 L 450	20,5	450

For flange fitting, one screw must be 4 mm longer.

TGF ISO — Protective hose

Application: Personal protection against oil jet injuries
Colour: black

Inner layer: special nylon
Temperature max.: 100 °C

Identification	Internal Ø mm
TGF ISO 17	17
TGF ISO 20	20
TGF ISO 23	23
TGF ISO 25	25
TGF ISO 27	27
TGF ISO 31	31
TGF ISO 33	33
TGF ISO 36	36
TGF ISO 40	40
TGF ISO 44	44
TGF ISO 47	47
TGF ISO 53	53
TGF ISO 55	55
TGF ISO 60	60
TGF ISO 66	66
TGF ISO 73	73
TGF ISO 93	93
TGF ISO 112	112
TGF ISO 127	127

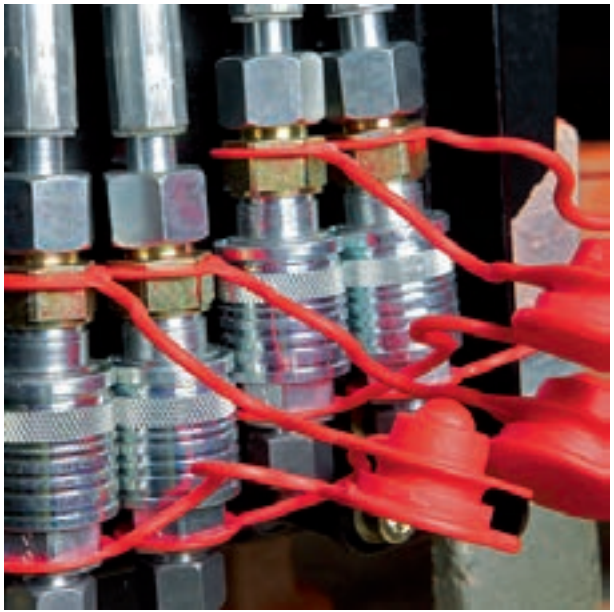
Extremely abrasion resistant, flame retardant.

TECALANSCHERE Cutter for plastic pipes

suitable for: Plastic pipes and hoses

Material: Steel

Identification	for external pipe Ø mm
TECALAN SCHERE	4 - 28



Couplings and ball valves

AKM IM ME — Quick release coupling sleeve

Application: Meiler automotive engineering
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Material: Steel

Connection 1: metric cylindrical inner thread
Included in scope of supply: with dust protection
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Bulkhead thread	S1	S2	Size	Working pressure bar	SF*	Mineral oil temperature min. °C	Mineral oil temperature max. °C	Vegetable oil temperature min. °C	Vegetable oil temperature max. temperature min. °C
AKM 13 IM 3 ME	12	M 22 x 1.5	M 38 x 1.5	27	46	3	250	4,0	-30	100	-15	80

DN = Nominal diameter, nominal width SF = Safety factor

AKM HL ME — Quick release coupling sleeve

Application: Meiler automotive engineering
Sealing form 1: 24° inner cone
Material: Steel

Connection 1: metric cylindrical outer thread
Included in scope of supply: with dust protection
Surface protection: electro galvanised

Identification	DN*	Series for external pipe Ø mm	Connecting thread	Bulkhead thread	S1	S2	Size	Working pressure bar	SF*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	Vegetable oil temp. min. °C	Vegetable oil temp. max. °C
AKM 13 HL 3 ME	12	L 15	M 22 x 1.5	M 38 x 1.5	30	46	3	250	4,0	-30	100	-15	80

DN = Nominal diameter, nominal width SF = Safety factor

AKF HL / AKF HS — Quick release coupling (fixed)

Application: Automotive engineering
Sealing form 1: 24° inner cone
Surface protection: electro galvanised
Accessories: AKF ZUB GEHÄUSE, Dust protection housing

Connection 1: metric cylindrical outer thread
Material: Steel coupling, steel housing, malleable cast iron above DN 12.

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Coupling thread	Working pressure bar	BD* uncoup. bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
AKF 08 HL 1	8	L	10	M 16 x 1.5	1	Rd. 32 x 3	315	250	4,0	-40	100
AKF 10 HL 1	10	L	12	M 18 x 1.5	1	Rd. 32 x 3	315	250	4,0	-40	100
AKF 13 HL 3	12	L	15	M 22 x 1.5	3	Rd. 48 x 3	315	250	4,0	-40	100
AKF 16 HL 3	16	L	18	M 26 x 1.5	3	Rd. 48 x 3	315	250	4,0	-40	100
AKF 20 HL 5	19	L	22	M 30 x 2	5	Rd. 60 x 3	160	160	4,0	-40	100
AKF 06 HS 1	6	S	10	M 18 x 1.5	1	Rd. 32 x 3	315	250	4,0	-40	100
AKF 08 HS 1	8	S	12	M 20 x 1.5	1	Rd. 32 x 3	315	250	4,0	-40	100
AKF 10 HS 1	10	S	14	M 22 x 1.5	1	Rd. 32 x 3	315	250	4,0	-40	100
AKF 13 HS 3	12	S	16	M 24 x 1.5	3	Rd. 48 x 3	315	250	4,0	-40	100
AKF 16 HS 3	16	S	20	M 30 x 2	3	Rd. 48 x 3	315	250	4,0	-40	100
AKF 20 HS 5	19	S	25	M 36 x 2	5	Rd. 60 x 3	160	160	4,0	-40	100
AKF 25 HS 5	25	S	30	M 42 x 2	5	Rd. 60 x 3	160	160	4,0	-40	100

DN = Nominal diameter, nominal width BD ungek. = Operating pressure uncoupled SF gek. = Safety factor coupled

AKL HL / AKL HS — Quick release coupling (loose)

Application: Automotive engineering
Sealing form 1: 24° inner cone
Surface protection: electro galvanised
Accessories: AKL ZUB DOSE, Dust protection container
Connection 1: metric cylindrical outer thread
Material: Steel

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Coupling thread	Working pressure bar	BD* uncoup. bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
AKL 06 HL 1	6	L	8	M 14 x 1.5	1	Rd. 32 x 3	315	250	4,0	-40	100
AKL 08 HL 1	8	L	10	M 16 x 1.5	1	Rd. 32 x 3	315	250	4,0	-40	100
AKL 10 HL 1	10	L	12	M 18 x 1.5	1	Rd. 32 x 3	315	250	4,0	-40	100
AKL 13 HL 3	12	L	15	M 22 x 1.5	3	Rd. 48 x 3	315	250	4,0	-40	100
AKL 16 HL 3	16	L	18	M 26 x 1.5	3	Rd. 48 x 3	315	250	4,0	-40	100
AKL 20 HL 5	19	L	22	M 30 x 2	5	Rd. 60 x 3	160	100	4,0	-40	100
AKL 08 HS 1	8	S	12	M 20 x 1.5	1	Rd. 32 x 3	315	250	4,0	-40	100
AKL 10 HS 1	10	S	14	M 22 x 1.5	1	Rd. 32 x 3	315	250	4,0	-40	100
AKL 13 HS 3	12	S	16	M 24 x 1.5	3	Rd. 48 x 3	315	250	4,0	-40	100
AKL 16 HS 3	16	S	20	M 30 x 2	3	Rd. 48 x 3	315	250	4,0	-40	100
AKL 20 HS 5	19	S	25	M 36 x 2	5	Rd. 60 x 3	160	100	4,0	-40	100
AKL 25 HS 5	25	S	30	M 42 x 2	5	Rd. 60 x 3	160	100	4,0	-40	100

DN = Nominal diameter, nominal width BD ungek. = Operating pressure uncoupled SF gek. = Safety factor coupled
DN 19 + 25 with hand wheel.

AKF ZUB GEHÄUSE — Dust protection housing

suitable for: Quick release coupling (fixed)
Accessories: AKF HL / AKF HS, Quick release coupling (fixed)

Identification	Size	LK mm
AKF ZUB 3 09	3	95,0

LK = Pitch circle diameter

AKL ZUB DOSE — Dust protection container

suitable for: Quick release coupling (loose)
Accessories: AKL HL / AKL HS, Quick release coupling (loose)

Identification	DN*	Size	SW mm
AKL ZUB 1 09	6	1	46
AKL ZUB 3 09	12	3	70

DN = Nominal diameter, nominal width SW = Width across flats

RKF HL / RKF HS Pipe coupling (fixed)

Application: Automotive engineering
Sealing form 1: 24° inner cone
Surface protection: electro galvanised
Spare parts: RKF ORING, O-ring
Accessories: RKF ZUB, Dust protection container
RKF ZUBS, Cap

Connection 1: metric cylindrical outer thread
Material: Steel

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Coupling thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
RKF 06 HL 1	6	L	8	M 14 x 1.5	1	Rd. 32 x 3	315	4,0	-25	85
RKF 08 HL 1	8	L	10	M 16 x 1.5	1	Rd. 32 x 3	315	4,0	-25	85
RKF 10 HL 1	10	L	12	M 18 x 1.5	1	Rd. 32 x 3	315	4,0	-25	85
RKF 13 HL 1	12	L	15	M 22 x 1.5	1	Rd. 32 x 3	315	4,0	-25	85
RKF 13 HL 2	12	L	15	M 22 x 1.5	2	Rd. 36 x 3	300	4,0	-25	85
RKF 13 HL 3	12	L	15	M 22 x 1.5	3	Rd. 48 x 3	300	3,5	-25	100
RKF 16 HL 2	16	L	18	M 26 x 1.5	2	Rd. 36 x 3	300	4,0	-25	100
RKF 16 HL 3	16	L	18	M 26 x 1.5	3	Rd. 48 x 3	300	3,5	-25	100
RKF 16 HL 4	16	L	18	M 26 x 1.5	4	Rd. 54 x 4	300	3,5	-25	85
RKF 20 HL 4	19	L	22	M 30 x 2	4	Rd. 54 x 4	160	4,0	-25	85
RKF 20 HL 5	19	L	22	M 30 x 2	5	Rd. 60 x 3	160	4,0	-40	100
RKF 25 HL 4	25	L	28	M 36 x 2	4	Rd. 54 x 4	160	4,0	-25	85
RKF 25 HL 5	25	L	28	M 36 x 2	5	Rd. 60 x 3	160	4,0	-40	100
RKF 32 HL 6	31	L	35	M 45 x 2	6	Rd. 79 x 4	160	4,0	-25	85
RKF 06 HS 1	6	S	10	M 18 x 1.5	1	Rd. 32 x 3	400	4,0	-25	85
RKF 08 HS 1	8	S	12	M 20 x 1.5	1	Rd. 32 x 3	400	4,0	-25	85
RKF 10 HS 1	10	S	14	M 22 x 1.5	1	Rd. 32 x 3	400	4,0	-25	85
RKF 13 HS 2	12	S	16	M 24 x 1.5	2	Rd. 36 x 3	300	4,0	-25	85
RKF 13 HS 3	12	S	16	M 24 x 1.5	3	Rd. 48 x 3	300	3,5	-25	100
RKF 16 HS 3	16	S	20	M 30 x 2	3	Rd. 48 x 3	300	3,5	-25	100
RKF 16 HS 4	16	S	20	M 30 x 2	4	Rd. 54 x 4	300	3,5	-25	85
RKF 20 HS 4	19	S	25	M 36 x 2	4	Rd. 54 x 4	300	3,5	-25	85
RKF 20 HS 5	19	S	25	M 36 x 2	5	Rd. 60 x 3	160	4,0	-40	100
RKF 25 HS 4	25	S	30	M 42 x 2	4	Rd. 54 x 4	300	3,5	-25	85
RKF 25 HS 5	25	S	30	M 42 x 2	5	Rd. 60 x 3	160	4,0	-40	100
RKF 32 HS 6	31	S	38	M 52 x 2	6	Rd. 79 x 4	420	2,5	-25	85

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

RKL HL / RKL HS — Pipe coupling (loose)

Application: Automotive engineering
Sealing form 1: 24° inner cone
Surface protection: electro galvanised
Accessories: SK ZUB GEHÄUSE, Dust protection housing
RKL ZUBS, Blanking screw

Connection 1: metric cylindrical outer thread
Material: Steel

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Coupling thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
RKL 06 HL 1	6	L	8	M 14 x 1.5	1	Rd. 32 x 3	315	4,0	-25	85
RKL 08 HL 1	8	L	10	M 16 x 1.5	1	Rd. 32 x 3	315	4,0	-25	85
RKL 10 HL 1	10	L	12	M 18 x 1.5	1	Rd. 32 x 3	315	4,0	-25	85
RKL 13 HL 1	12	L	15	M 22 x 1.5	1	Rd. 32 x 3	315	4,0	-25	85
RKL 13 HL 2	12	L	15	M 22 x 1.5	2	Rd. 36 x 3	300	4,0	-25	85
RKL 13 HL 3	12	L	15	M 22 x 1.5	3	Rd. 48 x 3	300	3,5	-25	100
RKL 16 HL 3	16	L	18	M 26 x 1.5	3	Rd. 48 x 3	300	3,5	-25	100
RKL 16 HL 4	16	L	18	M 26 x 1.5	4	Rd. 54 x 4	300	3,5	-25	85
RKL 20 HL 4	19	L	22	M 30 x 2	4	Rd. 54 x 4	160	4,0	-25	85
RKL 20 HL 5	19	L	22	M 30 x 2	5	Rd. 60 x 3	160	4,0	-40	100
RKL 25 HL 4	25	L	28	M 36 x 2	4	Rd. 54 x 4	160	4,0	-25	85
RKL 25 HL 5	25	L	28	M 36 x 2	5	Rd. 60 x 3	160	4,0	-40	100
RKL 32 HL 6	31	L	35	M 45 x 2	6	Rd. 79 x 4	160	4,0	-25	85
RKL 06 HS 1	6	S	10	M 18 x 1.5	1	Rd. 32 x 3	400	4,0	-25	85
RKL 08 HS 1	8	S	12	M 20 x 1.5	1	Rd. 32 x 3	400	4,0	-25	85
RKL 10 HS 1	10	S	14	M 22 x 1.5	1	Rd. 32 x 3	400	4,0	-25	85
RKL 13 HS 2	12	S	16	M 24 x 1.5	2	Rd. 36 x 3	300	4,0	-25	85
RKL 13 HS 3	12	S	16	M 24 x 1.5	3	Rd. 48 x 3	300	3,5	-25	100
RKL 16 HS 3	16	S	20	M 30 x 2	3	Rd. 48 x 3	300	3,5	-25	100
RKL 16 HS 4	16	S	20	M 30 x 2	4	Rd. 54 x 4	300	3,5	-25	85
RKL 20 HS 4	19	S	25	M 36 x 2	4	Rd. 54 x 4	300	3,5	-25	85
RKL 20 HS 5	19	S	25	M 36 x 2	5	Rd. 60 x 3	160	4,0	-40	100
RKL 25 HS 4	25	S	30	M 42 x 2	4	Rd. 54 x 4	300	3,5	-25	85
RKL 25 HS 5	25	S	30	M 42 x 2	5	Rd. 60 x 3	160	4,0	-40	100
RKL 32 HS 6	31	S	38	M 52 x 2	6	Rd. 79 x 4	420	2,5	-25	85

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.Size 5 with hand wheel

RKF ZUB — Dust protection container

suitable for: Pipe coupling (fixed)
Accessories: RKF HL / RKF HS, Pipe coupling (fixed)

Material: Brass

Identification	Size
RKF ZUB 2 10	2

RKF ZUBS — Cap

suitable for: Pipe coupling (fixed)
Accessories: RKF HL / RKF HS, Pipe coupling (fixed)

Identification	Size	Coupling thread	Material
RKF ZUBS 1 K	1	Rd. 32 x 3	Plastic
RKF ZUBS 2 K	2	Rd. 36 x 3	Plastic
RKF ZUBS 2 ALU	2	Rd. 36 x 3	Aluminium
RKF ZUBS 4 ALU	4	Rd. 54 x 4	Aluminium
RKF ZUBS 6	6	Rd. 79 x 4	Aluminium

RKL ZUBS — Blanking screw

suitable for: Pipe coupling (loose)
Accessories: RKL HL / RKL HS, Pipe coupling (loose)

Identification	Size	Coupling thread	Material
RKL ZUBS 1 K	1	Rd. 32 x 3	Plastic
RKL ZUBS 2K	2	Rd. 36 x 3	Plastic
RKL ZUBS 2 ALU	2	Rd. 36 x 3	Aluminium
RKL ZUBS 4 ALU	4	Rd. 54 x 4	Aluminium
RKL ZUBS 6	6	Rd. 79 x 4	Aluminium

SK ZUB GEHÄUSE — Dust protection housing

Accessories: RKL HL / RKL HS, Pipe coupling (loose)

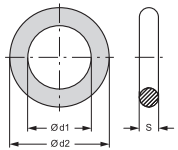
Identification	Size
SK ZUB 3 16	3

RKF ORING — O-ring

suitable for: Pipe coupling (fixed)
Spare parts: RKF HL / RKF HS, Pipe coupling (fixed)

Material: NBR

Identification	Size	Ø d1 mm	Ø d2 mm	S mm
RKF ORING 1-17-2	1	17	21	2,0
RKF ORING 1-22-1.5	1	22	25	1,5
RKF ORING 2-20-2	2	20	24	2,0
RKF ORING 2-25-1.5	2	25	28	1,5
RKF ORING 3-37-2	3	37	41	2,0
RKF ORING 4-32-3	4	32	38	3,0
RKF ORING 4-35-2.5	4	35	40	2,5
RKF ORING 5-40-3	5	50	56	3,0
RKF ORING 5-47-2.5	5	47	52	2,5



SKF HL / SKF HS — Screw coupling (fixed)

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: 24° inner cone
Surface protection: electro galvanised
Accessories: SKF ZUBS AL, Cap
SKF ZUBS, Dust protection for SKF

Connection 1: metric cylindrical outer thread
Material: Steel

Identification	Size	DN*	Series	for external pipe Ø mm	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SF coup.*
SKF 04 HL 1	1	4	L	6	M 12 x 1.5	Rd. 24 x 2	315	-25	100	4
SKF 06 HL 1	1	6	L	8	M 14 x 1.5	Rd. 24 x 2	450	-30	100	4
SKF 06 HL 2	2	6	L	8	M 14 x 1.5	Rd. 28 x 2	325	-30	100	4
SKF 06 HL 3	3	6	L	8	M 14 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 08 HL 2	2	8	L	10	M 16 x 1.5	Rd. 28 x 2	325	-30	100	4
SKF 08 HL 3	3	8	L	10	M 16 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 10 HL 3	3	10	L	12	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 10 HL 4	4	10	L	12	M 18 x 1.5	Rd. 42 x 2	250	-30	100	4
SKF 13 HL 3	3	12	L	15	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 13 HL 4	4	12	L	15	M 22 x 1.5	Rd. 42 x 2	250	-30	100	4
SKF 16 HL 3	3	16	L	18	M 26 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 16 HL 4	4	16	L	18	M 26 x 1.5	Rd. 42 x 2	250	-30	100	4
SKF 16 HL 5	5	16	L	18	M 26 x 1.5	Rd. 48 x 3	250	-30	100	4
SKF 20 HL 5	5	19	L	22	M 30 x 2	Rd. 48 x 3	250	-30	100	4
SKF 25 HL 5	5	25	L	28	M 36 x 2	Rd. 48 x 3	250	-30	100	4

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKF HL / SKF HS (Continuation) Screw coupling (fixed)

Identification	Size	DN*	Series	for external pipe Ø mm	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SF coup.*
SKF 32 HL 5	5	31	L	35	M 45 x 2	Rd. 48 x 3	250	-30	100	4
SKF 32 HL 6	6	31	L	35	M 45 x 2	Rd. 70 x 3	160	-25	100	4
SKF 40 HL 6	6	38	L	42	M 52 x 2	Rd. 70 x 3	160	-25	100	4
SKF 04 HS 1	1	4	S	8	M 16 x 1.5	Rd. 24 x 2	450	-25	100	4
SKF 06 HS 1	1	6	S	10	M 18 x 1.5	Rd. 24 x 2	450	-25	100	4
SKF 06 HS 2	2	6	S	10	M 18 x 1.5	Rd. 28 x 2	325	-30	100	4
SKF 06 HS 3	3	6	S	10	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 08 HS 2	2	8	S	12	M 20 x 1.5	Rd. 28 x 2	325	-30	100	4
SKF 08 HS 3	3	8	S	12	M 20 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 10 HS 3	3	10	S	14	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 10 HS 4	4	10	S	14	M 22 x 1.5	Rd. 42 x 2	250	-30	100	4
SKF 13 HS 3	3	12	S	16	M 24 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 13 HS 4	4	12	S	16	M 24 x 1.5	Rd. 42 x 2	250	-30	100	4
SKF 16 HS 3	3	16	S	20	M 30 x 2	Rd. 36 x 2	300	-30	100	4
SKF 16 HS 4	4	16	S	20	M 30 x 2	Rd. 42 x 2	250	-30	100	4
SKF 16 HS 5	5	16	S	20	M 30 x 2	Rd. 48 x 3	250	-30	100	4
SKF 20 HS 5	5	19	S	25	M 36 x 2	Rd. 48 x 3	250	-30	100	4
SKF 25 HS 5	5	25	S	30	M 42 x 2	Rd. 48 x 3	250	-30	100	4
SKF 25 HS 6	6	25	S	30	M 42 x 2	Rd. 70 x 3	300	-30	100	4
SKF 32 HS 6	6	31	S	38	M 52 x 2	Rd. 70 x 3	300	-30	100	4

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

Other pressure and temperature figures available on request.

SKFS HL / SKFS HS Screw coupling (fixed)

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Connection 1: metric cylindrical outer thread
Material: Steel
Accessories: **SKF ZUBS,** Dust protection for SKF
SKF ZUBS AL, Cap

Design: Coupling with bulkhead connection
Sealing form 1: 24° inner cone
Surface protection: electro galvanised

Identification	Size	DN*	Series	for external pipe Ø mm	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SF coup.*
SKFS 04 HL 1	1	4	L	6	M 12 x 1.5	Rd. 24 x 2	315	-25	100	4
SKFS 06 HL 1	1	6	L	8	M 14 x 1.5	Rd. 24 x 2	450	-30	100	4
SKFS 06 HL 2	2	6	L	8	M 14 x 1.5	Rd. 28 x 2	325	-30	100	4
SKFS 06 HL 3	3	6	L	8	M 14 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 08 HL 2	2	8	L	10	M 16 x 1.5	Rd. 28 x 2	325	-30	100	4
SKFS 08 HL 3	3	8	L	10	M 16 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 10 HL 3	3	10	L	12	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 10 HL 4	4	10	L	12	M 18 x 1.5	Rd. 42 x 2	250	-30	100	4
SKFS 13 HL 3	3	12	L	15	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 13 HL 4	4	12	L	15	M 22 x 1.5	Rd. 42 x 2	250	-30	100	4
SKFS 16 HL 3	3	16	L	18	M 26 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 16 HL 4	4	16	L	18	M 26 x 1.5	Rd. 42 x 2	250	-30	100	4

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKFS HL / SKFS HS (Continuation) Screw coupling (fixed)

Identification	Size	DN*	Series	for external pipe Ø mm	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SF coup.*
SKFS 16 HL 5	5	16	L	18	M 26 x 1.5	Rd. 48 x 3	250	-30	100	4
SKFS 20 HL 5	5	19	L	22	M 30 x 2	Rd. 48 x 3	250	-30	100	4
SKFS 25 HL 5	5	25	L	28	M 36 x 2	Rd. 48 x 3	250	-30	100	4
SKFS 32 HL 6	6	31	L	35	M 45 x 2	Rd. 70 x 3	160	-25	100	4
SKFS 40 HL 6	6	38	L	42	M 52 x 2	Rd. 70 x 3	160	-25	100	4
SKFS 04 HS 1	1	4	S	8	M 16 x 1.5	Rd. 24 x 2	450	-25	100	4
SKFS 06 HS 2	2	6	S	10	M 18 x 1.5	Rd. 28 x 2	325	-30	100	4
SKFS 06 HS 3	3	6	S	10	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 08 HS 2	2	8	S	12	M 20 x 1.5	Rd. 28 x 2	325	-30	100	4
SKFS 08 HS 3	3	8	S	12	M 20 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 10 HS 3	3	10	S	14	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 10 HS 4	4	10	S	14	M 22 x 1.5	Rd. 42 x 2	250	-30	100	4
SKFS 13 HS 3	3	12	S	16	M 24 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 13 HS 4	4	12	S	16	M 24 x 1.5	Rd. 42 x 2	250	-30	100	4
SKFS 16 HS 4	4	16	S	20	M 30 x 2	Rd. 42 x 2	250	-30	100	4
SKFS 16 HS 5	5	16	S	20	M 30 x 2	Rd. 48 x 3	250	-30	100	4
SKFS 20 HS 5	5	19	S	25	M 36 x 2	Rd. 48 x 3	250	-30	100	4
SKFS 25 HS 5	5	25	S	30	M 42 x 2	Rd. 48 x 3	250	-30	100	4
SKFS 25 HS 6	6	25	S	30	M 42 x 2	Rd. 70 x 3	300	-30	100	4
SKFS 32 HS 5	5	31	S	38	M 52 x 2	Rd. 48 x 3	300	-30	100	4
SKFS 32 HS 6	6	31	S	38	M 52 x 2	Rd. 70 x 3	300	-30	100	4

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKF IR Screw coupling (fixed)

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised
Product versions: SKF IR VA, Screw coupling (fixed), Stainless steel
Accessories: SKF ZUBS, Dust protection for SKF
SKF ZUBS AL, Cap

Connection 1: BSP cylindrical internal threads
Material: Steel

Identification	Size	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SF coup.*
SKF 06 IR 1	1	6	G 1/4" -19	Rd. 24 x 2	450	-30	100	4
SKF 10 IR 2	2	10	G 3/8" -19	Rd. 28 x 2	325	-30	100	4
SKF 10 IR 3	3	10	G 3/8" -19	Rd. 36 x 2	300	-30	100	4
SKF 13 IR 3	3	12	G 1/2" -14	Rd. 36 x 2	300	-30	100	4
SKF 20 IR 4	4	19	G 3/4" -14	Rd. 42 x 2	250	-30	100	4
SKF 20 IR 5	5	19	G 3/4" -14	Rd. 48 x 3	250	-30	100	4
SKF 25 IR 5	5	25	G 1" -11	Rd. 48 x 3	250	-30	100	4
SKF 32 IR 6	6	31	G 1.1/4" -11	Rd. 70 x 3	300	-25	100	4
SKF 40 IR 6	6	38	G 1.1/2" -11	Rd. 70 x 3	300	-25	100	4

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKF IM AE — Screw coupling (fixed)

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Material: Steel
Accessories: SKF ZUBS AE, Dust protection for SKF...AE

Connection 1: metric cylindrical inner thread
compatible with: Aeroquip
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SF coup.*
SKF 13 IM AE	12	M 22 x 1.5	Rd. 35 x 2	350	-30	100	4
SKF 16 IM AE	16	M 26 x 1.5	Rd. 42 x 2	350	-30	100	
SKF 20 IM AE	19	M 30 x 1.5	Rd. 54 x 3	350	-30	100	4
SKF 25 IM AE	25	M 38 x 1.5	Rd. 64 x 3	350	-40	150	

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKFS IR E — Screw coupling (fixed)

Application: Automotive engineering
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised
Accessories: SKF ZUBS E, Dust protection for SKF...E

Connection 1: BSP cylindrical internal threads
Material: Steel

Identification	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SF coup.*
SKFS 20 IR E	19	G 3/4" -14	Rd. 44 x 2.5	250	-25	100	3
SKFS 25 IR E	25	G 1" -11	Rd. 54 x 2.5	230	-25	100	3

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKF IN SP — Screw coupling (fixed)

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: thread seal
Additional feature: with ball valve
Surface protection: galvanised, white chromised
Accessories: SKF ZUBS SP, Dust protection for SKF...SP

Connection 1: NPT internal thread
compatible with: Pioneer
Material: High resistance special steel

Identification	Size	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKF 06 IN SP	1	6	NPT 1/4" -18	700	3	-25	125
SKF 10 IN 06 SP	2	10	NPT 1/4" -18	700	3	-25	125
SKF 10 IN SP	2	10	NPT 3/8" -18	700	3	-30	80

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKF IR RO — Screw coupling (fixed)

Application: Hydraulic hammers, rams etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised
Accessories: SKF ZUBS 08 RO, Dust protection for SKF...RO
SK ZUB 01 RO, Welded on clip for RO coupling

Connection 1: BSP cylindrical internal threads
Material: Steel

Identification	DN*	Connecting thread	SW mm	Coupling thread	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SF coup.*
SKF 10 IR RO	10	G 3/8" -19	22	Rd. 36 x 3	500	-30	120	4
SKF 13 IR RO	12	G 1/2" -14	26	Rd. 40 x 3	450	-30	120	4
SKF 20 IR RO	19	G 3/4" -14	30	Rd. 45 x 3	400	-30	120	4
SKF 25 IR RO	25	G 1" -11	40	Rd. 58 x 4	350	-30	120	4
SKF 32 IR RO	31	G 1.1/4" -11	48	Rd. 65 x 5	320	-30	120	4
SKF 40 IR RO	38	G 1.1/2" -11	55	Rd. 75 x 5	300	-30	120	4
SKF 50 IR RO	51	G 2" -11	76	Rd. 108 x 5	250	-30	120	4

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled SW = Width across flats

SKF IR SN75 — Screw coupling (fixed)

Application: Offshore applications, oilfields, tools etc.
Connection 1: BSP cylindrical internal threads
Material: Steel
Accessories: SKF ZUBS SN75, Dust protection for SKF...SN 75

Design: Snap-tite series 75
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Coupling thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKF 20 IR SN75	19	G 3/4" -14	1.3/4" -8	345	4	-40	90
SKF 25 IR SN75	25	G 1" -11	2.1/4" -6	345	4	-40	90
SKF 32 IR SN75	31	G 1.1/4" -11	2.5/8" -6	345	3	-40	90
SKF 40 IR SN75	38	G 1.1/2" -11	3.1/4" -4	345	3	-40	90
SKF 50 IR SN75	51	G 2" -11	4" -4	345	3	-40	90
SKF 65 IR SN75	65	G 2.1/2" -11	5" -4	207	2	-40	90
SKF 75 IR SN75	76	G 3" -11	6" -4	207	2	-40	90

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKL HL / SKL HS — Screw coupling (loose)

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: 24° inner cone
Surface protection: electro galvanised
Product versions: SKL HL SI / SKL HS SI, Screw coupling with locking mechanism (loose), Steel
Accessories: SKL ZUBS AL, Dust protector
SKL ZUBS, Dust protection for SKL

Connection 1: metric cylindrical outer thread
Material: Steel

Identification	Size	DN*	Series	for external pipe Ø mm	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SF coup.*
SKL 04 HL 1	1	4	L	6	M 12 x 1.5	Rd. 24 x 2	315	-25	100	4
SKL 06 HL 1	1	6	L	8	M 14 x 1.5	Rd. 24 x 2	450	-30	100	4

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKL HL / SKL HS (Continuation) Screw coupling (loose)

Identification	Size	DN*	Series	for external pipe Ø mm	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SF coup.*
SKL 06 HL 2	2	6	L	8	M 14 x 1.5	Rd. 28 x 2	325	-30	100	4
SKL 06 HL 3	3	6	L	8	M 14 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 08 HL 2	2	8	L	10	M 16 x 1.5	Rd. 28 x 2	325	-30	100	4
SKL 08 HL 3	3	8	L	10	M 16 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 10 HL 3	3	10	L	12	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 10 HL 4	4	10	L	12	M 18 x 1.5	Rd. 42 x 2	250	-30	100	4
SKL 13 HL 3	3	12	L	15	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 13 HL 4	4	12	L	15	M 22 x 1.5	Rd. 42 x 2	250	-30	100	4
SKL 16 HL 3	3	16	L	18	M 26 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 16 HL 4	4	16	L	18	M 26 x 1.5	Rd. 42 x 2	250	-30	100	4
SKL 16 HL 5	5	16	L	18	M 26 x 1.5	Rd. 48 x 3	250	-30	100	4
SKL 20 HL 5	5	19	L	22	M 30 x 2	Rd. 48 x 3	250	-30	100	4
SKL 25 HL 5	5	25	L	28	M 36 x 2	Rd. 48 x 3	250	-30	100	4
SKL 32 HL 5	5	31	L	35	M 45 x 2	Rd. 48 x 3	250	-30	100	4
SKL 32 HL 6	6	31	L	35	M 45 x 2	Rd. 70 x 3	160	-25	100	4
SKL 40 HL 6	6	38	L	42	M 52 x 2	Rd. 70 x 3	160	-25	100	4
SKL 04 HS 1	1	4	S	8	M 16 x 1.5	Rd. 24 x 2	450	-25	100	4
SKL 06 HS 1	1	6	S	10	M 18 x 1.5	Rd. 24 x 2	450	-25	100	4
SKL 06 HS 2	2	6	S	10	M 18 x 1.5	Rd. 28 x 2	325	-30	100	4
SKL 06 HS 3	3	6	S	10	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 08 HS 2	2	8	S	12	M 20 x 1.5	Rd. 28 x 2	325	-30	100	4
SKL 08 HS 3	3	8	S	12	M 20 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 10 HS 3	3	10	S	14	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 10 HS 4	4	10	S	14	M 22 x 1.5	Rd. 42 x 2	250	-25	125	4
SKL 13 HS 3	3	12	S	16	M 24 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 13 HS 4	4	12	S	16	M 24 x 1.5	Rd. 42 x 2	250	-30	100	4
SKL 16 HS 3	3	16	S	20	M 30 x 2	Rd. 36 x 2	300	-25	125	4
SKL 16 HS 4	4	16	S	20	M 30 x 2	Rd. 42 x 2	250	-30	100	4
SKL 16 HS 5	5	16	S	20	M 30 x 2	Rd. 48 x 3	250	-30	100	4
SKL 20 HS 5	5	19	S	25	M 36 x 2	Rd. 48 x 3	250	-30	100	4
SKL 25 HS 5	5	25	S	30	M 42 x 2	Rd. 48 x 3	250	-30	100	4
SKL 25 HS 6	6	25	S	30	M 42 x 2	Rd. 70 x 3	300	-30	100	4
SKL 32 HS 6	6	31	S	38	M 52 x 2	Rd. 70 x 3	300	-30	100	4

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

Other pressure and temperature figures available on request.

SKLS HL / SKLS HS Screw coupling (loose)

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Connection 1: metric cylindrical outer thread
Material: Steel
Accessories: **SKL ZUBS,** Dust protection for SKL
SKL ZUBS AL, Dust protector

Design: Coupling with bulkhead connection
Sealing form 1: 24° inner cone
Surface protection: electro galvanised

Identification	Size	DN*	Series	for external pipe Ø mm	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SF coup.*
SKLS 04 HL 1	1	4	L	6	M 12 x 1.5	Rd. 24 x 2	315	-25	100	4
SKLS 06 HL 1	1	6	L	8	M 14 x 1.5	Rd. 24 x 2	450	-30	100	4
SKLS 06 HL 2	2	6	L	8	M 14 x 1.5	Rd. 28 x 2	270	-30	100	4
SKLS 06 HL 3	3	6	L	8	M 14 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 08 HL 2	2	8	L	10	M 16 x 1.5	Rd. 28 x 2	270	-30	100	4
SKLS 08 HL 3	3	8	L	10	M 16 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 10 HL 3	3	10	L	12	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 10 HL 4	4	10	L	10	M 18 x 1.5	Rd. 42 x 2	250	-30	100	4
SKLS 13 HL 3	3	12	L	15	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 13 HL 4	4	12	L	15	M 22 x 1.5	Rd. 42 x 2	250	-30	100	4
SKLS 16 HL 3	3	16	L	18	M 26 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 16 HL 4	4	16	L	18	M 26 x 1.5	Rd. 42 x 2	250	-30	100	4
SKLS 16 HL 5	5	16	L	18	M 26 x 1.5	Rd. 48 x 3	250	-30	100	4
SKLS 20 HL 5	5	19	L	22	M 30 x 2	Rd. 48 x 3	250	-30	100	4
SKLS 25 HL 5	5	25	L	28	M 36 x 2	Rd. 48 x 3	250	-30	100	4
SKLS 32 HL 6	6	31	L	38	M 45 x 2	Rd. 70 x 3	160	-25	100	4
SKLS 40 HL 6	6	38	L	42	M 52 x 2	Rd. 70 x 3	160	-25	100	4
SKLS 04 HS 1	1	4	S	8	M 16 x 1.5	Rd. 24 x 2	450	-25	100	4
SKLS 06 HS 1	1	6	S	10	M 18 x 1.5	Rd. 24 x 2	450	-25	100	4
SKLS 06 HS 2	2	6	S	10	M 18 x 1.5	Rd. 28 x 2	325	-30	100	4
SKLS 06 HS 3	3	6	S	10	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 08 HS 2	2	8	S	12	M 20 x 1.5	Rd. 28 x 2	325	-30	100	4
SKLS 08 HS 3	3	8	S	12	M 20 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 10 HS 3	3	10	S	14	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 10 HS 4	4	10	S	14	M 22 x 1.5	Rd. 42 x 2	250	-25	125	4
SKLS 13 HS 3	3	12	S	16	M 24 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 13 HS 4	4	12	S	16	M 24 x 1.5	Rd. 42 x 2	250	-30	100	4
SKLS 16 HS 4	4	16	S	20	M 30 x 2	Rd. 42 x 2	250	-30	100	4
SKLS 16 HS 5	5	16	S	20	M 30 x 2	Rd. 48 x 3	250	-30	100	4
SKLS 20 HS 5	5	19	S	25	M 36 x 2	Rd. 48 x 3	250	-30	100	4
SKLS 25 HS 5	5	25	S	30	M 42 x 2	Rd. 48 x 3	250	-30	100	4
SKLS 25 HS 6	6	25	S	30	M 42 x 2	Rd. 70 x 3	300	-25	100	4
SKLS 32 HS 6	6	31	S	38	M 52 x 2	Rd. 70 x 3	300	-30	100	4

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKL IR — Screw coupling (loose)

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised
Product versions: SKL IR VA, Screw coupling (loose), Stainless steel
Accessories: SKL ZUBS, Dust protection for SKL
SKL ZUBS AL, Dust protector

Connection 1: BSP cylindrical internal threads
Material: Steel

Identification	Size	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SF coup.*
SKL 06 IR 1	1	6	G 1/4" -19	Rd. 24 x 2	450	-30	100	4
SKL 10 IR 2	2	10	G 3/8" -19	Rd. 28 x 2	325	-30	100	4
SKL 10 IR 3	3	10	G 3/8" -19	Rd. 36 x 2	300	-30	100	4
SKL 13 IR 3	3	12	G 1/2" -14	Rd. 36 x 2	300	-30	100	4
SKL 20 IR 4	4	19	G 3/4" -14	Rd. 42 x 2	250	-30	100	4
SKL 20 IR 5	5	19	G 3/4" -14	Rd. 48 x 3	250	-30	100	4
SKL 25 IR 5	5	25	G 1" -11	Rd. 48 x 3	250	-30	100	4
SKL 32 IR 6	6	31	G 1.1/4" -11	Rd. 70 x 3	300	-25	100	4
SKL 40 IR 6	6	38	G 1.1/2" -11	Rd. 70 x 3	300	-25	100	4

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKL IM AE — Screw coupling (loose)

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Material: Steel
Accessories: SKL ZUBS AE, Dust protection for SKL...AE

Connection 1: metric cylindrical inner thread
compatible with: Aeroquip
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SF coup.*
SKL 13 IM AE	12	M 22 x 1.5	Rd. 35 x 2	350	-30	100	4
SKL 16 IM AE	16	M 26 x 1.5	Rd. 42 x 2	350	-30	100	
SKL 20 IM AE	19	M 30 x 1.5	Rd. 54 x 3	350	-30	100	4
SKL 25 IM AE	25	M 38 x 1.5	Rd. 64 x 3	350	-40	150	

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKL IR E — Screw coupling (loose)

Application: Automotive engineering
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised
Accessories: SKL ZUBS E, Dust protection for SKL...E

Connection 1: BSP cylindrical internal threads
Material: Steel

Identification	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SF coup.*
SKL 20 IR E	19	G 3/4" -14	Rd. 44 x 2.5	250	-25	100	3
SKL 25 IR E	25	G 1" -11	Rd. 54 x 2.5	230	-25	100	3

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKL HN SP — Screw coupling (loose)

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: thread seal
Additional feature: with ball valve
Surface protection: electro galvanised
Accessories: SKL ZUBS SP, Dust protection for SKL...SP

Connection 1: NPT external threads
compatible with: Pioneer
Material: Steel

Identification	DN*	Connecting thread	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SF coup.*
SKL 06 HN SP	6	NPT 1/4" -18	700	-25	110	3
SKL 10 HN 06 SP	10	NPT 1/4" -18	700	-25	125	3
SKL 10 HN SP	10	NPT 3/8" -18	700	-30	80	3

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKL IR RO — Screw coupling (loose)

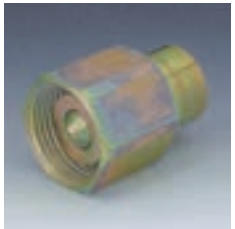
Application: Hydraulic hammers, rams etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised
Accessories: SKL ZUB 03 RO, Flat spanner for SKL...RO
SKL ZUBS 09 RO, Dust protection for SKL...RO
SK ZUB 01 RO, Welded on clip for RO coupling

Connection 1: BSP cylindrical internal threads
Material: Steel

Identification	DN*	Connecting thread	SW mm	Coupling thread	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SF coup.*
SKL 10 IR RO	10	G 3/8" -19	45	Rd. 36 x 3	500	-30	120	4
SKL 13 IR RO	12	G 1/2" -14	50	Rd. 40 x 3	450	-30	120	4
SKL 20 IR RO	19	G 3/4" -14	55	Rd. 45 x 3	400	-30	120	4
SKL 25 IR RO	25	G 1" -11	70	Rd. 58 x 4	350	-30	120	4
SKL 32 IR RO	31	G 1.1/4" -11	80	Rd. 65 x 5	320	-30	120	4
SKL 40 IR RO	38	G 1.1/2" -11	87	Rd. 75 x 5	300	-30	120	4
SKL 50 IR RO	51	G 2" -11	130	Rd. 108 x 5	250	-30	120	4

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled SW = Width across flats
To prevent the hexagonal nuts from coming loose if vibrations occur, they must be securely tightened with a flat spanner.

SKL IR SN75 — Screw coupling (loose)



Application: Offshore applications, oilfields, tools etc.
Connection 1: BSP cylindrical internal threads
Material: Steel
Design: Snap-tite series 75
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SF coup.*
SKL 20 IR SN75	19	G 3/4" -14	1.3/4" -8	345	-40	90	4
SKL 25 IR SN75	25	G 1" -11	2.1/4" -6	345	-40	90	4
SKL 32 IR SN75	31	G 1.1/4" -11	2.5/8" -6	345	-40	90	3
SKL 40 IR SN75	38	G 1.1/2" -11	3.1/4" -4	345	-40	90	3
SKL 50 IR SN75	51	G 2" -11	4" -4	345	-40	90	3
SKL 65 IR SN75	65	G 2.1/2" -11	5" -4	207	-40	90	2
SKL 75 IR SN75	76	G 3" -11	6" -4	207	-40	90	2

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKF ZUBS — Dust protection for SKF

suitable for: Screw coupling (fixed)
Product versions: SKF ZUBS AL, Cap, Aluminium
Accessories: SKF HL / SKF HS, Screw coupling (fixed)
SKFS HL / SKFS HS, Screw coupling (fixed)
SKF IR, Screw coupling (fixed)
Material: Plastic

Identification	Size	for coupling thread	Colour
SKF ZUBS 1	1	Rd. 24 x 2	red
SKF ZUBS 2	2	Rd. 28 x 2	red
SKF ZUBS 2 BLAU	2	Rd. 28 x 2	blue
SKF ZUBS 2 GELB	2	Rd. 28 x 2	yellow
SKF ZUBS 2 GRUEN	2	Rd. 28 x 2	green
SKF ZUBS 3	3	Rd. 36 x 2	red
SKF ZUBS 3 BLAU	3	Rd. 36 x 2	blue
SKF ZUBS 3 GELB	3	Rd. 36 x 2	yellow
SKF ZUBS 3 GRUEN	3	Rd. 36 x 2	green
SKF ZUBS 4	4	Rd. 42 x 2	red
SKF ZUBS 5	5	Rd. 48 x 3	red
SKF ZUBS 6	6	Rd. 70 x 3	red

SKF ZUBS AL — Cap

suitable for: Screw coupling (fixed)
Accessories: SKFS HL / SKFS HS, Screw coupling (fixed)
SKF HL / SKF HS, Screw coupling (fixed)
SKF IR, Screw coupling (fixed)
Material: Aluminium

Identification	Size	for coupling thread
SKF ZUBS 1 AL	1	M 24 x 2
SKF ZUBS 2 AL	2	M 28 x 2
SKF ZUBS 3 AL	3	M 36 x 2
SKF ZUBS 4 AL	4	M 42 x 2

SKF ZUBS AL (Continuation) Cap

Identification	Size	for coupling thread
SKF ZUBS 5 AL	5	M 48 x 3
SKF ZUBS 6 AL	6	M 70 x 3

SKF ZUBS AE Dust protection for SKF...AE

suitable for: Screw coupling (fixed) SKF...AE
Accessories: SKF IM AE, Screw coupling (fixed)
Material: Aluminium

Identification	DN*	for coupling thread
SKF ZUBS 13 AE	12	Rd. 35 x 2
SKF ZUBS 16 AE	16	Rd. 42 x 2
SKF ZUBS 20 AE	19	Rd. 54 x 3
SKF ZUBS 25 AE	25	Rd. 64 x 3

DN = Nominal diameter, nominal width

SKF ZUBS E Dust protection for SKF...E

suitable for: Screw coupling (fixed) SKF...E
Accessories: SKFS IR E, Screw coupling (fixed)
Material: Steel

Identification	DN*	for coupling thread
SKF ZUBS 20 E	19	Rd. 44 x 2.5
SKF ZUBS 25 E	25	Rd. 54 x 2.5

DN = Nominal diameter, nominal width

SKF ZUBS SP — Dust protection for SKF...SP

suitable for: Screw coupling (fixed), SKF...SP
Accessories: SKF IN SP, Screw coupling (fixed)

Material: Aluminium

Identification	DN*
SKF ZUBS SP 04	6
SKF ZUBS SP 06	10

DN = Nominal diameter, nominal width

SKF ZUBS 08 RO — Dust protection for SKF...RO

suitable for: Screw coupling (fixed) SKF...RO
Accessories: SKF IR RO, Screw coupling (fixed)

Identification	DN*	for coupling thread
SKF ZUBS 08 RO 03	10	Rd. 36 x 3
SKF ZUBS 08 RO 04	12	Rd. 40 x 3
SKF ZUBS 08 RO 05	19	Rd. 45 x 3
SKF ZUBS 08 RO 06	25	Rd. 58 x 4
SKF ZUBS 08 RO 07	31	Rd. 65 x 5
SKF ZUBS 08 RO 08	38	Rd. 75 x 5
SKF ZUBS 08 RO 09	51	Rd. 108 x 5

SK ZUB 01 RO — Welded on clip for RO coupling

Included in scope of supply: Retainer with screw and nut
Accessories: SKL IR RO, Screw coupling (loose)
SKF IR RO, Screw coupling (fixed)

suitable for: Screw coupling loose half SKL...RO and fixed half SKF...RO.

Identification	DN*	for RO coupling
SK ZUB 01 RO 03	10	3/8"
SK ZUB 01 RO 04	12	1/2"
SK ZUB 01 RO 05	19	3/4"
SK ZUB 01 RO 06	25	1"
SK ZUB 01 RO 07	31	1.1/4"
SK ZUB 01 RO 08	38	1.1/2"
SK ZUB 01 RO 09	51	2"

SKF ZUBS SN75 — Dust protection for SKF...SN 75

suitable for: Screw coupling (fixed), Snap-tite series 75
Accessories: SKF IR SN75, Screw coupling (fixed)
Material: Steel

Identification	DN*	for coupling thread
SKF ZUBS 20 SN75	19	1.3/4" -8
SKF ZUBS 25 SN75	25	2.1/4" -6
SKF ZUBS 32 SN75	31	2.5/8" -6
SKF ZUBS 40 SN75	38	3.1/4" -4
SKF ZUBS 50 SN75	51	4" -4

DN = Nominal diameter, nominal width

SKL ZUBS — Dust protection for SKL

suitable for: Screw coupling (loose)
Product versions: SKL ZUBS AL, Dust protector, Aluminium
Accessories: SKL IR, Screw coupling (loose)
SKL HL / SKL HS, Screw coupling (loose)
SKLS HL / SKLS HS, Screw coupling (loose)
Material: Plastic

Identification	Size	for coupling thread	Colour
SKL ZUBS 1	1	Rd. 24 x 2	red
SKL ZUBS 2	2	Rd. 28 x 2	red
SKL ZUBS 2 BLAU	2	Rd. 28 x 2	blue
SKL ZUBS 2 GELB	2	Rd. 28 x 2	yellow
SKL ZUBS 2 GRUEN	2	Rd. 28 x 2	green
SKL ZUBS 3	3	Rd. 36 x 2	red
SKL ZUBS 3 BLAU	3	Rd. 36 x 2	blue
SKL ZUBS 3 GELB	3	Rd. 36 x 2	yellow
SKL ZUBS 3 GRUEN	3	Rd. 36 x 2	green
SKL ZUBS 4	4	Rd. 42 x 2	red
SKL ZUBS 5	5	Rd. 48 x 3	red
SKL ZUBS 6	6	Rd. 70 x 3	red

SKL ZUBS AL — Dust protector

suitable for: Screw coupling (loose)
Accessories: SKL HL / SKL HS, Screw coupling (loose)
SKL IR, Screw coupling (loose)
SKLS HL / SKLS HS, Screw coupling (loose)
Material: Aluminium

Identification	Size	for coupling thread
SKL ZUBS 1 AL	1	M 24 x 2
SKL ZUBS 2 AL	2	M 28 x 2
SKL ZUBS 3 AL	3	M 36 x 2
SKL ZUBS 4 AL	4	M 42 x 2
SKL ZUBS 5 AL	5	M 48 x 3
SKL ZUBS 6 AL	6	M 70 x 3

SKL ZUBS AE — Dust protection for SKL...AE

suitable for: Screw coupling (loose) SKL...AE
Material: Aluminium
Accessories: SKL IM AE, Screw coupling (loose)

Identification	DN*	for coupling thread
SKL ZUBS 13 AE	12	Rd. 35 x 2
SKL ZUBS 16 AE	16	Rd. 42 x 2
SKL ZUBS 20 AE	19	Rd. 54 x 3
SKL ZUBS 25 AE	25	Rd. 64 x 3

DN = Nominal diameter, nominal width

SKL ZUBS E — Dust protection for SKL...E

suitable for: Screw coupling (loose) SKL...E
Accessories: SKL IR E, Screw coupling (loose)

Identification	DN*	for coupling thread
SKL ZUBS 20 E	19	Rd. 44 x 2.5
SKL ZUBS 25 E	25	Rd. 54 x 2.5

DN = Nominal diameter, nominal width

SKL ZUBS SP — Dust protection for SKL...SP

suitable for: Screw coupling (loose) SKL...SP
Material: Aluminium
Accessories: SKL HN SP, Screw coupling (loose)

Identification	DN*	Size
SKL ZUBS SP 04	6	4
SKL ZUBS SP 06	10	6

DN = Nominal diameter, nominal width

SKL ZUBS 09 RO — Dust protection for SKL...RO

suitable for: Screw coupling (loose) SKL...RO
Accessories: SKL IR RO, Screw coupling (loose)

Identification	DN*	for coupling thread
SKL ZUBS 09 RO 03	10	Rd. 36 x 3
SKL ZUBS 09 RO 04	12	Rd. 40 x 3
SKL ZUBS 09 RO 05	19	Rd. 45 x 3
SKL ZUBS 09 RO 06	25	Rd. 58 x 4
SKL ZUBS 09 RO 07	31	Rd. 65 x 5
SKL ZUBS 09 RO 08	38	Rd. 75 x 5
SKL ZUBS 09 RO 09	51	Rd. 108 x 5

SKL ZUB 03 RO — Flat spanner for SKL...RO

suitable for: Screw coupling (loose) SKL...RO
Accessories: SKL IR RO, Screw coupling (loose)

Identification	DN*	SW mm
SKL ZUB 03 RO 03	10	45
SKL ZUB 03 RO 04	12	50
SKL ZUB 03 RO 05	19	55
SKL ZUB 03 RO 06	25	70
SKL ZUB 03 RO 07	31	80
SKL ZUB 03 RO 08	38	87
SKL ZUB 03 RO 09	51	130

SW = Width across flats

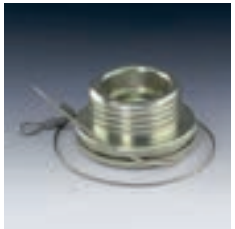
SK ZUB 01 RO — Welded on clip for RO coupling

Included in scope of supply: Retainer with screw and nut
Accessories: SKL IR RO, Screw coupling (loose)
SKF IR RO, Screw coupling (fixed)

suitable for: Screw coupling loose half SKL...RO and fixed half SKF...RO.

Identification	DN*	for RO coupling
SK ZUB 01 RO 03	10	3/8"
SK ZUB 01 RO 04	12	1/2"
SK ZUB 01 RO 05	19	3/4"
SK ZUB 01 RO 06	25	1"
SK ZUB 01 RO 07	31	1.1/4"
SK ZUB 01 RO 08	38	1.1/2"
SK ZUB 01 RO 09	51	2"

SKL ZUBS SN75 — Dust protection for SKF...SN 75



suitable for: Screw coupling (loose), Snap-tite series 75

Identification	DN*	for coupling thread
SKL ZUBS 20 SN75	19	1.3/4" -8
SKL ZUBS 25 SN75	25	2.1/4" -6
SKL ZUBS 32 SN75	31	2.5/8" -6
SKL ZUBS 40 SN75	38	3.1/4" -4
SKL ZUBS 50 SN75	51	4" -4

DN = Nominal diameter, nominal width

SKM HL / SKM HS — Plug-in coupling sleeve

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: 24° inner cone
Surface protection: electro galvanised
Accessories: **SKM ZUBS 3 C,** Dust protection coupling sleeve, SKM..
SKM ZUB 3 12, Quick release clip with spring
SKM ZUBS, Dust protection coupling sleeve, SKM..
SKM ZUB BLINDSTECKER, Dummy connector for plug-in coupling sleeve
SKM ZUB 3 11, Quick release clip with dust protection
SKM ZUBS 3 CB, Dust protection coupling sleeve, SKM..

Connection 1: metric cylindrical outer thread
Material: Steel

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 04 HL 2	4	L	6	M 12 x 1.5	2	250	4	-30	100
SKM 06 HL 2	6	L	8	M 14 x 1.5	2	250	4	-30	100
SKM 06 HL 3	6	L	8	M 14 x 1.5	3	225	4	-30	100
SKM 08 HL 2	8	L	10	M 16 x 1.5	2	250	4	-30	100
SKM 08 HL 3	8	L	10	M 16 x 1.5	3	225	4	-30	100
SKM 10 HL 3	10	L	12	M 18 x 1.5	3	225	4	-30	100
SKM 10 HL 4	10	L	12	M 18 x 1.5	4	225	4	-30	100
SKM 13 HL 3	12	L	15	M 22 x 1.5	3	225	4	-30	100
SKM 13 HL 4	12	L	15	M 22 x 1.5	4	225	4	-30	100
SKM 16 HL 3	16	L	18	M 26 x 1.5	3	225	4	-30	100
SKM 16 HL 4	16	L	18	M 26 x 1.5	4	225	4	-30	100
SKM 16 HL 5	16	L	18	M 26 x 1.5	5	225	4	-30	100
SKM 20 HL 4	19	L	22	M 30 x 2	4	225	4	-30	100
SKM 20 HL 5	19	L	22	M 30 x 2	5	225	4	-30	100
SKM 25 HL 5	25	L	28	M 36 x 2	5	225	4	-30	100
SKM 04 HS 2	4	S	8	M 16 x 1.5	2	250	4	-30	100
SKM 06 HS 1	6	S	10	M 18 x 1.5	1	300	4	-25	100
SKM 06 HS 2	6	S	10	M 18 x 1.5	2	250	4	-30	100
SKM 06 HS 3	6	S	10	M 18 x 1.5	3	225	4	-30	100
SKM 08 HS 2	8	S	12	M 20 x 1.5	2	250	4	-30	100
SKM 08 HS 3	8	S	12	M 20 x 1.5	3	225	4	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKM HL / SKM HS (Continuation) Plug-in coupling sleeve

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 10 HS 3	10	S	14	M 22 x 1.5	3	225	4	-30	100
SKM 10 HS 4	10	S	14	M 22 x 1.5	4	225	4	-25	125
SKM 13 HS 3	12	S	16	M 24 x 1.5	3	225	4	-30	100
SKM 13 HS 4	12	S	16	M 24 x 1.5	4	225	4	-30	100
SKM 16 HS 3	16	S	20	M 30 x 2	3	225	4	-25	100
SKM 16 HS 4	16	S	20	M 30 x 2	4	225	4	-30	100
SKM 16 HS 5	16	S	20	M 30 x 2	5	225	4	-30	100
SKM 20 HS 5	19	S	25	M 36 x 2	5	225	4	-30	100
SKM 25 HS 5	25	S	30	M 42 x 2	5	225	4	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKMS HL / SKMS HS Plug-in coupling sleeve (bulkhead connection)

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Connection 1: metric cylindrical outer thread
Material: Steel
Accessories: SKM ZUBS, Dust protection coupling sleeve, SKM..
SKM ZUBS 3 CB, Dust protection coupling sleeve, SKM..
SKM ZUBS 3 C, Dust protection coupling sleeve, SKM..

Design: Coupling with bulkhead connection
Sealing form 1: 24° inner cone
Surface protection: electro galvanised

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKMS 04 HL 2	4	L	6	M 12 x 1.5	2	300	4	-25	125
SKMS 06 HL 2	6	L	8	M 14 x 1.5	2	250	4	-30	100
SKMS 06 HL 3	6	L	8	M 14 x 1.5	3	225	4	-30	100
SKMS 08 HL 2	8	L	10	M 16 x 1.5	2	250	4	-30	100
SKMS 08 HL 3	8	L	10	M 16 x 1.5	3	225	4	-30	100
SKMS 10 HL 3	10	L	12	M 18 x 1.5	3	225	4	-30	100
SKMS 10 HL 4	10	L	12	M 18 x 1.5	4	225	4	-30	100
SKMS 13 HL 3	12	L	15	M 22 x 1.5	3	225	4	-30	100
SKMS 13 HL 4	12	L	15	M 22 x 1.5	4	225	4	-30	100
SKMS 16 HL 3	16	L	18	M 26 x 1.5	3	225	4	-30	100
SKMS 16 HL 4	16	L	18	M 26 x 1.5	4	225	4	-30	100
SKMS 16 HL 5	16	L	18	M 26 x 1.5	5	225	4	-30	100
SKMS 20 HL 4	19	L	22	M 30 x 2	4	225	4	-30	100
SKMS 20 HL 5	19	L	22	M 30 x 2	5	225	4	-30	100
SKMS 25 HL 5	25	L	28	M 36 x 2	5	225	4	-30	100
SKMS 04 HS 2	4	S	8	M 16 x 1.5	2	250	4	-30	100
SKMS 06 HS 1	6	S	10	M 18 x 1.5	1	300	4	-25	100
SKMS 06 HS 2	6	S	10	M 18 x 1.5	2	250	4	-30	100
SKMS 06 HS 3	6	S	10	M 18 x 1.5	3	225	4	-30	100
SKMS 08 HS 2	8	S	12	M 20 x 1.5	2	250	4	-30	100
SKMS 08 HS 3	8	S	12	M 20 x 1.5	3	225	4	-30	100
SKMS 10 HS 3	10	S	14	M 22 x 1.5	3	225	4	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKMS HL / SKMS HS (Continuation) Plug-in coupling sleeve (bulkhead connection)

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKMS 10 HS 4	10	S	14	M 22 x 1.5	4	225	4	-25	125
SKMS 13 HS 3	12	S	16	M 24 x 1.5	3	225	4	-30	100
SKMS 13 HS 4	12	S	16	M 24 x 1.5	4	225	4	-30	100
SKMS 16 HS 3	16	S	20	M 30 x 2	3	225	4	-25	100
SKMS 16 HS 4	16	S	20	M 30 x 2	4	225	4	-30	100
SKMS 16 HS 5	16	S	20	M 30 x 2	5	225	4	-30	100
SKMS 20 HS 5	19	S	25	M 36 x 2	5	225	4	-30	100
SKMS 25 HS 5	25	S	30	M 42 x 2	5	225	4	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKM IR Plug-in coupling sleeve

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised
Accessories: **SKM ZUBS 3 CB,** Dust protection coupling sleeve, SKM..
SKM ZUB 3 12, Quick release clip with spring
SKM ZUBS, Dust protection coupling sleeve, SKM..
SKM ZUBS 3 C, Dust protection coupling sleeve, SKM..
SKM ZUB 3 11, Quick release clip with dust protection
SKM ZUB BLINDSTECKER, Dummy connector for plug-in coupling sleeve

Connection 1: BSP cylindrical internal threads
Material: Steel

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 04 IR 1	4	G 1/8" -28	1	300	4	-25	100
SKM 06 IR 1	6	G 1/4" -19	1	250	4	-30	100
SKM 10 IR 2	10	G 3/8" -19	2	250	4	-30	100
SKM 10 IR 3	10	G 3/8" -19	3	225	4	-30	100
SKM 13 IR 3	12	G 1/2" -14	3	225	4	-30	100
SKM 20 IR 4	19	G 3/4" -14	4	225	4	-30	100
SKM 20 IR 5	19	G 3/4" -14	5	225	4	-30	100
SKM 25 IR 5	25	G 1" -11	5	225	4	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKM IM — Plug-in coupling sleeve

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised
Accessories: **SKM ZUBS,** Dust protection coupling sleeve, SKM..
SKM ZUB BLINDSTECKER, Dummy connector for plug-in coupling sleeve
SKM ZUB 3 12, Quick release clip with spring
SKM ZUBS 3 C, Dust protection coupling sleeve, SKM..
SKM ZUBS 3 CB, Dust protection coupling sleeve, SKM..
SKM ZUB 3 11, Quick release clip with dust protection

Connection 1: metric cylindrical inner thread
Material: Steel

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 04 IM 1	4	M 12 x 1.5	1	300	4	-25	100
SKM 06 IM 1	6	M 14 x 1.5	1	300	4	-25	100
SKM 08 IM 2	8	M 16 x 1.5	2	250	4	-30	100
SKM 08 IM 3	8	M 16 x 1.5	3	225	4	-25	125
SKM 10 IM 2	10	M 18 x 1.5	2	250	4	-30	100
SKM 10 IM 3	10	M 18 x 1.5	3	225	4	-30	100
SKM 10 IM 4	10	M 18 x 1.5	4	225	4	-25	125
SKM 13 IM 3	12	M 22 x 1.5	3	225	4	-30	100
SKM 13 IM 4	12	M 22 x 1.5	4	225	4	-30	100
SKM 20 IM 5	19	M 30 x 1.5	5	225	4	-25	125

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKM IR T — Plug-in coupling sleeve

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Accessories: **SKM ZUBS T,** Dust protection coupling sleeve, SKM..T

Connection 1: BSP cylindrical internal threads
compatible with: Tema

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 06 IR T	6	G 1/4" -19	450	2,5	-30	100
SKM 10 IR T	10	G 3/8" -19	350	3,0	-30	100
SKM 13 IR T	12	G 1/2" -14	300	3,0	-30	100
SKM 20 IR T	19	G 3/4" -14	280	2,5	-30	100
SKM 25 IR T	25	G 1" -11	250	3,5	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKM IR AE — Plug-in coupling sleeve

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
compatible with: Aeroquip
Surface protection: electro galvanised
Accessories: SKM ZUBS AE, Dust protection coupling sleeve, SKM..AE

Connection 1: BSP cylindrical internal threads
Standard: ISO 7241-1 A
Material: Steel

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 10 IR AE	10	G 3/8" -19	210	4	-25	100
SKM 13 IR AE	12	G 1/2" -14	210	4	-25	100
SKM 20 IR AE	19	G 3/4" -14	250	4	-25	100
SKM 25 IR AE	25	G 1" -11	200	4	-25	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKM IN AE — Plug-in coupling sleeve

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: thread seal
Material: Steel
Accessories: SKM ZUBS AE, Dust protection coupling sleeve, SKM..AE

Connection 1: NPT internal thread
compatible with: Aeroquip
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 06 IN AE	6	NPT 1/4" -18	210	4	-25	100
SKM 10 IN AE	10	NPT 3/8" -18	210	4	-25	100
SKM 13 IN AE	12	NPT 1/2" -14	210	4	-25	100
SKM 20 IN AE	19	NPT 3/4" -14	210	4	-25	100
SKM 25 IN AE	25	NPT 1" -11.5	200	4	-25	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKM IR ARG — Plug-in coupling sleeve

Connection 1: BSP cylindrical internal threads
Material: Steel

Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 10 IR 2 ARG	10	G 3/8" -19	2	250	4	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKM IM ARG — Plug-in coupling sleeve

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised

Connection 1: metric cylindrical inner thread
Material: Steel

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 08 IM 2 ARG	8	M 16 x 1.5	2	400	4	-40	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKM IR HC — Plug-in coupling sleeve

Application: Emergency tools, clamping tools, presses etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Material: Steel

Connection 1: BSP cylindrical internal threads
Included in scope of supply: with dust protection
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 04 IR HC	4	G 1/8" -28	1000	2,5	-30	100
SKM 06 IR HC	6	G 1/4" -19	1000	2,5	-30	100
SKM 10 IR HC	10	G 3/8" -19	1000	2,5	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKM IN HC — Plug-in coupling sleeve

Application: Emergency tools, clamping tools, presses etc.
Sealing form 1: thread seal
Material: Steel

Connection 1: NPT internal thread
Included in scope of supply: with dust protection
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 06 IN HC	6	NPT 1/4" -18	1000	2,5	-30	100
SKM 10 IN HC	10	NPT 3/8" -18	1000	2,5	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKM IR MC — Plug-in coupling sleeve for medium pressure

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Material: Steel

Connection 1: BSP cylindrical internal threads
Included in scope of supply: with dust protection
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 06 IR MC	6	G 1/4" -19	250	4	-30	100
SKM 10 IR MC	10	G 3/8" -19	250	4	-30	100
SKM 13 IR MC	12	G 1/2" -14	250	4	-30	100
SKM 20 IR MC	19	G 3/4" -14	320	3	-30	100
SKM 25 IR MC	25	G 1" -11	320	3	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKM IR SP — Plug-in coupling sleeve

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Additional feature: with ball valve
Surface protection: electro galvanised
Accessories: SKM ZUBS SP, Dust protection coupling sleeve, SKM..SP

Connection 1: BSP cylindrical internal threads
compatible with: Pioneer
Material: Steel

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 06 IR SP	6	G 1/4" -19	200	4	-25	110
SKM 10 IR SP	10	G 3/8" -19	200	4	-25	110
SKM 13 IR SP	12	G 1/2" -14	200	4	-25	125
SKM 20 IR SP	19	G 3/4" -14	200	4	-25	125

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKMS HL 3 U — Plug-in coupling sleeve (bulkhead connection)

Application: Automotive engineering (UNIMOG)
Connection 1: metric cylindrical outer thread
Material: Steel
Accessories: SKM ZUBS, Dust protection coupling sleeve, SKM..

Design: Coupling with bulkhead connection
Sealing form 1: 24° inner cone
Surface protection: electro galvanised

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure / bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C	Vegetable oil temperature min. °C	Vegetable oil temperature max. °C
SKMS 10 HL 3 U	10	L	12	M 18 x 1.5	3	250	4	-30	100	-15	80
SKMS 13 HL 3 U	12	L	15	M 22 x 1.5	3	250	4	-30	100	-15	80

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKM IM U — Plug-in coupling sleeve

Application: Automotive engineering (UNIMOG)
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised
Accessories: SKM ZUB BLINDSTECKER, Dummy connector for plug-in coupling sleeve
SKM ZUBS, Dust protection coupling sleeve, SKM..

Connection 1: metric cylindrical inner thread
Material: Steel

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C	Vegetable oil temperature min. °C	Vegetable oil temperature max. °C
SKM 13 IM 3 U	12	M 22 x 1.5	3	250	4	-30	100	-15	80

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKM IR SN72 — Plug-in coupling sleeve

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Connection 1: BSP cylindrical internal threads
Standard: ISO 7241-1 Series B
Surface protection: electro galvanised
Product versions: SKM IR SN72 VA, Plug-in coupling sleeve, Stainless steel
Accessories: SKM ZUBS SN72, Dust protection coupling sleeve, SKM..SN 72

Design: Snap-tite series 72
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Material: Steel

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 04 IR SN72	5	G 1/8" -28	345	4	-40	90
SKM 06 IR SN72	6	G 1/4" -19	500	4	-25	90
SKM 10 IR SN72	10	G 3/8" -19	250	4	-25	90
SKM 13 IR SN72	12	G 1/2" -14	250	4	-25	90
SKM 20 IR SN72	19	G 3/4" -14	250	4	-25	90
SKM 25 IR SN72	25	G 1" -11	200	4	-25	90

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKM IR SN H — Plug-in coupling sleeve

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Connection 1: BSP cylindrical internal threads
Material: Steel
Product versions: SKM IR SN H VA, Plug-in coupling sleeve, Stainless steel
Accessories: SKM ZUBS SN H, Dust protection coupling sleeve, SKM..SN H

Design: Snap-tite series H
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 06 IR SN H	6	G 1/4" -19	450	2	-40	90
SKM 10 IR SN H	10	G 3/8" -19	310	2	-40	90
SKM 13 IR SN H	12	G 1/2" -14	280	2	-40	90
SKM 20 IR SN H	19	G 3/4" -14	245	2	-40	90
SKM 25 IR SN H	25	G 1" -11	140	2	-40	90
SKM 32 IR SN H	31	G 1.1/4" -11	125	2	-40	90

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKM IR SN H (Continuation) Plug-in coupling sleeve

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 40 IR SN H	38	G 1.1/2" -11	105	2	-40	90
SKM 50 IR SN H	51	G 2" -11	105	2	-40	90
SKM 65 IR SN H	65	G 2.1/2" -11	70	2	-40	90
SKM 75 IR SN H	76	G 3" -11	55	2	-40	90

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKS HL / SKS HS Plug-in coupling connector

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: 24° inner cone
Surface protection: electro galvanised
Accessories: **SKS ZUBS,** Dust protection coupling connector, SKS..
SKS ZUB 3, Connector clip for coupling connector SKS..3
SKS ZUB 3 S, Connector clip for coupling connector SKS..3

Connection 1: metric cylindrical outer thread
Material: Steel

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 04 HL 2	4	L	6	M 12 x 1.5	2	250	4	-30	100
SKS 06 HL 2	6	L	8	M 14 x 1.5	2	250	4	-30	100
SKS 06 HL 3	6	L	8	M 14 x 1.5	3	225	4	-30	100
SKS 08 HL 2	8	L	10	M 16 x 1.5	2	250	4	-30	100
SKS 08 HL 3	8	L	10	M 16 x 1.5	3	225	4	-30	100
SKS 10 HL 3	10	L	12	M 18 x 1.5	3	225	4	-30	100
SKS 10 HL 3 ED	10	L	12	M 18 x 1.5	3	225	4	-30	100
SKS 10 HL 4	10	L	12	M 18 x 1.5	4	225	4	-30	100
SKS 13 HL 3	12	L	15	M 22 x 1.5	3	225	4	-30	100
SKS 13 HL 4	12	L	15	M 22 x 1.5	4	225	4	-30	100
SKS 16 HL 3	16	L	18	M 26 x 1.5	3	225	4	-30	100
SKS 16 HL 4	16	L	18	M 26 x 1.5	4	225	4	-30	100
SKS 16 HL 5	16	L	18	M 26 x 1.5	5	225	4	-30	100
SKS 20 HL 4	19	L	22	M 30 x 2	4	225	4	-30	100
SKS 20 HL 5	19	L	22	M 30 x 2	5	225	4	-30	100
SKS 25 HL 5	25	L	28	M 36 x 2	5	225	4	-30	100
SKS 04 HS 2	4	S	8	M 16 x 1.5	2	250	4	-30	100
SKS 06 HS 1	6	S	10	M 18 x 1.5	1	300	4	-25	100
SKS 06 HS 2	6	S	10	M 18 x 1.5	2	250	4	-30	100
SKS 06 HS 3	6	S	10	M 18 x 1.5	3	225	4	-30	100
SKS 08 HS 2	8	S	12	M 20 x 1.5	2	250	4	-30	100
SKS 08 HS 3	8	S	12	M 20 x 1.5	3	225	4	-30	100
SKS 10 HS 3	10	S	14	M 22 x 1.5	3	225	4	-30	100
SKS 10 HS 4	10	S	14	M 22 x 1.5	4	225	4	-30	100
SKS 13 HS 3	12	S	16	M 24 x 1.5	3	225	4	-30	100
SKS 13 HS 4	12	S	16	M 24 x 1.5	4	225	4	-30	100
SKS 16 HS 3	16	S	20	M 30 x 2	3	225	4	-25	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKS HL / SKS HS (Continuation) Plug-in coupling connector

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 16 HS 4	16	S	20	M 30 x 2	4	225	4	-30	100
SKS 16 HS 5	16	S	20	M 30 x 2	5	225	4	-30	100
SKS 20 HS 5	19	S	25	M 36 x 2	5	225	4	-30	100
SKS 25 HS 5	25	S	30	M 42 x 2	5	225	4	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

Other pressure and temperature figures available on request.

SKSS HL / SKSS HS Plug-in coupling connector (bulkhead connection)

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: 24° inner cone
Surface protection: electro galvanised
Accessories: **SKS ZUBS,** Dust protection coupling connector, SKS..
SKS ZUB 3, Connector clip for coupling connector SKS..3
SKS ZUB 3 S, Connector clip for coupling connector SKS..3

Connection 1: metric cylindrical outer thread
Material: Steel

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKSS 04 HL 2	5	L	6	M 12 x 1.5	2	250	4	-30	100
SKSS 06 HL 2	6	L	8	M 14 x 1.5	2	250	4	-30	100
SKSS 06 HL 3	6	L	8	M 14 x 1.5	3	225	4	-30	100
SKSS 08 HL 2	8	L	10	M 16 x 1.5	2	250	4	-30	100
SKSS 08 HL 3	8	L	10	M 16 x 1.5	3	225	4	-30	100
SKSS 10 HL 3	10	L	12	M 18 x 1.5	3	225	4	-30	100
SKSS 10 HL 4	10	L	12	M 18 x 1.5	4	225	4	-30	100
SKSS 13 HL 3	12	L	15	M 22 x 1.5	3	225	4	-30	100
SKSS 13 HL 4	12	L	15	M 22 x 1.5	4	225	4	-30	100
SKSS 16 HL 3	16	L	18	M 26 x 1.5	3	225	4	-30	100
SKSS 16 HL 4	16	L	18	M 26 x 1.5	4	225	4	-30	100
SKSS 16 HL 5	16	L	18	M 26 x 1.5	5	225	4	-30	100
SKSS 20 HL 4	16	L	22	M 30 x 2	4	225	4	-30	100
SKSS 20 HL 5	19	L	22	M 30 x 2	5	225	4	-30	100
SKSS 25 HL 5	25	L	28	M 36 x 2	5	225	4	-30	100
SKSS 04 HS 2	5	S	8	M 16 x 1.5	2	250	4	-30	100
SKSS 06 HS 2	6	S	10	M 18 x 1.5	2	250	4	-30	100
SKSS 06 HS 3	6	S	10	M 18 x 1.5	3	225	4	-30	100
SKSS 08 HS 2	8	S	12	M 20 x 1.5	2	300	4	-25	125
SKSS 08 HS 3	8	S	12	M 20 x 1.5	3	225	4	-30	100
SKSS 10 HS 3	10	S	14	M 22 x 1.5	3	225	4	-30	100
SKSS 10 HS 4	10	S	14	M 22 x 1.5	4	225	4	-30	100
SKSS 13 HS 3	12	S	16	M 24 x 1.5	3	225	4	-30	100
SKSS 13 HS 4	12	S	16	M 24 x 1.5	4	225	4	-30	100
SKSS 16 HS 3	16	S	20	M 30 x 2	3	225	4	-25	100
SKSS 16 HS 4	16	S	20	M 30 x 2	4	225	4	-30	100
SKSS 16 HS 5	16	S	20	M 30 x 2	5	225	4	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKSS HL / SKSS HS (Continuation) Plug-in coupling connector (bulkhead connection)

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKSS 20 HS 5	19	S	25	M 36 x 2	5	225	4	-30	100
SKSS 25 HS 5	25	S	30	M 42 x 2	5	225	4	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKS IR Plug-in coupling connector

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised
Accessories: **SKS ZUBS,** Dust protection coupling connector, SKS..
SKS ZUB 3, Connector clip for coupling connector SKS..3
SKS ZUB 3 S, Connector clip for coupling connector SKS..3

Connection 1: BSP cylindrical internal threads
Material: Steel

Identification	DN*	Connecting thread	L mm	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 04 IR 1	5	G 1/8" -28	42,0	1	300	4	-25	100
SKS 06 IR 1	6	G 1/4" -19	44,0	1	250	4	-30	100
SKS 10 IR 2	10	G 3/8" -19	49,0	2	250	4	-30	100
SKS 10 IR 3	10	G 3/8" -19	60,0	3	225	4	-30	100
SKS 13 IR 3	12	G 1/2" -14	48,0	3	225	4	-30	100
SKS 20 IR 4	19	G 3/4" -14	67,5	4	225	4	-30	100
SKS 20 IR 5	19	G 3/4" -14	76,0	5	225	4	-30	100
SKS 25 IR 5	25	G 1" -11	76,0	5	225	4	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKS IM Plug-in coupling connector

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised
Accessories: **SKS ZUBS,** Dust protection coupling connector, SKS..
SKS ZUB 3, Connector clip for coupling connector SKS..3
SKS ZUB 3 S, Connector clip for coupling connector SKS..3

Connection 1: metric cylindrical inner thread
Material: Steel

Identification	DN*	Connecting thread	L mm	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 04 IM 1	5	M 12 x 1.5	45,0	1	300	4	-25	100
SKS 06 IM 1	6	M 14 x 1.5	45,0	1	300	4	-25	100
SKS 08 IM 2	8	M 16 x 1.5	49,0	2	250	4	-30	100
SKS 08 IM 3	8	M 16 x 1.5	59,0	3	225	4	-25	125

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKS IM (Continuation) Plug-in coupling connector

Identification	DN*	Connecting thread	L mm	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 10 IM 2	10	M 18 x 1.5	49,0	2	300	4	-25	125
SKS 10 IM 3	10	M 18 x 1.5	60,0	3	225	4	-30	100
SKS 10 IM 4	10	M 18 x 1.5	63,5	4	225	4	-25	125
SKS 13 IM 3	12	M 22 x 1.5	48,0	3	225	4	-30	100
SKS 13 IM 4	12	M 22 x 1.5	63,5	4	225	4	-30	100
SKS 20 IM 5	19	M 30 x 1.5	76,0	5	225	4	-25	125

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKS IR T Plug-in coupling connector

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Material: Steel
Accessories: SKS ZUBS T, Dust protection coupling connector, SKS..T

Connection 1: BSP cylindrical internal threads
compatible with: Tema
Surface protection: electro galvanised

Identification	DN*	Size	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 06 IR T	6	4	G 1/4" -19	450	2,5	-30	100
SKS 10 IR T	10	6	G 3/8" -19	350	3,0	-30	100
SKS 13 IR T	12	8	G 1/2" -14	300	3,0	-30	100
SKS 20 IR T	19	12	G 3/4" -14	280	2,5	-30	100
SKS 25 IR T	25	16	G 1" -11	250	3,5	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKS IR AE Plug-in coupling connector

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Material: Steel
Accessories: SKS ZUBS AE, Dust protection coupling connector, SKS..AE

Connection 1: BSP cylindrical internal threads
compatible with: Aeroquip
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 10 IR AE	10	G 3/8" -19	210	4,0	-25	100
SKS 13 IR AE	12	G 1/2" -14	210	4,0	-25	100
SKS 20 IR AE	19	G 3/4" -14	250	3,5	-25	100
SKS 25 IR AE	25	G 1" -11	200	4,0	-25	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKS IN AE — Plug-in coupling connector

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: thread seal
Additional feature: ISO 7241-1 A
Surface protection: electro galvanised
Accessories: SKS ZUBS AE, Dust protection coupling connector, SKS..AE

Connection 1: NPT internal thread
compatible with: Aeroquip
Material: Steel

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 06 IN AE	6	NPT 1/4" -18	210	4	-25	100
SKS 10 IN AE	10	NPT 3/8" -18	210	4	-25	100
SKS 13 IN AE	12	NPT 1/2" -14	210	4	-25	100
SKS 20 IN AE	19	NPT 3/4" -14	210	4	-25	100
SKS 25 IN AE	25	NPT 1" -11.5	200	4	-25	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKS IR ARG — Plug-in coupling connector

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Material: Steel

Connection 1: BSP cylindrical internal threads
compatible with: ARGUS
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 10 IR 2 ARG	10	G 3/8" -19	2	250	4	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKS IR HC — Plug-in coupling connector

Application: Emergency tools, clamping tools, presses etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Material: Steel

Connection 1: BSP cylindrical internal threads
Included in scope of supply: with dust protection
Surface protection: electro galvanised

Identification	DN*	Connecting thread	L mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 04 IR HC	5	G 1/8" -28	33,3	1000	2,5	-30	100
SKS 06 IR HC	6	G 1/4" -19	38,0	1000	2,5	-30	100
SKS 10 IR HC	10	G 3/8" -19	39,5	1000	2,5	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
The connector may not be placed under load when uncoupled.

SKS IN HC — Plug-in coupling connector

Application: Emergency tools, clamping tools, presses etc.
Sealing form 1: thread seal
Material: Steel
Connection 1: NPT internal thread
Included in scope of supply: with dust protection
Surface protection: electro galvanised

Identification	DN*	Connecting thread	L mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 04 IN HC	5	NPT 1/8" -27	33,3	1000	2,5	-30	100
SKS 06 IN HC	6	NPT 1/4" -18	35,7	1000	2,5	-30	100
SKS 10 IN HC	10	NPT 3/8" -18	37,0	1000	2,5	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
The connector may not be placed under load when uncoupled.

SKS IR SP — Plug-in coupling connector

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Additional feature: with ball valve
Surface protection: electro galvanised
Accessories: SKS ZUBS SP, Dust protection coupling connector, SKS..SP
Connection 1: BSP cylindrical internal threads
compatible with: Pioneer
Material: Steel

Identification	DN*	Connecting thread	L mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 06 IR SP	6	G 1/4" -19	35,3	200	4	-25	110
SKS 10 IR SP	10	G 3/8" -19	38,0	200	4	-25	110
SKS 13 IR SP	12	G 1/2" -14	51,4	200	4	-25	125
SKS 20 IR SP	19	G 3/4" -14	46,0	200	4	-25	125

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKS IR SN72 — Plug-in coupling connector

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Connection 1: BSP cylindrical internal threads
Additional feature: ISO 7241-1 Series B
Surface protection: electro galvanised
Product versions: SKS IR SN72 VA, Plug-in coupling connector, Stainless steel
Design: Snap-tite series 72
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Material: Steel

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 04 IR SN72	5	G 1/8" -28	345	4	-40	90
SKS 06 IR SN72	6	G 1/4" -19	500	4	-25	90
SKS 10 IR SN72	10	G 3/8" -19	250	4	-25	90
SKS 13 IR SN72	12	G 1/2" -14	250	4	-25	90
SKS 20 IR SN72	19	G 3/4" -14	250	4	-25	90
SKS 25 IR SN72	25	G 1" -11	200	4	-25	90

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKS IR SN H — Plug-in coupling connector

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Connection 1: BSP cylindrical internal threads
Material: Steel
Product versions: SKS IR SN H VA, Stainless steel plug-in coupling connector, Stainless steel
Accessories: SKS ZUBS SN H, Dust protection coupling connector, SKS..SN H

Design: Snap-tite series H
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 06 IR SN H	6	G 1/4" -19	450	2	-40	90
SKS 10 IR SN H	10	G 3/8" -19	310	2	-40	90
SKS 13 IR SN H	12	G 1/2" -14	280	2	-40	90
SKS 20 IR SN H	19	G 3/4" -14	245	2	-40	90
SKS 25 IR SN H	25	G 1" -11	140	2	-40	90
SKS 32 IR SN H	31	G 1.1/4" -11	125	2	-40	90
SKS 40 IR SN H	38	G 1.1/2" -11	105	2	-40	90
SKS 50 IR SN H	51	G 2" -11	105	2	-40	90
SKS 65 IR SN H	65	G 2.1/2" -11	70	2	-40	90
SKS 75 IR SN H	76	G 3" -11	55	2	-40	90

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKM ZUBS — Dust protection coupling sleeve, SKM..

suitable for: Plug-in coupling sleeve
Accessories: SKMS HL / SKMS HS, Plug-in coupling sleeve (bulkhead connection)
SKM HL / SKM HS, Plug-in coupling sleeve
SKM IM, Plug-in coupling sleeve
SKM IR, Plug-in coupling sleeve
SKM IM U, Plug-in coupling sleeve
SKMS HL 3 U, Plug-in coupling sleeve (bulkhead connection)

Material: Plastic

Identification	Size	Colour
SKM ZUBS 1	1	blue
SKM ZUBS 2	2	red
SKM ZUBS 3 99	3	red
SKM ZUBS 3 99 GE	3	yellow
SKM ZUBS 3 99 GRU	3	green
SKM ZUBS 3 99 SC	3	black
SKM ZUBS 3 99 BL	3	blue
SKM ZUBS 4	4	red
SKM ZUBS 5	5	red

SKM ZUBS 3 C — Dust protection coupling sleeve, SKM..

suitable for: Plug-in coupling sleeve
Material: Plastic
Accessories: **SKM HL / SKM HS,** Plug-in coupling sleeve
SKMS HL / SKMS HS, Plug-in coupling sleeve (bulkhead connection)
SKM IM, Plug-in coupling sleeve
SKM IR, Plug-in coupling sleeve

Identification	Size	Colour
SKM ZUBS 3 C	3	red
SKM ZUBS 3 C BL	3	blue
SKM ZUBS 3 C GE	3	yellow
SKM ZUBS 3 C GR	3	green
SKM ZUBS 3 C SC	3	black

SKM ZUBS 3 CB — Dust protection coupling sleeve, SKM..

suitable for: Plug-in coupling sleeve
Material: Plastic
Accessories: **SKMS HL / SKMS HS,** Plug-in coupling sleeve (bulkhead connection)
SKM HL / SKM HS, Plug-in coupling sleeve
SKM IR, Plug-in coupling sleeve
SKM IM, Plug-in coupling sleeve

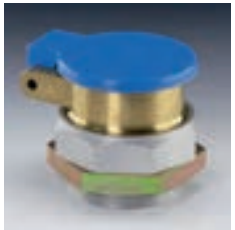
Identification	Size	Colour
SKM ZUBS 3 CB	3	red
SKM ZUBS 3 CB SC	3	black

SKM ZUB BLINDSTECKER — Dummy connector for plug-in coupling sleeve

suitable for: Plug-in coupling sleeve
Included in scope of supply: with counter nut
Accessories: **SKM HL / SKM HS,** Plug-in coupling sleeve
SKM IM, Plug-in coupling sleeve
SKM IM U, Plug-in coupling sleeve
SKM IR, Plug-in coupling sleeve

Identification	Size	Bulkhead thread	SW mm
SKM ZUB 3 17	3	M 30 x 1	36

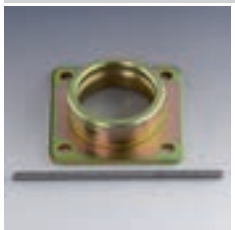
SKM ZUB 3 11 — Quick release clip with dust protection



suitable for: Plug-in coupling sleeve
Accessories: **SKM IR,** Plug-in coupling sleeve
SKM HL / SKM HS, Plug-in coupling sleeve
SKM IM, Plug-in coupling sleeve

Identification	Size	Bulkhead thread	SW mm
SKM ZUB 3 11	3	M 48 x 1.5	55

SKM ZUB 3 12 — Quick release clip with spring



suitable for: Plug-in coupling sleeve
Accessories: **SKM HL / SKM HS,** Plug-in coupling sleeve
SKM IM, Plug-in coupling sleeve
SKM IR, Plug-in coupling sleeve

Identification	Size	Mounting hole mm
SKM ZUB 3 12	3	7,5

SKM ZUBS AE — Dust protection coupling sleeve, SKM..AE

suitable for: Plug-in coupling sleeve SKM...AE
Accessories: **SKM IR AE,** Plug-in coupling sleeve
SKM IN AE, Plug-in coupling sleeve

Identification	DN*	Material	Colour
SKM ZUBS AE 04	6	Plastic	red
SKM ZUBS AE 06	10	Plastic	red
SKM ZUBS AE 08	12	Plastic	red
SKM ZUBS AE 12	19	Plastic	red
SKM ZUBS AE 16 AL	25	Aluminium	metallic

DN = Nominal diameter, nominal width

SKM ZUBS SP — Dust protection coupling sleeve, SKM..SP

suitable for: Plug-in coupling sleeve SKM...SP
Accessories: SKM IR SP, Plug-in coupling sleeve
Material: Plastic

Identification	DN*	Size
SKM ZUBS SP 04	6	4
SKM ZUBS SP 06	10	6
SKM ZUBS SP 08	12	8

DN = Nominal diameter, nominal width

SKM ZUBS T — Dust protection coupling sleeve, SKM..T

suitable for: Plug-in coupling sleeve SKM...T
Accessories: SKM IR T, Plug-in coupling sleeve
Material: Plastic

Identification	DN*
SKM ZUBS T 06	6
SKM ZUBS T 10	10
SKM ZUBS T 13	12
SKM ZUBS T 20	19
SKM ZUBS T 25	25

DN = Nominal diameter, nominal width

SKM ZUBS SN72 — Dust protection coupling sleeve, SKM..SN 72

suitable for: Plug-in coupling sleeve, Snap-tite series 72
Accessories: SKM IR SN72, Plug-in coupling sleeve
Material: Plastic

Identification	DN*	for thread
SKM ZUBS 06 SN72	6	G 1/4″
SKM ZUBS 10 SN72	10	G 3/8″
SKM ZUBS 13 SN72	12	G 1/2″
SKM ZUBS 25 SN72	25	G 1"

SKM ZUBS SN H — Dust protection coupling sleeve, SKM..SN H

suitable for: Plug-in coupling sleeve, Snap-tite series H
Accessories: SKM IR SN H, Plug-in coupling sleeve
Material: Plastic

Identification	for thread
SKM ZUBS 32 SN H	G 1.1/4"

SKS ZUB 3 S — Connector clip for coupling connector SKS..3

suitable for: Plug-in coupling connector
Accessories: SKS HL / SKS HS, Plug-in coupling connector
SKSS HL / SKSS HS, Plug-in coupling connector (bulkhead connection)
SKS IM, Plug-in coupling connector
SKS IR, Plug-in coupling connector

Identification	Size	Bulkhead thread	Material	Included in scope of supply
SKS ZUB 3 10 S	3	M 18 x 1.5	Steel	without counter nut

SKS ZUBS — Dust protection coupling connector, SKS..

suitable for: Plug-in coupling connector
Accessories: SKSS HL / SKSS HS, Plug-in coupling connector (bulkhead connection)
SKS IM, Plug-in coupling connector
SKS HL / SKS HS, Plug-in coupling connector
SKS IR, Plug-in coupling connector
Material: Plastic

Identification	Size	Colour
SKS ZUBS 1	1	blue
SKS ZUBS 2	2	red
SKS ZUBS 399	3	red
SKS ZUBS 399 BL	3	blue
SKS ZUBS 399 GE	3	yellow
SKS ZUBS 399 GRU	3	green
SKS ZUBS 399 SC	3	black
SKS ZUBS 4	4	red
SKS ZUBS 5	5	red

SKS ZUB 3 — Connector clip for coupling connector SKS..3

suitable for: Plug-in coupling connector
Accessories: **SKS HL / SKS HS,** Plug-in coupling connector
SKSS HL / SKSS HS, Plug-in coupling connector (bulkhead connection)
SKS IM, Plug-in coupling connector
SKS IR, Plug-in coupling connector

Identification	Size	Bulkhead thread	Material	Included in scope of supply
SKS ZUB 3 10	3	M 18 x 1.5	Plastic	with counter nut

SKS ZUBS AE — Dust protection coupling connector, SKS..AE

suitable for: Plug-in coupling connector SKS...AE
Material: Plastic
Accessories: **SKS IR AE,** Plug-in coupling connector
SKS IN AE, Plug-in coupling connector

Identification	DN*
SKS ZUBS AE 04	6
SKS ZUBS AE 06	10
SKS ZUBS AE 08	12
SKS ZUBS AE 12	19
SKS ZUBS AE 16	25
DN = Nominal diameter, nominal width	

SKS ZUBS T — Dust protection coupling connector, SKS..T

suitable for: Plug-in coupling connector SKS...T
Material: Plastic
Accessories: **SKS IR T,** Plug-in coupling connector

Identification	DN*
SKS ZUBS T 06	6
SKS ZUBS T 10	10
SKS ZUBS T 13	12
SKS ZUBS T 20	19
SKS ZUBS T 25	25
DN = Nominal diameter, nominal width	

SKS ZUBS SP — Dust protection coupling connector, SKS..SP

suitable for: Plug-in coupling connector SKS...SP
Accessories: SKS IR SP, Plug-in coupling connector
Material: Plastic

Identification	DN*	Size
SKS ZUBS SP 04	6	4
SKS ZUBS SP 06	10	6
SKS ZUBS SP 08	12	8

DN = Nominal diameter, nominal width

SKS ZUBS SN H — Dust protection coupling connector, SKS..SN H

suitable for: Plug-in coupling connector, Snap-tite series H
Accessories: SKS IR SN H, Plug-in coupling connector
Material: Plastic

Identification	for thread
SKS ZUBS 32 SN H	G 1.1/4"

SKM HL FS — Plug-in coupling sleeve

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: 24° inner cone
Material: Steel
Accessories: SKM ZUBS FS, Dust protection coupling sleeve, SKM..FS

Connection 1: metric cylindrical outer thread
compatible with: Stucchi
Surface protection: electro galvanised

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 08 HL 2 FS	8	L	10	M 16 x 1.5	2	350	4,0	-20	100
SKM 10 HL 2 FS	10	L	12	M 18 x 1.5	2	350	4,0	-20	100
SKM 10 HL 3 FS	10	L	12	M 18 x 1.5	3	350	4,0	-20	100
SKM 13 HL 2 FS	12	L	15	M 22 x 1.5	2	350	4,0	-20	100
SKM 13 HL 3 FS	12	L	15	M 22 x 1.5	3	350	4,0	-20	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
With standard threaded connections in determining the operating pressure of the maximum rated pressure is taken into account.Other pressure and temperature figures available on request.

SKMS HL FS — Plug-in coupling sleeve (bulkhead connection)

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Connection 1: metric cylindrical outer thread
compatible with: Stucchi
Surface protection: electro galvanised
Accessories: SKM ZUBS FS, Dust protection coupling sleeve, SKM..FS

Design: Coupling with bulkhead connection
Sealing form 1: 24° inner cone
Material: Steel

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKMS 08 HL 2 FS	8	L	10	M 16 x 1.5	2	350	4	-20	100
SKMS 10 HL 2 FS	10	L	12	M 18 x 1.5	2	350	4	-20	100
SKMS 10 HL 3 FS	10	L	12	M 18 x 1.5	3	350	4	-20	100
SKMS 13 HL 2 FS	12	L	15	M 22 x 1.5	2	350	4	-20	100
SKMS 13 HL 3 FS	12	L	15	M 22 x 1.5	3	350	4	-20	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
With standard threaded connections in determining the operating pressure of the maximum rated pressure is taken into account.Other pressure and temperature figures available on request.

SKM IR FS — Plug-in coupling sleeve

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Material: Steel
Product versions: SKM IR FS VA, Plug-in coupling sleeve, Stainless steel
Accessories: SKM ZUBS FS, Dust protection coupling sleeve, SKM..FS

Connection 1: BSP cylindrical internal threads
compatible with: Stucchi
Surface protection: electro galvanised

Identification	DN*	Size	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 06 IR 1 FS	6	1	G 1/4" -19	400	4	-20	100
SKM 10 IR 2 FS	10	2	G 3/8" -19	350	4	-20	100
SKM 13 IR 2 FS	12	2	G 1/2" -14	350	4	-20	100
SKM 13 IR 3 FS	12	3	G 1/2" -14	350	4	-20	100
SKM 20 IR 3 FS	19	3	G 3/4" -14	350	4	-20	100
SKM 20 IR 4 FS	19	4	G 3/4" -14	350	4	-20	100
SKM 25 IR 5 FS	25	5	G 1" -11	350	4	-20	100
SKM 32 IR 6 FS	31	6	G 1.1/4" -11	300	4	-20	100
SKM 40 IR 7 FS	38	7	G 1.1/2" -11	200	4	-20	100
SKM 50 IR 8 FS	51	8	G 2" -11	200	4	-20	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKM IJ FS — Plug-in coupling sleeve

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shape F
Material: Steel
Accessories: SKM ZUBS FS, Dust protection coupling sleeve, SKM..FS

Connection 1: UN/UNF inner thread
compatible with: Stucchi
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 10 IJ 1 FS	10	UNF 9/16" -18	1	350	4	-20	100
SKM 13 IJ 2 FS	12	UNF 3/4" -16	2	350	4	-20	100
SKM 16 IJ 3 FS	16	UNF 7/8" -14	3	350	4	-20	100
SKM 20 IJ 3 FS	19	UN 1.1/16" -12	3	350	4	-20	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKM IR SN71-3 — Plug-in coupling sleeve

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised
Accessories: SKM ZUBS SN71, Dust protection coupling sleeve, SKM..SN 71

Connection 1: BSP cylindrical internal threads
Material: Steel

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKM 06 IR SN71-3	6	G 1/4" -19	690	2	-40	90
SKM 10 IR SN71-3	10	G 3/8" -19	690	2	-40	90
SKM 13 IR SN71-3	12	G 1/2" -14	690	2	-40	90
SKM 20 IR SN71-3	19	G 3/4" -14	520	2	-40	90
SKM 25 IR SN71-3	25	G 1" -11	520	2	-40	90

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKS IR F — Plug-in coupling connector

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Material: Steel
Accessories: SKS ZUBS FS, Dust protection coupling connector, SKS..FS

Connection 1: BSP cylindrical internal threads
compatible with: Faster
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 16 IR 25 F	16	G 1" -11	250	4	-25	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKS IJ FS HA — Plug-in coupling plug

Application: in construction, mining and tunnel building
Connection 1: UN/UNF inner thread
Standard: ISO 16028
compatible with: Stucchi
Surface protection: electro galvanised

Design: flat sealing
Sealing form 1: for screw-in pins with shape F
Additional feature: for breaker operation
Material: Steel

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 20 IJ 5 FS HA	19	UN 1.1/16" -12	5	350	4	-25	100
SKS 25 IJ 5 FS HA	25	UN 1 5/16" -12	5	350	4	-25	100

SKS IR FS HA — Plug-in coupling plug

Application: in construction, mining and tunnel building
Connection 1: BSP cylindrical internal threads
Standard: ISO 16028
compatible with: Stucchi
Surface protection: electro galvanised

Design: flat sealing
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Additional feature: for breaker operation
Material: Steel

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 20 IR 5 FS HA	19	G 3/4" -14	5	350	4	-25	100
SKS 25 IR 5 FS HA	25	G 1" -11	5	350	4	-25	100

SKS IR FS UDK — Plug-in coupling plug

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Connection 1: BSP cylindrical internal threads
Standard: ISO 16028
compatible with: Stucchi
Surface protection: electro galvanised

Design: flat sealing
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Additional feature: can be coupled with 250 bar residual pressure
Material: Steel

Identification	DN*	Connecting thread	Size	Working pressure bar	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 06 IR 1 FS UDK	6	G 1/4" -19	1	400	-25	100
SKS 10 IR 2 FS UDK	10	G 3/8" -19	2	350	-25	100
SKS 13 IR 2 FS UDK	12	G 1/2" -14	2	350	-25	100
SKS 13 IR 3 FS UDK	12	G 1/2" -14	3	350	-25	100
SKS 13 IR 4 FS UDK	12	G 1/2" -14	4	350	-25	100
SKS 20 IR 3 FS UDK	19	G 3/4" -14	3	350	-25	100
SKS 20 IR 4 FS UDK	19	G 3/4" -14	4	350	-25	100
SKS 20 IR 5 FS UDK	19	G 3/4" -14	5	300	-25	100
SKS 25 IR 5 FS UDK	25	G 1" -11	5	300	-25	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKS HL FS — Plug-in coupling connector

suitable for: Plug-in coupling connector SKS...FS
Connection 1: metric cylindrical outer thread
compatible with: Stucchi
Surface protection: electro galvanised
Accessories: SKS ZUBS FS, Dust protection coupling connector, SKS..FS

Design: flat sealing
Sealing form 1: 24° inner cone
Material: Steel

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 08 HL 2 FS	8	L	10	M 16 x 1.5	2	350	4,0	-20	100
SKS 10 HL 2 FS	10	L	12	M 18 x 1.5	2	350	4,0	-20	100
SKS 10 HL 2 FS ED	10	L	12	M 18 x 1.5	2	350	4,0	-20	100
SKS 10 HL 3 FS	10	L	12	M 18 x 1.5	3	350	4,0	-20	100
SKS 13 HL 2 FS	12	L	15	M 22 x 1.5	2	350	4,0	-20	100
SKS 13 HL 3 FS	12	L	15	M 22 x 1.5	3	350	4,0	-20	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled BD = Working pressure

With standard threaded connections in determining the operating pressure of the maximum rated pressure is taken into account.Other pressure and temperature figures available on request.nominal width 10, size 2 also available in ED
version

SKSS HL FS — Plug-in coupling connector (bulkhead connection)

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Connection 1: metric cylindrical outer thread
compatible with: Stucchi
Surface protection: electro galvanised
Accessories: SKS ZUBS FS, Dust protection coupling connector, SKS..FS

Design: Coupling with bulkhead connection
Sealing form 1: 24° inner cone
Material: Steel

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKSS 08 HL 2 FS	8	L	10	M 16 x 1.5	2	350	4,0	-20	100
SKSS 10 HL 2 FS	10	L	12	M 18 x 1.5	2	350	4,0	-20	100
SKSS 10 HL 3 FS	10	L	12	M 18 x 1.5	3	350	4,0	-20	100
SKSS 13 HL 2 FS	12	L	15	M 22 x 1.5	2	350	4,0	-20	100
SKSS 13 HL 3 FS	12	L	15	M 22 x 1.5	3	350	4,0	-20	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

Other pressure and temperature figures available on request.With standard threaded connections in determining the operating pressure of the maximum rated pressure is taken into account.

SKS IR FS — Plug-in coupling connector

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Material: Steel
Product versions: SKS IR FS VA, Plug-in coupling connector, Stainless steel
Accessories: SKS ZUBS FS, Dust protection coupling connector, SKS..FS

Connection 1: BSP cylindrical internal threads
compatible with: Stucchi
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 06 IR 1 FS	6	G 1/4" -19	1	300	4	-30	100
SKS 10 IR 2 FS	10	G 3/8" -19	2	250	4	-30	100
SKS 13 IR 2 FS	12	G 1/2" -14	2	250	4	-30	100
SKS 13 IR 3 FS	12	G 1/2" -14	3	250	4	-30	100
SKS 20 IR 3 FS	19	G 3/4" -14	3	250	4	-30	100
SKS 20 IR 4 FS	19	G 3/4" -14	4	250	4	-30	100
SKS 25 IR 5 FS	25	G 1" -11	5	250	4	-30	100
SKS 32 IR 6 FS	31	G 1.1/4" -11	6	250	4	-20	100
SKS 40 IR 7 FS	38	G 1.1/2" -11	7	200	4	-20	100
SKS 50 IR 8 FS	51	G 2" -11	8	200	4	-20	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKS IJ FS — Plug-in coupling connector

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shape F
Material: Steel
Accessories: SKS ZUBS FS, Dust protection coupling connector, SKS..FS

Connection 1: UN/UNF inner thread
compatible with: Stucchi
Surface protection: electro galvanised

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 10 IJ 1 FS	10	UNF 9/16" -18	1	350	4	-20	100
SKS 13 IJ 2 FS	12	UNF 3/4" -16	2	350	4	-20	100
SKS 16 IJ 3 FS	16	UNF 7/8" -14	3	350	4	-20	100
SKS 20 IJ 3 FS	19	UN 1.1/16" -12	3	350	4	-20	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

SKS IR SN71-3 — Plug-in coupling connector

Application: General application, e.g. in industry, construction machinery, agricultural technology etc.
Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Surface protection: electro galvanised
Accessories: SKS ZUBS SN71, Dust protection coupling connector, SKS..SN 71

Connection 1: BSP cylindrical internal threads
Material: Steel

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
SKS 06 IR SN71-3	6	G 1/4" -19	690	2	-40	90
SKS 10 IR SN71-3	10	G 3/8" -19	690	2	-40	90
SKS 13 IR SN71-3	12	G 1/2" -14	690	2	-40	90
SKS 20 IR SN71-3	19	G 3/4" -14	520	2	-40	90
SKS 25 IR SN71-3	25	G 1" -11	520	2	-40	90

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

SKM ZUBS FS — Dust protection coupling sleeve, SKM..FS

suitable for: Plug-in coupling sleeve SKM...FS
Accessories: SKM IR FS, Plug-in coupling sleeve
SKM HL FS, Plug-in coupling sleeve
SKM IJ FS, Plug-in coupling sleeve
SKMS HL FS, Plug-in coupling sleeve (bulkhead connection)

Material: Plastic

Identification	Size
SKM ZUBS 1 FS	1
SKM ZUBS 2 FS	2
SKM ZUBS 3 FS	3
SKM ZUBS 4 FS	4
SKM ZUBS 5 FS	5

SKM ZUBS SN71 — Dust protection coupling sleeve, SKM..SN 71

suitable for: Plug-in coupling sleeve, Snap-tite series 71
Accessories: SKM IR SN71-3, Plug-in coupling sleeve

Material: Plastic

Identification	DN*	for thread
SKM ZUBS 20 SN71	19	G 3/4"
SKM ZUBS 25 SN71	25	G 1"

SKS ZUBS FS — Dust protection coupling connector, SKS..FS

suitable for: Plug-in coupling connector SKS...FS

Material: Plastic

Accessories: **SKS IR FS,** Plug-in coupling connector
SKS IR F, Plug-in coupling connector
SKS IJ FS, Plug-in coupling connector
SKS HL FS, Plug-in coupling connector
SKSS HL FS, Plug-in coupling connector (bulkhead connection)

Identification	Size
SKS ZUBS 1 FS	1
SKS ZUBS 2 FS	2
SKS ZUBS 3 FS	3
SKS ZUBS 4 FS	4
SKS ZUBS 5 FS	5

SKS ZUBS SN71 — Dust protection coupling connector, SKS..SN 71

suitable for: Plug-in coupling connector, Snap-tite series 71

Material: Plastic

Accessories: **SKS IR SN71-3,** Plug-in coupling connector

Identification	DN*	for thread
SKS ZUBS 06 SN71	6	G 1/4"
SKS ZUBS 20 SN71	19	G 3/4"
SKS ZUBS 25 SN71	25	G 1"

TKM MV IR — Temperature control coupling sleeve with valve

Connection 1: BSP cylindrical internal threads

Sealing form 1: for screw-in pins with shapes A, B and if necessary E

Material: Brass

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SW mm
TKM 09 MV 06 IR	6	G 1/4" -19	9	15	3	-15	150	17
TKM 13 MV 06 IR	6	G 1/4" -19	13	15	3	-15	150	17
TKM 13 MV 10 IR	10	G 3/8" -19	13	15	3	-15	150	22

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled SW = Width across flats
Other pressure and temperature figures available on request.

TKM MV HB KAF — Temperature control coupling sleeve with valve, short

Connection 1: BSP external thread, cylindrical
Sealing form 1: 60° inner cone
Material: Brass

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SW mm
TKM 09 MV 06 HB KAF	6	G 1/4" -19	9	15	3	-15	150	17
TKM 13 MV 10 HB KAF	10	G 3/8" -19	13	15	3	-15	150	22

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled SW = Width across flats
Other pressure and temperature figures available on request.

TKM MV HB — Temperature control coupling sleeve with valve

Connection 1: BSP external thread, cylindrical
Sealing form 1: 60° inner cone
Material: Brass

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SW mm
TKM 09 MV 06 HB	6	G 1/4" -19	9	15	3	-15	150	17
TKM 09 MV 10 HB	10	G 3/8" -19	9	15	3	-15	150	19
TKM 13 MV 06 HB	6	G 1/4" -19	13	15	3	-15	150	22
TKM 13 MV 10 HB	10	G 3/8" -19	13	15	3	-15	150	22
TKM 19 MV 13 HB	12	G 1/2" -14	19	15	3	-15	150	30
TKM 19 MV 20 HB	19	G 3/4" -14	19	15	3	-15	150	30

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled SW = Width across flats
Other pressure and temperature figures available on request.

TKM MV H 45 — Temperature control coupling sleeve with valve, angle 45°

Connection 1: metric cylindrical outer thread
Sealing form 1: 60° inner cone
Material: Brass

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SW mm
TKM 09 MV 02 H 45	2	M 10 x 1	9	15	3	-15	150	17
TKM 09 MV 06 H 45	6	M 14 x 1.5	9	15	3	-15	150	17
TKM 13 MV 08 H 45	8	M 16 x 1.5	13	15	3	-15	150	22

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled SW = Width across flats
Other pressure and temperature figures available on request.

TKM MV H 90 — Temperature control coupling sleeve with valve, angle 90°

Connection 1: metric cylindrical outer thread
Sealing form 1: 60° inner cone
Material: Brass

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SW mm
TKM 09 MV 02 H 90	2	M 10 x 1	9	15	3	-15	150	17
TKM 09 MV 06 H 90	6	M 14 x 1.5	9	15	3	-15	150	17
TKM 13 MV 08 H 90	8	M 16 x 1.5	13	15	3	-15	150	22

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled SW = Width across flats
Other pressure and temperature figures available on request.

TKM MV MM — Temperature control coupling sleeve with valve

Connection 1: Hose connection
Material: Brass

Identification	DN*	Hose connection mm	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
TKM 09 MV 06 MM	6	6	9	15	3	-15	150
TKM 09 MV 09 MM	10	9	9	15	3	-15	150
TKM 13 MV 09 MM	10	9	13	15	3	-15	150
TKM 13 MV 13 MM	12	13	13	15	3	-15	150
TKM 19 MV 19 MM	19	19	19	15	3	-15	150

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

TKM MV MM ND — Temperature control coupling sleeve with valve

Connection 1: Hose connection
O-ring: Viton, PFTE coated
Material: Brass

Identification	DN*	Hose connection mm	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
TKM 09 MV 06 MM ND	6	6	9	15	3	-15	150
TKM 09 MV 10 MM ND	10	10	9	15	3	-15	150
TKM 13 MV 10 MM ND	10	10	13	15	3	-15	150
TKM 13 MV 13 MM ND	12	13	13	15	3	-15	150
TKM 19 MV 16 MM ND	16	16	19	15	3	-15	150
TKM 19 MV 19 MM ND	19	19	19	15	3	-15	150

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

TKM MV MM 45 ND — Temperature control coupling sleeve with valve, angle 45°

Connection 1: Hose connection
Material: Brass
O-ring: Viton, PFTE coated

Identification	DN*	Hose connection mm	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
TKM 09 MV 06 MM 45 ND	6	6	9	15	3	-15	150
TKM 09 MV 10 MM 45 ND	10	10	9	15	3	-15	150
TKM 13 MV 10 MM 45 ND	10	10	13	15	3	-15	150
TKM 13 MV 13 MM 45 ND	12	13	13	15	3	-15	150

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

TKM MV MM 90 ND — Temperature control coupling sleeve with valve, angle 90°

Connection 1: Hose connection
Material: Brass
O-ring: Viton, PFTE coated

Identification	DN*	Hose connection mm	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
TKM 09 MV 06 MM 90 ND	6	6	9	15	3	-15	150
TKM 09 MV 10 MM 90 ND	10	10	9	15	3	-15	150
TKM 13 MV 10 MM 90 ND	10	10	13	15	3	-15	150
TKM 13 MV 13 MM 90 ND	12	13	13	15	3	-15	150

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

TKM OV IR — Temperature control coupling sleeve without valve

Connection 1: BSP cylindrical internal threads
Material: Brass
Sealing form 1: for screw-in pins with shapes A, B and if necessary E

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SW mm
TKM 09 OV 06 IR	6	G 1/4" -19	9	15	3	-15	150	17
TKM 13 OV 06 IR	6	G 1/4" -19	13	15	3	-15	150	17
TKM 13 OV 10 IR	10	G 3/8" -19	13	15	3	-15	150	22

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled SW = Width across flats
Other pressure and temperature figures available on request.

TKM OV HB — Temperature control coupling sleeve without valve

Connection 1: BSP external thread, cylindrical
Sealing form 1: 60° inner cone
Material: Brass

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SW mm
TKM 09 OV 06 HB	6	G 1/4" -19	9	15	3	-15	150	17
TKM 09 OV 10 HB	10	G 3/8" -19	9	15	3	-15	150	19
TKM 13 OV 06 HB	6	G 1/4" -19	13	15	3	-15	150	22
TKM 13 OV 10 HB	10	G 3/8" -19	13	15	3	-15	150	22
TKM 19 OV 13 HB	12	G 1/2" -14	19	15	3	-15	150	30
TKM 19 OV 20 HB	19	G 3/4" -14	19	15	3	-15	150	30

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled SW = Width across flats
Other pressure and temperature figures available on request.

TKM OV MM — Temperature control coupling sleeve without valve

Connection 1: Hose connection
Material: Brass

Identification	DN*	Hose connection mm	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
TKM 09 OV 06 MM	6	6	9	15	3	-15	150
TKM 09 OV 09 MM	10	9	9	15	3	-15	150
TKM 13 OV 09 MM	10	9	13	15	3	-15	150
TKM 13 OV 13 MM	12	13	13	15	3	-15	150
TKM 19 OV 19 MM	19	19	19	15	3	-15	150

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

TKM OV MM 45 — Temperature control coupling sleeve without valve, angle 45°

Connection 1: Hose connection
Material: Brass

Identification	DN*	Hose connection mm	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
TKM 09 OV 06 MM 45	6	6	9	15	3	-15	150
TKM 09 OV 09 MM 45	10	9	9	15	3	-15	150
TKM 13 OV 09 MM 45	10	9	13	15	3	-15	150
TKM 13 OV 13 MM 45	12	13	13	15	3	-15	150
TKM 19 OV 19 MM 45	19	19	19	15	3	-15	150

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

TKM OV MM 90 — Temperature control coupling sleeve without valve, angle 90°

Connection 1: Hose connection **Material:** Brass

Identification	DN*	Hose connection mm	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
TKM 09 OV 06 MM 90	6	6	9	15	3	-15	150
TKM 09 OV 09 MM 90	10	9	9	15	3	-15	150
TKM 13 OV 09 MM 90	10	9	13	15	3	-15	150
TKM 13 OV 13 MM 90	12	9	13	15	3	-15	150
TKM 19 OV 19 MM 90	19	19	19	15	3	-15	150

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

TKM OV MM ND — Temperature control coupling sleeve without valve

Connection 1: Hose connection **O-ring:** Viton, PFTE coated
Material: Brass

Identification	DN*	Hose connection mm	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
TKM 09 OV 06 MM ND	6	6	9	15	3	-15	150
TKM 09 OV 10 MM ND	10	10	9	15	3	-15	150
TKM 13 OV 10 MM ND	10	10	13	15	3	-15	150
TKM 13 OV 13 MM ND	12	13	13	15	3	-15	150
TKM 19 OV 16 MM ND	16	16	19	15	3	-15	150
TKM 19 OV 19 MM ND	19	19	19	15	3	-15	150

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

TKM OV MM 45 ND — Temperature control coupling sleeve without valve, angle 45°

Connection 1: Hose connection **O-ring:** Viton, PFTE coated
Material: Brass

Identification	DN*	Hose connection mm	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
TKM 09 OV 06 MM 45 ND	6	6	9	15	3	-15	150
TKM 09 OV 10 MM 45 ND	10	10	9	15	3	-15	150
TKM 13 OV 10 MM 45 ND	10	10	13	15	3	-15	150
TKM 13 OV 13 MM 45 ND	12	13	13	15	3	-15	150

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

TKM OV MM 90 ND — Temperature control coupling sleeve without valve, angle 90°

Connection 1: Hose connection
Material: Brass
O-ring: Viton, PFTE coated

Identification	DN*	Hose connection mm	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C
TKM 09 OV 06 MM 90 ND	6	6	9	15	3	-15	150
TKM 09 OV 10 MM 90 ND	10	10	9	15	3	-15	150
TKM 13 OV 10 MM 90 ND	10	10	13	15	3	-15	150
TKM 13 OV 13 MM 90 ND	12	13	13	15	3	-15	150

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled
Other pressure and temperature figures available on request.

TKS MV HB — Temperature control coupling connector with valve

Connection 1: BSP external thread, cylindrical
Material: Brass
Sealing form 1: thread seal

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SW mm
TKS 09 MV 06 HB	6	G 1/4" -19	9	15	3	-15	150	15
TKS 13 MV 10 HB	10	G 3/8" -19	13	15	3	-15	150	17
TKS 19 MV 20 HB	19	G 3/4" -14	19	15	3	-15	150	27

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled SW = Width across flats
Other pressure and temperature figures available on request.

TKS OV HB — Temperature control coupling connector without valve

Connection 1: BSP external thread, cylindrical
Material: Brass
Sealing form 1: 60° inner cone

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temperature min. °C	Mineral oil temperature max. °C	SW mm
TKS 09 OV 02 HB	2	G 1/8" -28	9	15	3	-15	150	11
TKS 09 OV 06 HB	6	G 1/4" -19	9	15	3	-15	150	15
TKS 09 OV 10 HB	10	G 3/8" -19	9	15	3	-15	150	17
TKS 13 OV 06 HB	6	G 1/4" -19	13	15	3	-15	150	15
TKS 13 OV 10 HB	10	G 3/8" -19	13	15	3	-15	150	17
TKS 13 OV 13 HB	12	G 1/2" -14	13	15	3	-15	150	22
TKS 19 OV 13 HB	12	G 1/2" -14	19	15	3	-15	150	22
TKS 19 OV 20 HB	19	G 3/4" -14	19	15	3	-15	150	27

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled SW = Width across flats
Other pressure and temperature figures available on request.

SKM HL 2 MULTI R — Square multi-coupling (fixed)

Application: Agriculture
Industry
Transport and municipal vehicles
Sealing form 1: 24° inner cone
Design: Multicoupling
Standard: complies with ISO 16028
Residual pressure:: for coupling under residual pressure up to 40 bar on the plug side
Connection 1: metric cylindrical outer thread
Connection 2: Plug in sleeve
Supplementary design information: Panel construction as quick-change system
max: Flow: 100 L/min

Identification	Series	for external pipe Ø mm	Working pressure bar	Size
SKM 08 HL 2 MULTIR	L	10	200	2
SKM 10 HL 2 MULTIR	L	12	200	2
SKM 13 HL 2 MULTIR	L	15	200	2
SKM 16 HL 2 MULTIR	L	18	200	2

SKM IR 2 MULTI Q — Square multi-coupling (fixed)

Application: Agriculture
Industry
Transport and municipal vehicles
Connection 2: Plug in sleeve
Supplementary design information: Panel construction as quick-change system
Connection 1: BSP cylindrical internal threads
Design: Multicoupling
max: Flow: 40 L/min

Identification	Connecting thread	Working pressure bar
SKM 13 IR 2 MULTI Q	G 1/2" -14	250

SKS IR 2 MULTI R — Multicoupling loose half, rectangular

Application: Agriculture
Industry
Transport and municipal vehicles
Connection 2: Connectors
Supplementary design information: Panel construction as quick-change system
max: Flow: 100 L/min
Connection 1: BSP cylindrical internal threads
Design: Multicoupling
Standard: complies with ISO 16028
Residual pressure:: for coupling under residual pressure up to 40 bar on the plug side

Identification	Connecting thread	Working pressure bar	Size
SKS 10 IR 2 MULTI R	G 3/8" -19	200	2
SKS 13 IR 2 MULTI R	G 1/2" -14	200	2

Working pressure: 200 bar for each coupling, but no more than 600 bar for the multicoupler

SKS IR 2 MULTI Q — Square multi coupling (loose)

Application: Agriculture
Industry
Transport and municipal vehicles
Connection 2: Connectors
Supplementary design information: Panel construction as quick-change system

Connection 1: BSP cylindrical internal threads
Design: Multicoupling
max: Flow: 40 L/min

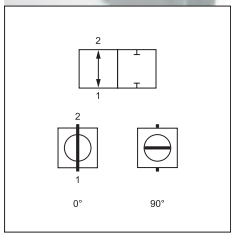
Identification	Connecting thread	Working pressure bar
SKS 13 IR 2 MULTI Q	G 1/2" -14	250

BKR — 2-way ball valve in block design

Connection 1 + 2: BSP cylindrical internal threads
Contact travel: 0°; 90°
Temperature max.: 80 °C
Surface protection: burnished

Sealing form 1 + 2: for screw-in pins with shapes A, B and if necessary E
Temperature min.: -10 °C
Material: Steel housing, ball and operating shaft
Polyamide ball seal
NBR O-ring

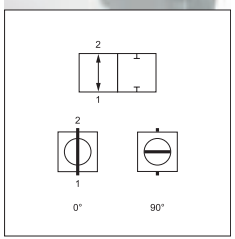
Product versions: BKR VZ, 2-way ball valve in block design, Steel housing, ball and operating shaft
BKR VA, 2-way ball valve in block design, Stainless steel housing, ball and operating shaft
Spare parts: BK ANSCHLAG, Stop washers for ball valve
BK GEKR GRIFF SW, Handle (offset) for ball valve



Identification	DN*	Connecting thread	LW mm	Working pressure bar	SW mm	SF*
BKR 04	4	G 1/8" -28	5	PN 500	9	1,5
BKR 06	6	G 1/4" -19	6	PN 500	9	1,5
BKR 10	10	G 3/8" -19	10	PN 500	9	1,5
BKR 13	12	G 1/2" -14	13	PN 500	9	1,5
BKR 20	19	G 3/4" -14	20	PN 400	14	1,5
BKR 25	25	G 1" -11	24	PN 350	14	1,5
BKR 32	31	G 1.1/4" -11	24	PN 350	14	1,5
BKR 40	38	G 1.1/2" -11	24	PN 350	14	1,5

DN = Nominal diameter, nominal width LW = Clearance PN = Nominal pressure PB = Max. operating pressure
Please refer to the operating instructions for ball valves.Note the permissible pressure limits for the connecting elements.

BKN — 2-way ball valve in block design



Connection 1 + 2: NPT internal thread
Contact travel: 0°; 90°
Temperature max.: 80 °C
Surface protection: burnished

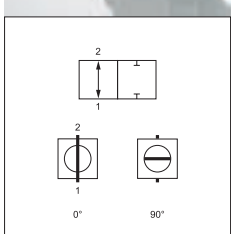
Sealing form 1 + 2: thread seal
Temperature min.: -10 °C
Material: Steel housing, ball and operating shaft
Polyamide ball seal
NBR O-ring

Spare parts: BK ANSCHLAG, Stop washers for ball valve
BK GEKR GRIFF SW, Handle (offset) for ball valve

Identification	DN*	Connecting thread	LW mm	Working pressure bar	SW mm	SF*
BKN 06	6	NPT 1/4" -18	6	PN 500	9	1,5
BKN 10	10	NPT 3/8" -18	10	PN 500	9	1,5
BKN 13	12	NPT 1/2" -14	13	PN 500	9	1,5
BKN 20	19	NPT 3/4" -14	20	PN 400	14	1,5
BKN 25	25	NPT 1" -11.5	24	PN 350	14	1,5
BKN 32	31	NPT 1.1/4" -11.5	24	PN 350	14	1,5

DN = Nominal diameter, nominal width LW = Clearance PN = Nominal pressure PB = Max. operating pressure
Note the permissible pressure limits for the connecting elements.Please refer to the operating instructions for ball valves.

BKHL / BKHS — 2-way ball valve in block design



Connection 1 + 2: metric cylindrical outer thread
Contact travel: 0°; 90°
Temperature max.: 80 °C
Surface protection: burnished

Sealing form 1 + 2: 24° inner cone
Temperature min.: -10 °C
Material: Steel housing, ball and operating shaft
Polyamide ball seal
NBR O-ring

Product versions: BKHL VZ / BKHS VZ, 2-way ball valve in block design, Steel housing, ball and operating shaft
BKHL VA / BKHS VA, 2-way ball valve in block design, Stainless steel housing, ball and operating shaft
Spare parts: BK ANSCHLAG, Stop washers for ball valve
BK GEKR GRIFF SW, Handle (offset) for ball valve

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	LW mm	Working pressure bar	SW mm	SF*
BKHL 04	4	L	6	M 12 x 1.5	5	PN 500	9	1,5
BKHL 06	6	L	8	M 14 x 1.5	6	PN 500	9	1,5
BKHL 08	8	L	10	M 16 x 1.5	8	PN 500	9	1,5
BKHL 10	10	L	12	M 18 x 1.5	10	PN 500	9	1,5
BKHL 13	12	L	15	M 22 x 1.5	13	PN 500	9	1,5
BKHL 16	16	L	18	M 26 x 1.5	13	PN 500	12	1,5
BKHL 20	19	L	22	M 30 x 2	20	PN 400	14	1,5
BKHL 25	25	L	28	M 36 x 2	24	PN 350	14	1,5
BKHL 32	31	L	35	M 45 x 2	24	PN 350	14	1,5
BKHL 40	38	L	42	M 52 x 2	24	PN 350	14	1,5
BKHS 04	4	S	8	M 16 x 1.5	5	PN 500	9	1,5
BKHS 06	6	S	10	M 18 x 1.5	6	PN 500	9	1,5

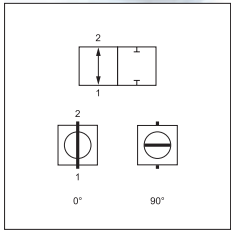
DN = Nominal diameter, nominal width Series: LL = Very light L = Light S = Heavy LW = Clearance

BKHL / BKHS (Continuation) 2-way ball valve in block design

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	LW mm	Working pressure bar	SW mm	SF*
BKHS 08	8	S	12	M 20 x 1.5	8	PN 500	9	1,5
BKHS 10	10	S	14	M 22 x 1.5	10	PN 500	9	1,5
BKHS 13	12	S	16	M 24 x 1.5	13	PN 500	9	1,5
BKHS 16	16	S	20	M 30 x 2	15	PN 500	12	1,5
BKHS 20	19	S	25	M 36 x 2	20	PN 400	14	1,5
BKHS 20 - 600 BAR	19	S	25	M 36 x 2	20	PN 600	14	1,5
BKHS 25	25	S	30	M 42 x 2	24	PN 350	14	1,5
BKHS 25 - 600 BAR	25	S	30	M 42 x 2	24	PN 600	14	1,5
BKHS 32	31	S	38	M 52 x 2	24	PN 350	14	1,5

DN = Nominal diameter, nominal width Series: LL = Very light L = Light S = Heavy LW = Clearance
Note the permissible pressure limits for the connecting elements.Please refer to the operating instructions for ball valves.

SK SF / SK SF6 2-way ball valve, in forged design



Connection 1 + 2: SAE flange
Contact travel: 0°; 90°
Temperature max.: 80 °C
Surface protection: burnished

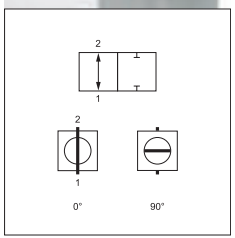
Spare parts: BK GEKR GRIFF SW, Handle (offset) for ball valve
BK ANSCHLAG, Stop washers for ball valve

Sealing form 1 + 2: flat seal with SF O-ring
Temperature min.: -10 °C
Material: Forged steel housing
Steel ball and operating shaft
POM ball seal

Identification	DN*	Pressure series	Flange size	LW mm	Pressure PN	SW mm	SF*
SK SF 32	31	3000 PSI	1.1/4"	32,0	250 bar	17	1,5
SK SF 40	38	3000 PSI	1.1/2"	38,0	200 bar	17	1,5
SK SF 50	51	3000 PSI	2"	47,5	200 bar	17	1,5
SK SF6 32	31	6000 PSI	1.1/4"	32,0	400 bar	17	1,5
SK SF6 40	38	6000 PSI	1.1/2"	38,0	400 bar	17	1,5
SK SF6 50	51	6000 PSI	2"	47,5	400 bar	17	1,5

DN = Nominal diameter, nominal width LW = Clearance PN = Nominal pressure PB = Max. operating pressure
Please refer to the operating instructions for ball valves.Note the permissible pressure limits for the connecting elements.

BK SF GFS — 2-way ball valve in block design



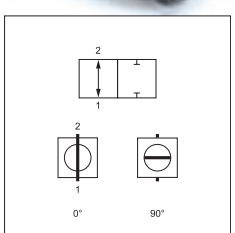
Connection 1: SAE flange
Sealing form 1 + 2: flat seal with SF O-ring
Temperature min.: -10 °C
Material: Steel housing, ball and operating shaft
POM ball seal
NBR O-ring
Spare parts: BK ANSCHLAG, Stop washers for ball valve
BK GEKR GRIFF SW, Handle (offset) for ball valve

Connection 2: SAE counter flange
Contact travel: 0°; 90°
Temperature max.: 80 °C
Surface protection: burnished

Identification	DN*	Pressure series	Flange size	LW mm	Pressure PN	SW mm	SF*
BK SF 20 GFS	19	3000 PSI	3/4"	20	315 bar	14	1,5
BK SF 25 GFS	25	3000 PSI	1"	24	315 bar	14	1,5
BK SF 620 GFS	19	6000 PSI	3/4"	20	400 bar	14	1,5
BK SF 625 GFS	25	6000 PSI	1"	24	400 bar	14	1,5

DN = Nominal diameter, nominal width LW = Clearance PN = Nominal pressure PB = Max. operating pressure
Please refer to the operating instructions for ball valves.Note the permissible pressure limits for the connecting elements.

SK SF GFS — 2-way ball valve, in forged design



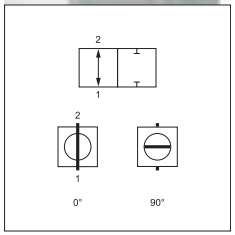
Connection 1: SAE flange
Sealing form 1 + 2: flat seal with SF O-ring
Temperature min.: -10 °C
Material: Forged steel housing
Steel ball and operating shaft
POM ball seal
Spare parts: BK ANSCHLAG, Stop washers for ball valve
BK GEKR GRIFF SW, Handle (offset) for ball valve

Connection 2: SAE counter flange
Contact travel: 0°; 90°
Temperature max.: 80 °C
Surface protection: burnished

Identification	DN*	Pressure series	Flange size	LW mm	Pressure PN	SW mm	SF*
SK SF 32 GFS	31	3000 PSI	1.1/4"	32,0	250 bar	17	1,5
SK SF 40 GFS	38	3000 PSI	1.1/2"	38,0	200 bar	17	1,5
SK SF 50 GFS	51	3000 PSI	2"	47,5	200 bar	17	1,5
SK SF 632 GFS	31	6000 PSI	1.1/4"	32,0	400 bar	17	1,5
SK SF 640 GFS	38	6000 PSI	1.1/2"	38,0	400 bar	17	1,5
SK SF 650 GFS	51	6000 PSI	2"	47,5	400 bar	17	1,5

DN = Nominal diameter, nominal width LW = Clearance PN = Nominal pressure PB = Max. operating pressure
Please refer to the operating instructions for ball valves.Note the permissible pressure limits for the connecting elements.

BK GFS — 2-way ball valve in block design



Connection 1 + 2: SAE counter flange
Contact travel: 0°; 90°
Temperature max.: 80 °C
Surface protection: burnished

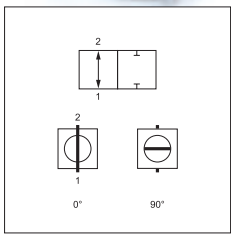
Spare parts: BK ANSCHLAG, Stop washers for ball valve
BK GEKR GRIFF SW, Handle (offset) for ball valve

Sealing form 1 + 2: flat seal with SF O-ring
Temperature min.: -10 °C
Material: Steel housing, ball and operating shaft
POM ball seal
NBR O-ring

Identification	DN*	Pressure series	Flange size	LW mm	Pressure PN	SW mm	SF*
BK GFS 20	19	3000 PSI	3/4"	20	315 bar	14	1,5
BK GFS 25	25	3000 PSI	1"	24	315 bar	14	1,5
BK GFS 6 20	19	6000 PSI	3/4"	20	400 bar	14	1,5
BK GFS 6 25	25	6000 PSI	1"	24	400 bar	14	1,5

DN = Nominal diameter, nominal width LW = Clearance PN = Nominal pressure PB = Max. operating pressure
Note the permissible pressure limits for the connecting elements.Please refer to the operating instructions for ball valves.

SK GFS — 2-way ball valve, in forged design



Connection 1 + 2: SAE counter flange
Contact travel: 0°; 90°
Temperature max.: 80 °C
Surface protection: burnished

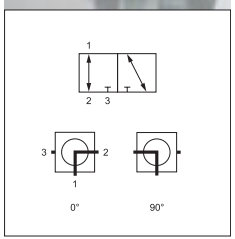
Spare parts: BK ANSCHLAG, Stop washers for ball valve
BK GEKR GRIFF SW, Handle (offset) for ball valve

Sealing form 1 + 2: flat seal with SF O-ring
Temperature min.: -10 °C
Material: Forged steel housing
Steel ball and operating shaft
POM ball seal

Identification	DN*	Pressure series	Flange size	LW mm	Pressure PN	SW mm	SF*
SK GFS 32	31	3000 PSI	1.1/4"	32,0	250 bar	17	1,5
SK GFS 40	38	3000 PSI	1.1/2"	38,0	200 bar	17	1,5
SK GFS 50	51	3000 PSI	2"	47,5	200 bar	17	1,5
SK GFS 6 32	31	6000 PSI	1.1/4"	32,0	400 bar	17	1,5
SK GFS 6 40	38	6000 PSI	1.1/2"	38,0	400 bar	17	1,5
SK GFS 6 50	51	6000 PSI	2"	47,5	400 bar	17	1,5

DN = Nominal diameter, nominal width LW = Clearance PN = Nominal pressure PB = Max. operating pressure
Note the permissible pressure limits for the connecting elements.Please refer to the operating instructions for ball valves.

3 BKR LK — 3-way ball valve in block design



Connection 1 - 3: BSP cylindrical internal threads
Construction: Compact construction
Contact travel: 0°; 90°
Temperature max.: 80 °C
Surface protection: burnished

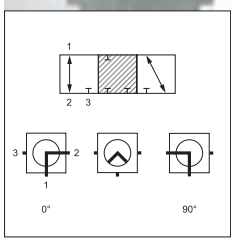
Sealing form 1 - 3: for screw-in pins with shapes A, B and if necessary E.
Bore: L shaped
Temperature min.: -10 °C
Material: Steel housing, ball and operating shaft
POM ball seal
NBR O-ring

Product versions: 3 BKR LK VZ, 3-way ball valve in block design, electro galvanised
Spare parts: BK ANSCHLAG, Stop washers for ball valve
BK GEKR GRIFF SW, Handle (offset) for ball valve

Identification	DN*	Connecting thread	LW mm	Working pressure bar	SW mm	SF*
3 BKR 04 LK	4	G 1/8" -28	5,0	PN 400	9	1,5
3 BKR 06 LK	6	G 1/4" -19	6,0	PN 400	9	1,5
3 BKR 10 LK	10	G 3/8" -19	9,0	PN 400	9	1,5
3 BKR 13 LK	12	G 1/2" -14	11,5	PN 350	9	1,5
3 BKR 20 LK	19	G 3/4" -14	18,0	PN 350	14	1,5
3 BKR 25 LK	25	G 1" -11	22,0	PN 350	14	1,5

DN = Nominal diameter, nominal width LW = Clearance PN = Nominal pressure PB = Max. operating pressure
Please refer to the operating instructions for ball valves.Note the permissible pressure limits for the connecting elements.

3 BKHL L / 3 BKHS L — 3-way ball valve in block design



Connection 1 - 3: metric cylindrical outer thread
Bore: L shaped
Temperature min.: -10 °C
Material: Steel housing, ball and operating shaft
POM ball seal
NBR O-ring
Spare parts: BK ANSCHLAG, Stop washers for ball valve
BK GEKR GRIFF SW, Handle (offset) for ball valve

Sealing form 1 - 3: 24° inner cone
Contact travel: 0°; 90°
Temperature max.: 80 °C
Surface protection: burnished

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	LW mm	Working pressure bar	SW mm	SF*
3 BKHL 04 L	4	L	6	M 12 x 1.5	5,0	PN 500	12	1,5
3 BKHL 06 L	6	L	8	M 14 x 1.5	6,0	PN 500	12	1,5
3 BKHL 08 L	8	L	10	M 16 x 1.5	9,0	PN 500	14	1,5
3 BKHL 10 L	10	L	12	M 18 x 1.5	9,0	PN 500	14	1,5
3 BKHL 13 L	12	L	15	M 22 x 1.5	12,5	PN 400	14	1,5
3 BKHL 16 L	16	L	18	M 26 x 1.5	12,5	PN 400	17	1,5
3 BKHL 20 L	19	L	22	M 30 x 2	19,0	PN 400	17	1,5
3 BKHL 25 L	25	L	28	M 36 x 2	24,0	PN 350	17	1,5
3 BKHL 32 L	31	L	35	M 45 x 2	24,0	PN 350	17	1,5
3 BKHL 40 L	38	L	42	M 52 x 2	36,0	PN 63	22	1,5
3 BKHS 04 L	4	S	8	M 16 x 1.5	5,0	PN 500	12	1,5
3 BKHS 06 L	6	S	10	M 18 x 1.5	6,0	PN 500	12	1,5
3 BKHS 08 L	8	S	12	M 20 x 1.5	7,0	PN 500	14	1,5

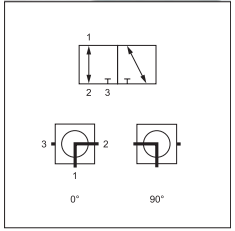
DN = Nominal diameter, nominal width Series: LL = Very light L = Light S = Heavy LW = Clearance

3 BKHL L / 3 BKHS L (Continuation) 3-way ball valve in block design

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	LW mm	Working pressure bar	SW mm	SF*
3 BKHS 10 L	10	S	14	M 22 x 1.5	9,0	PN 500	14	1,5
3 BKHS 13 L	12	S	16	M 24 x 1.5	11,5	PN 400	14	1,5
3 BKHS 16 L	16	S	20	M 30 x 2	11,5	PN 400	17	1,5
3 BKHS 20 L	19	S	25	M 36 x 2	18,0	PN 400	17	1,5
3 BKHS 25 L	25	S	30	M 42 x 2	22,0	PN 350	17	1,5
3 BKHS 32 L	31	S	38	M 52 x 2	30,0	PN 350	17	1,5

DN = Nominal diameter, nominal width Series: LL = Very light L = Light S = Heavy LW = Clearance
Please refer to the operating instructions for ball valves.Note the permissible pressure limits for the connecting elements.

3 BKHL LK / 3 BKHS LK 3-way ball valve in block design



Connection 1 - 3: metric cylindrical outer thread
Construction: Compact construction
Contact travel: 0°; 90°
Temperature max.: 80 °C
Surface protection: burnished

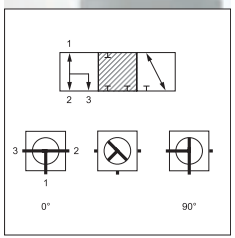
Sealing form 1 - 3: 24° inner cone
Bore: L shaped
Temperature min.: -10 °C
Material: Steel housing, ball and operating shaft
POM ball seal
NBR O-ring

Product versions: 3 BKHL LK VZ / 3 BKHS LK VZ, 3-way ball valve in block design, electro galvanised
Spare parts: BK ANSCHLAG, Stop washers for ball valve
BK GEKR GRIFF SW, Handle (offset) for ball valve

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	LW mm	Working pressure bar	SW mm	SF*
3 BKHL 04 LK	4	L	6	M 12 x 1.5	5,0	PN 400	9	1,5
3 BKHL 06 LK	6	L	8	M 14 x 1.5	6,0	PN 400	9	1,5
3 BKHL 08 LK	8	L	10	M 16 x 1.5	7,0	PN 400	9	1,5
3 BKHL 10 LK	10	L	12	M 18 x 1.5	9,0	PN 400	9	1,5
3 BKHL 13 LK	12	L	15	M 22 x 1.5	11,5	PN 350	9	1,5
3 BKHL 16 LK	16	L	18	M 26 x 1.5	14,0	PN 350	12	1,5
3 BKHL 20 LK	19	L	22	M 30 x 2	18,0	PN 350	14	1,5
3 BKHL 25 LK	25	L	28	M 36 x 2	22,0	PN 350	14	1,5
3 BKHS 04 LK	4	S	8	M 16 x 1.5	5,0	PN 400	9	1,5
3 BKHS 06 LK	6	S	10	M 18 x 1.5	6,0	PN 400	9	1,5
3 BKHS 08 LK	8	S	12	M 20 x 1.5	7,0	PN 400	9	1,5
3 BKHS 10 LK	10	S	14	M 22 x 1.5	9,0	PN 400	9	1,5
3 BKHS 13 LK	12	S	16	M 24 x 1.5	11,5	PN 350	9	1,5
3 BKHS 16 LK	16	S	20	M 30 x 2	14,0	PN 350	12	1,5
3 BKHS 20 LK	19	S	25	M 36 x 2	18,0	PN 350	14	1,5
3 BKHS 25 LK	25	S	30	M 42 x 2	22,0	PN 350	14	1,5

DN = Nominal diameter, nominal width Series: LL = Very light L = Light S = Heavy LW = Clearance
Please refer to the operating instructions for ball valves.Note the permissible pressure limits for the connecting elements.

3 BKR T — 3-way ball valve in block design



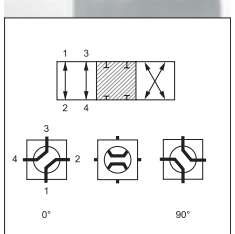
Connection 1 - 3: BSP cylindrical internal threads
Bore: T shaped
Temperature min.: -10 °C
Material: Steel housing, ball and operating shaft
POM ball seal
NBR O-ring
Spare parts: BK ANSCHLAG, Stop washers for ball valve
BK GEKR GRIFF SW, Handle (offset) for ball valve

Sealing form 1 - 3: for screw-in pins with shapes A, B and if necessary E.
Contact travel: 0°; 90°
Temperature max.: 80 °C
Surface protection: burnished

Identification	DN*	Connecting thread	LW mm	Working pressure bar	SW mm	SF*
3 BKR 04 T	4	G 1/8" -28	5,0	PN 500	12	1,5
3 BKR 06 T	6	G 1/4" -19	5,0	PN 500	12	1,5
3 BKR 10 T	10	G 3/8" -19	7,5	PN 500	14	1,5
3 BKR 13 T	12	G 1/2" -14	11,5	PN 400	14	1,5
3 BKR 20 T	19	G 3/4" -14	18,0	PN 400	17	1,5
3 BKR 25 T	25	G 1" -11	22,0	PN 350	17	1,5
3 BKR 32 T	31	G 1.1/4" -11	22,0	PN 350	17	1,5
3 BKR 40 T	38	G 1.1/2" -11	33,0	PN 63	22	1,5

DN = Nominal diameter, nominal width LW = Clearance PN = Nominal pressure PB = Max. operating pressure
Please refer to the operating instructions for ball valves.Note the permissible pressure limits for the connecting elements.

4 BKR X — 4-way ball valve



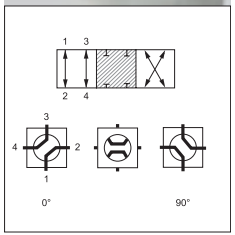
Connection 1 - 4: BSP cylindrical internal threads
Bore: X shaped
Temperature min.: -10 °C
Material: Steel housing, ball and operating shaft
POM ball seal
NBR O-ring
Spare parts: BK ANSCHLAG, Stop washers for ball valve
BK GEKR GRIFF SW, Handle (offset) for ball valve

Sealing form 1 - 4: for screw-in pins with shapes A, B and if necessary E
Contact travel: 0°; 90°
Temperature max.: 80 °C
Surface protection: burnished

Identification	DN*	Connecting thread	LW mm	Working pressure bar	SW mm	SF*
4 BKR 04 X	4	G 1/8" -28	5,0	PN 500	12	1,5
4 BKR 06 X	6	G 1/4" -19	5,0	PN 500	12	1,5
4 BKR 10 X	10	G 3/8" -19	7,5	PN 500	14	1,5
4 BKR 13 X	12	G 1/2" -14	11,5	PN 400	14	1,5
4 BKR 20 X	19	G 3/4" -14	18,0	PN 400	17	1,5
4 BKR 25 X	25	G 1" -11	22,0	PN 350	17	1,5
4 BKR 32 X	31	G 1.1/4" -11	22,0	PN 350	17	1,5
4 BKR 40 X	38	G 1.1/2" -11	33,0	PN 63	22	1,5

DN = Nominal diameter, nominal width LW = Clearance PN = Nominal pressure PB = Max. operating pressure
Please refer to the operating instructions for ball valves.Note the permissible pressure limits for the connecting elements.

4 BKHL X / 4 BKHS X 4-way ball valve



Connection 1 - 4: metric cylindrical outer thread
Bore: X shaped
Temperature min.: -10 °C
Material: Steel housing, ball and operating shaft
POM ball seal
NBR O-ring
Spare parts: BK ANSCHLAG, Stop washers for ball valve
BK GEKR GRIFF SW, Handle (offset) for ball valve

Sealing form 1 - 4: 24° inner cone
Contact travel: 0°; 90°
Temperature max.: 80 °C
Surface protection: burnished

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	LW mm	Working pressure bar	SW mm	SF*
4 BKHL 04 X	4	L	6	M 12 x 1.5	5,0	PN 500	12	1,5
4 BKHL 06 X	6	L	8	M 14 x 1.5	5,0	PN 500	12	1,5
4 BKHL 08 X	8	L	10	M 16 x 1.5	7,5	PN 500	14	1,5
4 BKHL 10 X	10	L	12	M 18 x 1.5	7,5	PN 500	14	1,5
4 BKHL 13 X	12	L	15	M 22 x 1.5	11,5	PN 400	14	1,5
4 BKHL 16 X	16	L	18	M 26 x 1.5	11,5	PN 400	17	1,5
4 BKHL 20 X	19	L	22	M 30 x 2	18,0	PN 400	17	1,5
4 BKHL 25 X	25	L	28	M 36 x 2	22,0	PN 350	17	1,5
4 BKHL 32 X	31	L	35	M 45 x 2	22,0	PN 350	17	1,5
4 BKHL 40 X	38	L	42	M 52 x 2	33,0	PN 63	22	1,5
4 BKHS 04 X	4	S	8	M 16 x 1.5	5,0	PN 500	12	1,5
4 BKHS 06 X	6	S	10	M 18 x 1.5	5,0	PN 500	12	1,5
4 BKHS 08 X	8	S	12	M 20 x 1.5	7,5	PN 500	14	1,5
4 BKHS 10 X	10	S	14	M 22 x 1.5	7,5	PN 500	14	1,5
4 BKHS 13 X	12	S	16	M 24 x 1.5	11,5	PN 400	14	1,5
4 BKHS 16 X	16	S	20	M 30 x 2	11,5	PN 400	17	1,5
4 BKHS 20 X	19	S	25	M 36 x 2	18,0	PN 400	17	1,5
4 BKHS 25 X	25	S	30	M 42 x 2	22,0	PN 350	17	1,5
4 BKHS 32 X	31	S	38	M 52 x 2	22,0	PN 350	17	1,5

DN = Nominal diameter, nominal width Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure
Note the permissible pressure limits for the connecting elements.Please refer to the operating instructions for ball valves.

BK ANSCHLAG — Stop washers for ball valve

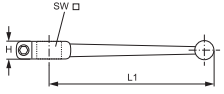
Material: Steel
Surface protection: electro galvanised
suitable for: Block ball valves
Spare parts: **3 BKHL LK / 3 BKHS LK,** 3-way ball valve in block design
BKN, 2-way ball valve in block design
3 BKR T, 3-way ball valve in block design
BKHL / BKHS, 2-way ball valve in block design
3 BKR LK, 3-way ball valve in block design
4 BKHL X / 4 BKHS X, 4-way ball valve
BK GFS, 2-way ball valve in block design
BKR, 2-way ball valve in block design
SK SF / SK SF6, 2-way ball valve, in forged design
SK SF GFS, 2-way ball valve, in forged design
3 BKHL L / 3 BKHS L, 3-way ball valve in block design
SK GFS, 2-way ball valve, in forged design
4 BKR X, 4-way ball valve
BK SF GFS, 2-way ball valve in block design

Identification	for width across flat mm	Strength mm
BK ANSCHLAG SW 09	9	3,00
BK ANSCHLAG SW 12	12	3,50
BK ANSCHLAG SW 14	14	4,00
BK ANSCHLAG SW 17	17	5,00
BK ANSCHLAG SW 19	19	5,00

BK ALU GRIFF SW — Handle for ball valve

Construction: straight
Material: Aluminium
suitable for: Block ball valves

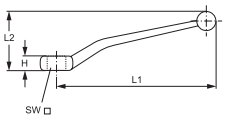
Identification	H mm	L1 mm	SW mm
BK ALU GRIFF SW 9	11,0	150,0	9
BK ALU GRIFF SW 12	12,0	175,0	12
BK ALU GRIFF SW 14	12,0	200,0	14
BK ALU GRIFF SW 17	16,0	280,0	17
BK ALU GRIFF SW 19		300,0	19



BK GEKR GRIFF SW — Handle (offset) for ball valve

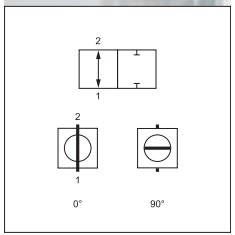
Construction: offset
suitable for: Block ball valves
Spare parts: **3 BKHL LK / 3 BKHS LK,** 3-way ball valve in block design
3 BKHL L / 3 BKHS L, 3-way ball valve in block design
SK SF GFS, 2-way ball valve, in forged design
SK SF / SK SF6, 2-way ball valve, in forged design
3 BKR LK, 3-way ball valve in block design
3 BKR T, 3-way ball valve in block design
BK GFS, 2-way ball valve in block design
BKHL / BKHS, 2-way ball valve in block design
4 BKHL X / 4 BKHS X, 4-way ball valve
BKN, 2-way ball valve in block design
BKR, 2-way ball valve in block design
4 BKR X, 4-way ball valve
BK SF GFS, 2-way ball valve in block design
SK GFS, 2-way ball valve, in forged design

Material: above SW 17 steel
up to SW 17 die-cast zinc



Identification	H mm	L1 mm	L2 mm	SW mm
BK GEKR GRIFF SW 9	8,7	107,0	36,0	9
BK GEKR GRIFF SW 12	12,0	165,0	65,0	12
BK GEKR GRIFF SW 14	12,0	165,0	65,0	14
BK GEKR GRIFF SW 17	14,0	211,0	66,0	17

BKR ND — 2-way ball valve in low pressure design



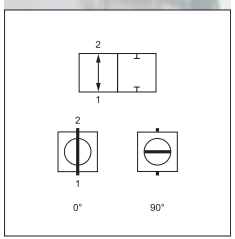
Connection 1 + 2: BSP cylindrical internal threads
Contact travel: 0°; 90°
Material: Brass housing
Aluminium handle
Brass ball, hard chrome-plated

Sealing form 1 + 2: for screw-in pins with shapes A, B and if necessary E
Temperature range: Air: - 20 °C to + 150 °C
Water: 0 °C to +150 °C
Surface protection: nickel plated

Identification	DN*	Connecting thread	Working pressure bar
BKR 06 ND	6	G 1/4" -19	50
BKR 10 ND	10	G 3/8" -19	50
BKR 13 ND	12	G 1/2" -14	50
BKR 20 ND	19	G 3/4" -14	40
BKR 25 ND	25	G 1" -11	40
BKR 32 ND	31	G 1.1/4" -11	30
BKR 40 ND	38	G 1.1/2" -11	30
BKR 50 ND	51	G 2" -11	25
BKR 65 ND	65	G 2.1/2" -11	18
BKR 75 ND	76	G 3" -11	16
BKR 100 ND	100	G 4" -11	14

DN = Nominal diameter, nominal width SF = Safety factor SW = Width across flats
The pressure figures are applicable for temperatures from 0 °C to +25 °C; at higher temperatures, pressure reductions must be taken into account.Other pressure and temperature figures available on request.

BKR ND ROV — 2-way ball valve in low pressure design



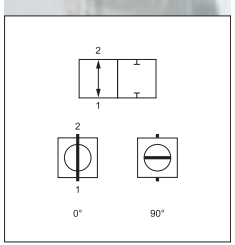
Connection 1 + 2: BSP cylindrical internal threads
Contact travel: 0°; 90°
Material: Brass housing
Aluminium handle
Brass ball, hard chrome-plated

Sealing form 1 + 2: for screw-in pins with shapes A, B and if necessary E
Temperature range: Water: 0 °C to +130 °C
Air: - 20 °C to +130 °C
Surface protection: nickel plated

Identification	DN*	Connecting thread	Working pressure bar
BKR 06 ND ROV	6	G 1/4" -19	64
BKR 10 ND ROV	10	G 3/8" -19	64
BKR 13 ND ROV	12	G 1/2" -14	50
BKR 20 ND ROV	19	G 3/4" -14	40
BKR 25 ND ROV	25	G 1" -11	40
BKR 32 ND ROV	31	G 1.1/4" -11	30
BKR 40 ND ROV	38	G 1.1/2" -11	30
BKR 50 ND ROV	51	G 2" -11	25

DN = Nominal diameter, nominal width SF = Safety factor SW = Width across flats
Other pressure and temperature figures available on request.The pressure figures are applicable for temperatures from 0 °C to +25 °C; at higher temperatures, pressure reductions must be taken into account.

BKR ND DVGW — 2-way ball valve in low pressure design



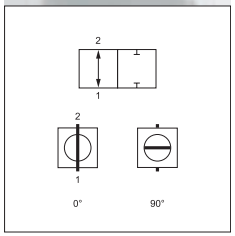
Connection 1 + 2: BSP cylindrical internal threads
Contact travel: 0°; 90°
Temperature range: Water: 0 °C to +120 °C
Gas: -20 °C to + 60 °C
Miscellaneous: - 20 °C to + 150 °C
Material: Elastomer O-ring double seal
Brass housing
Steel handle with yellow plastic protection

Sealing form 1 + 2: for screw-in pins with shapes A, B and if necessary E
Additional feature: DVGW approval for gas
Media: Town gas, liquid gas, methane gas
Cold and hot water, oils
Compressed air and general hydrocarbons
Surface protection: nickel plated

Identification	DN*	Connecting thread	BD* for gas bar	Working pressure bar
BKR 06 ND DVGW	6	G 1/4" -19	5	64
BKR 10 ND DVGW	10	G 3/8" -19	5	64
BKR 13 ND DVGW	12	G 1/2" -14	5	63
BKR 20 ND DVGW	19	G 3/4" -14	5	40
BKR 25 ND DVGW	25	G 1" -11	5	40
BKR 32 ND DVGW	31	G 1.1/4" -11	5	30
BKR 40 ND DVGW	38	G 1.1/2" -11	5	30
BKR 50 ND DVGW	51	G 2" -11	5	25

DN = Nominal diameter, nominal width SF = Safety factor SW = Width across flats
The pressure figures are applicable for temperatures from 0 °C to +25 °C; at higher temperatures, pressure reductions must be taken into account.Other pressure and temperature figures available on request.

BKR ND K — 2-way ball valve in low pressure design



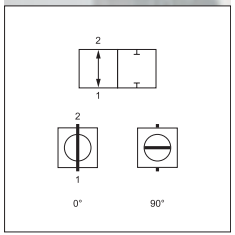
Construction: Compact type with T- handle
Sealing form 1 + 2: for screw-in pins with shapes A, B and if necessary E
Temperature range: Air: - 20 °C to + 150 °C
Water: 0 °C to +150 °C
Surface protection: nickel plated

Connection 1 + 2: BSP cylindrical internal threads
Contact travel: 0°; 90°
Material: Brass housing
Aluminium handle
Brass ball, hard chrome-plated

Identification	DN*	Connecting thread	Working pressure bar
BKR 06 ND K	6	G 1/4" -19	50
BKR 10 ND K	10	G 3/8" -19	50
BKR 13 ND K	12	G 1/2" -14	50
BKR 20 ND K	19	G 3/4" -14	40
BKR 25 ND K	25	G 1" -11	40

DN = Nominal diameter, nominal width SF = Safety factor SW = Width across flats
The pressure figures are applicable for temperatures from 0 °C to +25 °C; at higher temperatures, pressure reductions must be taken into account.Other pressure and temperature figures available on request.

BKR HR ND — 2-way ball valve in low pressure design



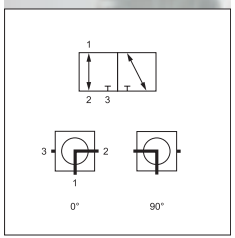
Connection 1: BSP cylindrical internal threads
Connection 2: BSP cylindrical external threads
Contact travel: 0°; 90°
Material: Brass housing
Aluminium handle
Brass ball, hard chrome-plated

Sealing form 1: for screw-in pins with shapes A, B and if necessary E
Sealing form 2: Flat seal
Temperature range: Air: - 20 °C to + 150 °C
Water: 0 °C to +150 °C
Surface protection: nickel plated

Identification	DN*	Connecting thread	Working pressure bar
BKR 06 HR ND	6	G 1/4" -19	50
BKR 10 HR ND	10	G 3/8" -19	50
BKR 13 HR ND	12	G 1/2" -14	50
BKR 20 HR ND	19	G 3/4" -14	40
BKR 25 HR ND	25	G 1" -11	40
BKR 32 HR ND	31	G 1.1/4" -11	30
BKR 40 HR ND	38	G 1.1/2" -11	30
BKR 50 HR ND	51	G 2" -11	25

DN = Nominal diameter, nominal width SF = Safety factor SW = Width across flats
Other pressure and temperature figures available on request.The pressure figures are applicable for temperatures from 0 °C to +25 °C; at higher temperatures, pressure reductions must be taken into account.

3 BKR ND L — 3-way ball valve in low pressure design



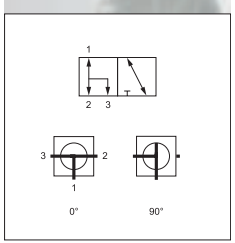
Connection 1 - 3: BSP cylindrical internal threads
Bore: L shaped
Temperature range: Water: 0 °C to +150 °C
Air: - 20 °C to + 150 °C
Surface protection: nickel plated

Sealing form 1 - 3: Shape A
Contact travel: 0°; 90°
Material: Brass housing
Aluminium handle
Brass ball, hard chrome-plated

Identification	DN*	Connecting thread	Working pressure bar
3 BKR 06 ND L	6	G 1/4" -19	25
3 BKR 10 ND L	10	G 3/8" -19	25
3 BKR 13 ND L	12	G 1/2" -14	25
3 BKR 20 ND L	19	G 3/4" -14	25
3 BKR 25 ND L	25	G 1" -11	25
3 BKR 32 ND L	31	G 1.1/4" -11	25
3 BKR 40 ND L	38	G 1.1/2" -11	25
3 BKR 50 ND L	50	G 2" -11	25

DN = Nominal diameter, nominal width SF = Safety factor SW = Width across flats
Other pressure and temperature figures available on request.

3 BKR ND T — 3-way ball valve in low pressure design



Connection 1 - 3: BSP cylindrical internal threads
Bore: T shaped
Temperature range: Water: 0 °C to +150 °C
Air: - 20 °C to + 150 °C
Surface protection: nickel plated

Sealing form 1 - 3: Shape A
Contact travel: 0°; 90°
Material: Brass housing
Aluminium handle
Brass ball, hard chrome-plated

Identification	DN*	Connecting thread	Working pressure bar
3 BKR 06 ND T	6	G 1/4" -19	25
3 BKR 10 ND T	10	G 3/8" -19	25
3 BKR 13 ND T	12	G 1/2" -14	25
3 BKR 20 ND T	19	G 3/4" -14	25
3 BKR 25 ND T	25	G 1" -11	25
3 BKR 32 ND T	31	G 1.1/4" -11	25
3 BKR 40 ND T	38	G 1.1/2" -11	25
3 BKR 50 ND T	51	G 2" -11	25

DN = Nominal diameter, nominal width SF = Safety factor SW = Width across flats
Other pressure and temperature figures available on request.

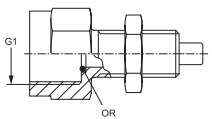
Measuring equipment

HFM MMA — Measuring connection, M16 x 2 series

Connection 1: BSP cylindrical internal threads
Connection 2: Measuring connection M 16 x 2
Supplementary design information: for bulkhead mounting
Temperature min.: -20 °C
Material: Steel
Product versions: HFM MMA VA, Pressure gauge connection, Stainless steel

Sealing form 1: O-ring seal
Design: Screw-on socket with measuring connector
Included in scope of supply: with lock nut and O-ring
Temperature max.: 100 °C
Surface protection: electro galvanised

Identification	G1	Max. working pressure bar	OR
HFM MMA 1/4	G 1/4" -19	630	5.0 x 1.5
HFM MMA 1/2	G 1/2" -14	630	9.0 x 1.8

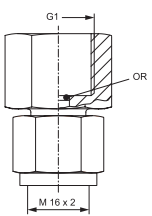


HFM MMD — Measuring connection, M16 x 2 series

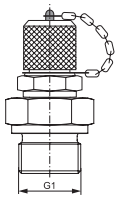
Connection 1: BSP cylindrical internal threads
Connection 2: Metric nut thread M 16 x 2
Included in scope of supply: with O-ring
Temperature max.: 100 °C
Surface protection: electro galvanised
Product versions: HFM MMD VA, Measuring connection, M16 x 2 series, Stainless steel

Sealing form 1: O-ring seal
Design: Direct pressure gauge connection
Temperature min.: -20 °C
Material: Steel

Identification	G1	Max. working pressure bar	OR
HFM MMD 1/4	G 1/4" -19	630	5.0 x 1.5
HFM MMD 1/2	G 1/2" -14	630	9.0 x 1.8



HFM MKR — Measuring connection, M16 x 2 series

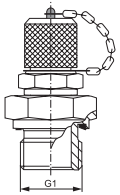


Connection 1: BSP external thread, cylindrical
Connection 2: Measuring connection M 16 x 2
Included in scope of supply: with cap
Temperature max.: 100 °C
Surface protection: electro galvanised

Sealing form 1: Shape B
Design: Screw-in socket with measurement connection
Temperature min.: -25 °C
Material: Steel

Identification	G1	Max. working pressure bar
HFM MKR 1/8	G 1/8" -28	400
HFM MKR 1/4	G 1/4" -19	400
HFM MKR 3/8	G 3/8" -19	400
HFM MKR 1/2	G 1/2" -14	400
HFM MKR 3/4	G 3/4" -14	400
HFM MKR 1	G 1" -11	400
HFM MKR 1 1/4	G 1.1/4" -11	250
HFM MKR 1 1/2	G 1.1/2" -11	250

HFM MKR ED — Measuring connection, M16 x 2 series

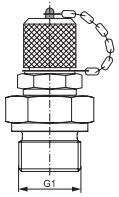


Connection 1: BSP external thread, cylindrical
Connection 2: Measuring connection M 16 x 2
Included in scope of supply: with cap
Temperature max.: 100 °C
Surface protection: electro galvanised
Product versions: HFM MKR ED VA, Measuring connection, M16 x 2 series, Stainless steel

Sealing form 1: Shape E
Design: Screw-in socket with measurement connection
Temperature min.: -20 °C
Material: Steel

Identification	G1	Max. working pressure bar
HFM MKR 1/8 ED	G 1/8" -28	400
HFM MKR 1/4 ED	G 1/4" -19	630
HFM MKR 3/8 ED	G 3/8" -19	630
HFM MKR 1/2 ED	G 1/2" -14	630

HFM MK — Measuring connection, M16 x 2 series

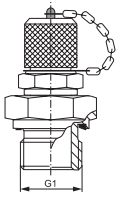


Connection 1: metric cylindrical outer thread
Connection 2: Measuring connection M 16 x 2
Included in scope of supply: with cap
Temperature max.: 100 °C
Surface protection: electro galvanised

Sealing form 1: Shape B
Design: Screw-in socket with measurement connection
Temperature min.: -20 °C
Material: Steel

Identification	G1	Max. working pressure bar
HFM MK 08-1	M 8 x 1	400
HFM MK 10-1	M 10 x 1	630
HFM MK 12-1.5	M 12 x 1.5	630
HFM MK 14-1.5	M 14 x 1.5	630
HFM MK 16-1.5	M 16 x 1.5	630
HFM MK 18-1.5	M 18 x 1.5	400
HFM MK 20-1.5	M 20 x 1.5	400
HFM MK 22-1.5	M 22 x 1.5	400
HFM MK 26-1.5	M 26 x 1.5	400
HFM MK 27-2	M 27 x 2	400
HFM MK 33-2	M 33 x 2	400
HFM MK 42-2	M 42 x 2	250
HFM MK 48-2	M 48 x 2	250

HFM MK ED — Measuring connection, M16 x 2 series

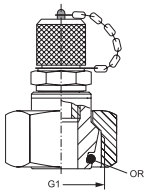


Connection 1: metric cylindrical outer thread
Connection 2: Measuring connection M 16 x 2
Included in scope of supply: with cap
Temperature max.: 100 °C
Surface protection: electro galvanised
Product versions: HFM MK ED VA, Measuring connection, M16 x 2 series, Stainless steel

Sealing form 1: Shape E
Design: Screw-in socket with measurement connection
Temperature min.: -20 °C
Material: Steel

Identification	G1	Max. working pressure bar
HFM MK 10-1 ED	M 10 x 1	400
HFM MK 12-1.5 ED	M 12 x 1.5	630
HFM MK 14-1.5 ED	M 14 x 1.5	630
HFM MK 16-1.5 ED	M 16 x 1.5	630
HFM MK 18-1.5 ED	M 18 x 1.5	630
HFM MK 20-1.5 ED	M 20 x 1.5	630
HFM MK 22-1.5 ED	M 22 x 1.5	630
HFM MK 27-2 ED	M 27 x 2	630

HFM KL / HFM KS — Measuring connection, M16 x 2 series



Connection 1: metric nut thread
Connection 2: Measuring connection M 16 x 2
Standard: DIN 3865
Included in scope of supply: with cap
Temperature max.: 100 °C
Surface protection: electro galvanised
Product versions: HFM KL VA / HFM KS VA, Measuring connection, M16 x 2 series, Stainless steel

Sealing form 1: 24° outer cone with O-ring
Design: Measuring connection with 24° sealing head (DKO)
Series: light and heavy
Temperature min.: -20 °C
Material: Steel

Identification	Series	External pipe Ø mm	G1	Max. working pressure bar	OR
HFM KL 06	L	6	M 12 x 1.5	315	4.0 x 1.5
HFM KL 08	L	8	M 14 x 1.5	315	6.0 x 1.5
HFM KL 10	L	10	M 16 x 1.5	315	7.5 x 1.5
HFM KL 12	L	12	M 18 x 1.5	315	9.0 x 1.5
HFM KL 15	L	15	M 22 x 1.5	315	12.0 x 2.0
HFM KL 18	L	18	M 26 x 1.5	315	15.0 x 2.0
HFM KL 22	L	22	M 30 x 2	160	16.3 x 2.4
HFM KL 28	L	28	M 36 x 2	160	26.0 x 2.0
HFM KL 35	L	35	M 45 x 2	160	32.0 x 2.5
HFM KL 42	L	42	M 52 x 2	160	38.0 x 2.5
HFM KS 06	S	6	M 14 x 1.5	630	6.0 x 1.5
HFM KS 08	S	8	M 16 x 1.5	630	7.5 x 1.5
HFM KS 10	S	10	M 18 x 1.5	630	9.0 x 1.5
HFM KS 12	S	12	M 20 x 1.5	630	9.0 x 1.5
HFM KS 14	S	14	M 22 x 1.5	630	12.0 x 2.0
HFM KS 16	S	16	M 24 x 1.5	400	12.0 x 2.0
HFM KS 20	S	20	M 30 x 2	400	16.3 x 2.4
HFM KS 25	S	25	M 36 x 2	400	26.0 x 2.0
HFM KS 30	S	30	M 42 x 2	400	25.3 x 2.4
HFM KS 38	S	38	M 52 x 2	315	38.0 x 2.5

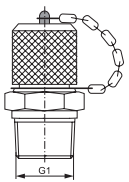
Series: LL = Very light L = Light S = Heavy
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

HFM MKN — Measuring connection, M16 x 2 series

Connection 1: NPT external threads
Connection 2: Measuring connection M 16 x 2
Included in scope of supply: with cap
Temperature max.: 100 °C
Surface protection: electro galvanised
Product versions: HFM MKN VA, Measuring connection, M16 x 2 series, Stainless steel

Sealing form 1: thread seal
Design: Screw-in socket with measurement connection
Temperature min.: -20 °C
Material: Steel

Identification	G1	Max. working pressure bar
HFM MKN 1/8	1/8" -27 NPT	400
HFM MKN 1/4	1/4" -18 NPT	630
HFM MKN 3/8	3/8" -18 NPT	400

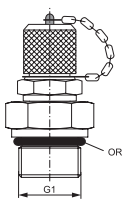


HFM MKU — Measuring connection, M16 x 2 series

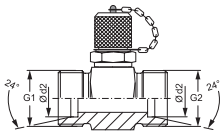
Connection 1: UN/UNF external threads
Connection 2: Measuring connection M 16 x 2
Included in scope of supply: with cap
Temperature max.: 100 °C
Surface protection: electro galvanised

Sealing form 1: O-ring seal on screw-in socket
Design: Screw-in socket with measurement connection
Temperature min.: -20 °C
Material: Steel

Identification	G1	Max. working pressure bar	OR
HFM MKU 7/16	7/16"-20 UNF	630	8.92 x 1.83
HFM MKU 9/16	9/16"-18 UNF	630	11.90 x 1.98



XHFM T HL / XHFM T HS Measuring connection, M16 x 2 series

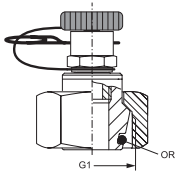


Connection 1 + 2: metric cylindrical outer thread
Connection 3: Measuring connection M 16 x 2
Construction: T shaped
Standard: DIN 2353
Temperature min.: -20 °C
Material: Steel
Sealing form 1 + 2: 24° inner cone
Design: Measuring connection with 24° inner cone
Series: light and heavy
Included in scope of supply: Socket (without union nut and cutting ring)
Temperature max.: 100 °C
Surface protection: electro galvanised
Product versions: XHFM T HL VA / XHFM T HS VA, Measuring connection, M16 x 2 series, Stainless steel
HFM T HL / HFM T HS, Measuring connection, M16 x 2 series, Steel

Identification	Series	Ø d2 mm	G1 + G2	Max. working pressure bar
XHFM T HL 04	L	6	M 12 x 1.5	315
XHFM T HL 06	L	8	M 14 x 1.5	315
XHFM T HL 08	L	10	M 16 x 1.5	315
XHFM T HL 10	L	12	M 18 x 1.5	315
XHFM T HL 13	L	15	M 22 x 1.5	315
XHFM T HL 16	L	18	M 26 x 1.5	315
XHFM T HL 20	L	22	M 30 x 2	160
XHFM T HL 25	L	28	M 36 x 2	160
XHFM T HL 32	L	35	M 45 x 2	160
XHFM T HL 40	L	42	M 52 x 2	160
XHFM T HS 03	S	6	M 14 x 1.5	630
XHFM T HS 04	S	8	M 16 x 1.5	630
XHFM T HS 06	S	10	M 18 x 1.5	630
XHFM T HS 08	S	12	M 20 x 1.5	630
XHFM T HS 10	S	14	M 22 x 1.5	630
XHFM T HS 13	S	16	M 24 x 1.5	400
XHFM T HS 16	S	20	M 30 x 2	400
XHFM T HS 20	S	25	M 36 x 2	400
XHFM T HS 25	S	30	M 42 x 2	400
XHFM T HS 32	S	38	M 52 x 2	315

Series: LL = Very light L = Light S = Heavy Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

HFM KL S / HFM KS S — Measuring connection, plug-in series



Connection 1: metric nut thread
Connection 2: Plug connection for measuring technology
Series: light and heavy
Included in scope of supply: with locking connector and retaining pin
Temperature max.: 100 °C
Surface protection: electro galvanised

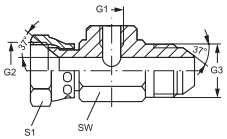
Sealing form 1: 24° outer cone with O-ring
Design: Measuring connection with 24° sealing head (DKO)
Standard: DIN 3865
Temperature min.: -20 °C
Material: Steel

Identification	Series	External pipe Ø mm	G1	Max. working pressure bar	OR
HFM KL 06 S	L	6	M 12 x 1.5	315	4.0 x 1.5
HFM KL 08 S	L	8	M 14 x 1.5	315	6.0 x 1.5
HFM KL 10 S	L	10	M 16 x 1.5	315	7.5 x 1.5
HFM KL 12 S	L	12	M 18 x 1.5	315	9.0 x 1.5
HFM KL 15 S	L	15	M 22 x 1.5	315	12.0 x 2.0
HFM KL 18 S	L	18	M 26 x 1.5	315	15.0 x 2.0
HFM KL 22 S	L	22	M 30 x 2	160	20.0 x 2.0
HFM KL 28 S	L	28	M 36 x 2	160	26.0 x 2.0
HFM KL 35 S	L	35	M 45 x 2	160	32.0 x 2.5
HFM KL 42 S	L	42	M 52 x 2	160	38.0 x 2.5
HFM KS 06 S	S	6	M 14 x 1.5	400	6.0 x 1.5
HFM KS 08 S	S	8	M 16 x 1.5	400	7.5 x 1.5
HFM KS 10 S	S	10	M 18 x 1.5	400	9.0 x 1.5
HFM KS 12 S	S	12	M 20 x 1.5	400	9.0 x 1.5
HFM KS 14 S	S	14	M 22 x 1.5	400	12.0 x 2.0
HFM KS 16 S	S	16	M 24 x 1.5	400	12.0 x 2.0
HFM KS 20 S	S	20	M 30 x 2	400	20.0 x 2.0
HFM KS 25 S	S	25	M 36 x 2	400	26.0 x 2.0
HFM KS 30 S	S	30	M 42 x 2	400	25.3 x 2.4
HFM KS 38 S	S	38	M 52 x 2	315	38.0 x 2.5

Series: LL = Very light L = Light S = Heavy

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

T IR AJ HJ — Adapter for test connection



Connection 1: BSP cylindrical internal threads
Sealing form 2: 74° inner cone
Sealing form 3: 74° outer cone
Construction: T shaped
Surface protection: electro galvanised

Connection 2: UN/UNF nut threads
Connection 3: UN/UNF external threads
Design: Adapter for test connection
Material: Steel

Identification	G1	G2 + G3	Max. working pressure bar	SW mm	S1
T 04 IR AJ 05 HJ	G 1/4" -19	1/2"-20 UNF	420	36	17
T 04 IR AJ 08 HJ	G 1/4" -19	3/4"-16 UNF	350	36	22
T 04 IR AJ 10 HJ	G 1/4" -19	7/8"-14 UNF	350	36	27
T 04 IR AJ 12 HJ	G 1/4" -19	1.1/16" -12 UN	350	41	32
T 04 IR AJ 16 HJ	G 1/4" -19	1.5/16" -12 UN	250	46	38
T 04 IR AJ 20 HJ	G 1/4" -19	1.5/8" -12 UN	250	50	50
T 04 IR AJ 24 HJ	G 1/4" -19	1.7/8" -12 UN	170	60	60

HFM SKE 16 — Measuring hose line

Application: Measuring equipment
Inner layer: Polyamide
Outer layer: Polyurethane
Temperature min.: -20 °C
Media: Liquids based on mineral oil and glycol

Design: Hose line DN 2 with M 16 x 1.5 measuring connections
Insert: one aramide braided insert
Included in scope of supply: with dust protection
Temperature max.: 100 °C

Identification	External Ø mm	Internal Ø mm	Max. working pressure bar	Min. bending radius mm	Length mm
HFM SKE 400-16	5,5	2	630	35	400
HFM SKE 630-16	5,5	2	630	35	630
HFM SKE 800-16	5,5	2	630	35	800
HFM SKE 1000-16	5,5	2	630	35	1000
HFM SKE 1500-16	5,5	2	630	35	1500
HFM SKE 2000-16	5,5	2	630	35	2000
HFM SKE 2500-16	5,5	2	630	35	2500
HFM SKE 3200-16	5,5	2	630	35	3200
HFM SKE 4000-16	5,5	2	630	35	4000

HFM SKE — Measuring hose line

Application: Measuring equipment
Inner layer: Polyamide
Outer layer: Polyurethane
Temperature min.: -20 °C
Media: Liquids based on mineral oil and glycol
Product versions: HFM SKE VA, Measuring hose line,

Design: Hose line DN 2 with M 16 x 2 measuring connections
Insert: one aramide braided insert
Included in scope of supply: with dust protection
Temperature max.: 100 °C

Identification	External Ø mm	Internal Ø mm	Max. working pressure bar	Min. bending radius mm	Length mm
HFM SKE 200	5,5	2	630	35	200
HFM SKE 300	5,5	2	630	35	300
HFM SKE 400	5,5	2	630	35	400
HFM SKE 630	5,5	2	630	35	630
HFM SKE 800	5,5	2	630	35	800
HFM SKE 1000	5,5	2	630	35	1000
HFM SKE 1500	5,5	2	630	35	1500
HFM SKE 2000	5,5	2	630	35	2000
HFM SKE 2500	5,5	2	630	35	2500
HFM SKE 3200	5,5	2	630	35	3200
HFM SKE 4000	5,5	2	630	35	4000

HFM VB M — Connectors

Connection 1 + 2: Measuring connection M 16 x 2
Temperature min.: -20 °C
Material: Steel

Design: Connector for measuring hose lines
Temperature max.: 100 °C
Surface protection: electro galvanised

Identification	G1	G2	Max. working pressure bar
HFM VB M16	M 16 x 2	M 16 x 2	630

HFM M BOX — Measuring case with screw connections

Included in scope of supply: HFM M BOX 1 - consisting of:
1 x pressure gauge Ø 63 according to choice;
1 x HFM SKE 2000.

Material: Plastic

Identification
HFM M BOX 1
HFM M BOX 2

Specify desired pressure range for pressure gauges when ordering.

HFM BOX — Measuring case with pressure gauge bracket

Included in scope of supply: 4 x HFM MMA 1/4"
1 x HFM VB M 16
1 x magnetic disc for 4 pressure gauges

Material: Plastic

Identification	G1 - G4
HFM BOX 63-4	M 16 x 2

The pressure gauges should be ordered separately.

HM — High pressure measuring hose

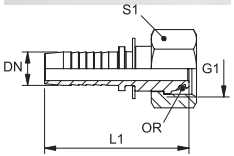
Application: Measuring equipment
Insert: one aramide braided insert
Colour: black
Temperature max.: 100 °C

Inner layer: Polyamide
Outer layer: Polyurethane
Temperature min.: -35 °C
Media: Liquids based on mineral oil and glycol

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
HM 102	2	1	5/64"	2,0	5,1	630	2000	35

DN = Nominal diameter, nominal width

PN 02 AOL / PN 02 AOS — Swage nipple, DKOL / DKOS



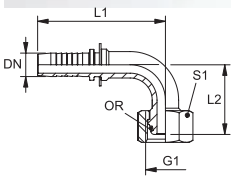
Application: Measuring equipment
Sealing form 1: 24° outer cone with O-ring
Standard code: DKOL
Surface protection: electro galvanised

Connection 1: metric nut thread
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Material: Steel

Identification	DN	Size	Inches	Series	for external pipe Ø mm	G1	L1 mm	S1	OR
PN 02 AOL 04	2	1	5/64"	L	6	M 12 x 1.5	35,0	14	4.0 x 1.5
PN 02 AOL 06	2	1	5/64"	L	8	M 14 x 1.5	35,0	17	6.0 x 1.5
PN 02 AOL 08	2	1	5/64"	L	10	M 16 x 1.5	36,5	19	7.5 x 1.5
PN 02 AOL 10	2	1	5/64"	L	12	M 18 x 1.5	37,5	22	9.0 x 1.5
PN 02 AOS 03	2	1	5/64"	S	6	M 14 x 1.5	35,0	17	4.0 x 1.5
PN 02 AOS 04	2	1	5/64"	S	8	M 16 x 1.5	35,0	19	6.0 x 1.5
PN 02 AOS 06	2	1	5/64"	S	10	M 18 x 1.5	36,5	22	7.5 x 1.5
PN 02 AOS 08	2	1	5/64"	S	12	M 20 x 1.5	37,5	24	9.0 x 1.5

DN = Nominal diameter, nominal width Series: LL = Very light L = Light S = Heavy
Appropriate ferrule: PMH 102.

PN 02 AOL 90 / PN 02 AOS 90 Swage nipple, DKOL angle 90° / DKOS angle 90°



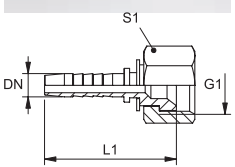
Application: Measuring equipment
Sealing form 1: 24° outer cone with O-ring
Standard code: DKOL
Surface protection: electro galvanised

Connection 1: metric nut thread
Standard: DIN 3865
ISO 8434-4
DIN ISO 12151-2
Material: Steel

Identification	DN	Size	Inches	Series	for external pipe Ø mm	G1	L1 mm	L2 mm	S1	OR
PN 02 AOL 04 90	2	1	5/64"	L	6	M 12 x 1.5	35,5	27	14	4.0 x 1.5
PN 02 AOL 06 90	2	1	5/64"	L	8	M 14 x 1.5	38,0	30	17	6.0 x 1.5
PN 02 AOL 08 90	2	1	5/64"	L	10	M 16 x 1.5	41,5	40	19	7.5 x 1.5
PN 02 AOS 03 90	2	1	5/64"	S	6	M 14 x 1.5	35,5	27	17	4.0 x 1.5
PN 02 AOS 04 90	2	1	5/64"	S	8	M 16 x 1.5	38,0	30	19	6.0 x 1.5
PN 02 AOS 06 90	2	1	5/64"	S	10	M 18 x 1.5	41,5	40	22	7.5 x 1.5

DN = Nominal diameter, nominal width Series: LL = Very light L = Light S = Heavy
Appropriate ferrule: PMH 102.

PN 02 AJ Swage nipple, DKJ



Application: Measuring equipment
Sealing form 1: 74° inner cone
Standard code: DKJ
Surface protection: electro galvanised

Connection 1: UN/UNF nut threads
Standard: SAE J514
ISO 8434-2
SAE J515
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 02 AJ 04	2	1	5/64"	3/8"-24 UNF	24,5	12
PN 02 AJ 06	2	1	5/64"	7/16"-20 UNF		14
PN 02 AJ 08	2	1	5/64"	1/2"-20 UNF	28,5	17
PN 02 AJ 10	2	1	5/64"	9/16"-18 UNF	28,5	19

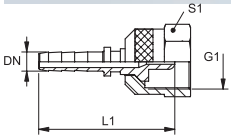
DN = Nominal diameter, nominal width
Appropriate ferrule: PMH 102.

PN SKE — Swage nipple, measuring hose

Application: Measuring equipment
Material: Steel
Connection 1: metric nut thread
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 02 SKE	2	1	5/64"	M 16 x 2	32,5	19
PN 02 SKE 12	2	1	5/64"	S 12.65 x 1.5	32,5	-
PN 02 SKE 16	2	1	5/64"	M 16 x 1.5	32,5	19

DN = Nominal diameter, nominal width
Appropriate ferrule: PMH 102.PN 02 SKE 12 without hex.

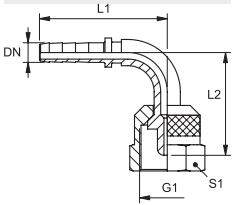


PN SKE 90 — Swage nipple, measuring hose angle 90°

Application: Measuring equipment
Material: Steel
Connection 1: metric nut thread
Surface protection: electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 02 SKE 90	2	1	5/64"	M 16 x 2	34,5	31,0	19
PN 02 SKE 12 90	2	1	5/64"	S 12.65 x 1.5	34,0	31,5	-
PN 02 SKE 16 90	2	1	5/64"	M 16 x 1.5	34,5	31,5	19

DN = Nominal diameter, nominal width
Appropriate ferrule: PMH 102.PN 02 SKE 12 without hex.

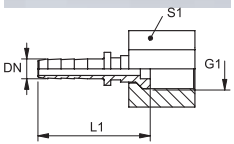


PN MMA — Swage nipple, measuring hose

Connection 1: BSP nut thread with pressure gauge connection
Surface protection: electro galvanised
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 02 MMA 1/4	2	1	5/64"	G 1/4" -19	26,5	17
PN 02 MMA 1/2	2	1	5/64"	G 1/2" -14	31,5	27

DN = Nominal diameter, nominal width
Appropriate ferrule: PMH 102.

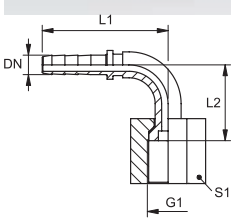


PN MMA 90 — Swage nipple, measuring hose angle 90°

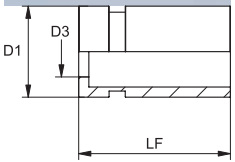
Connection 1: BSP nut thread with pressure gauge connection
Surface protection: electro galvanised
Material: Steel

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 02 MMA 1/4 90	2	1	5/64"	G 1/4" -19	38,0	25,0	17
PN 02 MMA 1/2 90	2	1	5/64"	G 1/2" -14	41,5	38,5	27

DN = Nominal diameter, nominal width
Appropriate ferrule: PMH 102.



PMH 100 — Swage ferrule for measuring hose HM 102

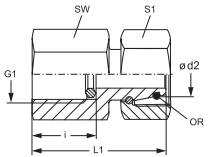


Ferrule type: Non-skive ferrule
Material: Steel
Surface protection: electro galvanised

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PMH 102	2	1	5/64"	8	4,8	15,3

DN = Nominal diameter, nominal width

MVO — Pressure gauge connection fitting



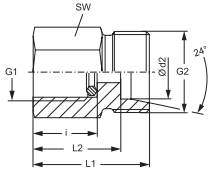
Connection 1: BSP cylindrical internal threads
Connection 2: metric nut thread
Design: Pressure gauge connection fitting
Material: Steel
Product versions: MVO VA, Pressure gauge connection fitting, Stainless steel
Spare parts: DKI, Edge sealing ring for internal thread

Sealing form 1: Edge sealing ring
Sealing form 2: 24° outer cone with O-ring
Included in scope of supply: with edge sealing ring
Surface protection: electro galvanised

Identification	Series	Ø d2 mm	Working pressure bar	G1	i mm	L1 mm	SW mm	S1	OR
MVO NW 04 L	L	6	PN 315	G 1/4" -19	14,5	36,5	19	14	4.0 x 1.5
MVO NW 06 L	L	8	PN 315	G 1/4" -19	14,5	36,5	19	17	6.0 x 1.5
MVO NW 08 L	L	10	PN 315	G 1/4" -19	14,5	36,0	19	19	7.5 x 1.5
MVO NW 10 L	L	12	PN 315	G 1/4" -19	14,5	37,5	19	22	9.0 x 1.5
MVO NW 03 S 1/4	S	6	PN 630	G 1/4" -19	14,5	35,5	19	17	4.0 x 1.5
MVO NW 03 S	S	6	PN 630	G 1/2" -14	20,0	43,5	27	17	4.0 x 1.5
MVO NW 04 S 1/4	S	8	PN 630	G 1/4" -19	14,5	35,5	19	19	6.0 x 1.5
MVO NW 04 S	S	8	PN 630	G 1/2" -14	20,0	43,0	27	19	6.0 x 1.5
MVO NW 06 S 1/4	S	10	PN 630	G 1/4" -19	14,5	36,0	19	22	7.5 x 1.5
MVO NW 06 S	S	10	PN 630	G 1/2" -14	20,0	45,0	27	22	7.5 x 1.5
MVO NW 08 S 1/4	S	12	PN 630	G 1/4" -19	14,5	39,0	19	24	9.0 x 1.5
MVO NW 08 S	S	12	PN 630	G 1/2" -14	20,0	44,5	27	24	9.0 x 1.5

Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø d2 = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

XMVR — Pressure gauge connection fitting



Connection 1: BSP cylindrical internal threads
Connection 2: metric cylindrical outer thread
Design: Pressure gauge connection fitting
Material: Steel
Product versions: XMVR VA, Pressure gauge connection fitting, Stainless steel
MVR, Pressure gauge connection fitting, Steel
Spare parts: DKI, Edge sealing ring for internal thread

Sealing form 1: Edge sealing ring
Sealing form 2: 24° inner cone
Included in scope of supply: with edge sealing ring (socket without union nut and cutting ring)
Surface protection: electro galvanised

Identification	Series	Ø d2 mm	Working pressure bar	G1	G2	i mm	L1 mm	L2 mm	SW mm
XMVR 04 LL	LL	4	PN 100	G 1/4" -19	M 8 x 1	14,5	27	23,0	19
XMVR NW 04 HL	L	6	PN 315	G 1/4" -19	M 12 x 1.5	14,5	29	22,0	19
XMVR NW 06 HL	L	8	PN 315	G 1/4" -19	M 14 x 1.5	14,5	29	22,0	19
XMVR NW 08 HL	L	10	PN 315	G 1/4" -19	M 16 x 1.5	14,5	30	23,0	19
XMVR NW 10 HL	L	12	PN 315	G 1/4" -19	M 18 x 1.5	14,5	30	23,0	19
XMVR NW 03 HS	S	6	PN 630	G 1/2" -14	M 14 x 1.5	20,0	38	31,0	27
XMVR NW 04 HS	S	8	PN 630	G 1/2" -14	M 16 x 1.5	20,0	38	31,0	27
XMVR NW 06 HS	S	10	PN 630	G 1/2" -14	M 18 x 1.5	20,0	38	30,5	27
XMVR NW 08 HS	S	12	PN 630	G 1/2" -14	M 20 x 1.5	20,0	38	30,5	27

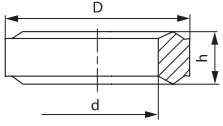
Series: LL = Very light L = Light S = Heavy PN = Nominal pressure PB = Max. operating pressure Ø = External pipe diameter
Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

DKI — Edge sealing ring for internal thread

Design: Edge sealing ring
Material: Steel
Product versions: DKI VA, Edge sealing ring for internal thread, Stainless steel
Spare parts: XMVR, Pressure gauge connection fitting
MVO, Pressure gauge connection fitting

Standard: DIN 2353
Surface protection: electro galvanised

Identification	for thread	D mm	d mm	h mm
DKI 1/4	G 1/4″	11,0	6,0	4,5
DKI 1/2	G 1/2″	18,3	12,5	5,0



GMM 63 — Pressure gauges with glycerine filling

Design: Positive pressure measuring range with glycerine filling
Sealing form 1: flat seal with pin
Damping: due to glycerine filling
Accessories: GMM SCHUTZ, Rubber cap for pressure gauge

Connection 1: BSP external thread, cylindrical
Connection: at bottom

Identification	Nominal size Ø	Scale range	Quality class	Connection
GMM 63-1	63	0...1	1,6	G 1/4" -19
GMM 63-1.5	63	0...1,5	1,6	G 1/4" -19
GMM 63-2.5	63	0...2,5	1,6	G 1/4" -19
GMM 63-4	63	0...4	1,6	G 1/4" -19
GMM 63-06	63	0...6	1,6	G 1/4" -19
GMM 63-10	63	0...10	1,6	G 1/4" -19
GMM 63-16	63	0...16	1,6	G 1/4" -19
GMM 63-25	63	0...25	1,6	G 1/4" -19
GMM 63-40	63	0...40	1,6	G 1/4" -19
GMM 63-60	63	0...60	1,6	G 1/4" -19
GMM 63-100	63	0...100	1,6	G 1/4" -19
GMM 63-160	63	0...160	1,6	G 1/4" -19
GMM 63-250	63	0...250	1,6	G 1/4" -19
GMM 63-400	63	0...400	1,6	G 1/4" -19
GMM 63-600	63	0...600	1,6	G 1/4" -19
GMM 63-1000	63	0...1000	1,6	G 1/4" -19

Application range at idle load = 3/4 x full scale.Application range with alternating load = 2/3 x full scale.

GMM 63 H — Pressure gauges with glycerine filling

Design: Positive pressure measuring range with glycerine filling
Sealing form 1: flat seal with pin
Damping: due to glycerine filling

Connection 1: BSP external thread, cylindrical
Connection: on back, centric

Identification	Nominal size Ø	Scale range	Quality class	Connection
GMM 63-1 H	63	0...1	1,6	G 1/4" -19
GMM 63-1.6 H	63	0...1,6	1,6	G 1/4" -19
GMM 63-2.5 H	63	0...2,5	1,6	G 1/4" -19
GMM 63-04 H	63	0...4	1,6	G 1/4" -19
GMM 63-06 H	63	0...6	1,6	G 1/4" -19
GMM 63-10 H	63	0...10	1,6	G 1/4" -19
GMM 63-16 H	63	0...16	1,6	G 1/4" -19
GMM 63-25 H	63	0...25	1,6	G 1/4" -19
GMM 63-40 H	63	0...40	1,6	G 1/4" -19
GMM 63-60 H	63	0...60	1,6	G 1/4" -19
GMM 63-100 H	63	0...100	1,6	G 1/4" -19
GMM 63-160 H	63	0...160	1,6	G 1/4" -19
GMM 63-250 H	63	0...250	1,6	G 1/4" -19
GMM 63-400 H	63	0...400	1,6	G 1/4" -19
GMM 63-600 H	63	0...600	1,6	G 1/4" -19

Application range at idle load = 3/4 x full scale.Application range with alternating load = 2/3 x full scale.

GVM 63 — Vacuum pressure gauges with glycerine filling

Design: Negative pressure measuring range with glycerine filling.
Sealing form 1: flat seal with pin
Damping: due to glycerine filling
Accessories: GMM SCHUTZ, Rubber cap for pressure gauge

Connection 1: BSP external thread, cylindrical
Connection: at bottom

Identification	Nominal size Ø	Scale range	Quality class	Connection
GVM 63 -1+0	63	-1...0	1,6	G 1/4" -19
GVM 63 -1+0.6	63	-1...+0,6	1,6	G 1/4" -19
GVM 63 -1+1.5	63	-1...+1,5	1,6	G 1/4" -19
GVM 63 -1+3	63	-1...+3	1,6	G 1/4" -19
GVM 63 -1+5	63	-1...+5	1,6	G 1/4" -19
GVM 63 -1+9	63	-1...+9	1,6	G 1/4" -19
GVM 63 -1+15	63	-1...+15	1,6	G 1/4" -19

Application range at idle load = 3/4 x full scale.Application range with alternating load = 2/3 x full scale.

GMM 100 — Pressure gauges with glycerine filling

Design: Positive pressure measuring range with glycerine filling
Sealing form 1: flat seal with pin
Damping: due to glycerine filling
Accessories: GMM SCHUTZ, Rubber cap for pressure gauge

Connection 1: BSP external thread, cylindrical
Connection: at bottom

Identification	Nominal size Ø	Scale range	Quality class	Connection
GMM 100-0.6	100	0...0,6	1,0	G 1/2" -14
GMM 100-1	100	0...1	1,0	G 1/2" -14
GMM 100-1.6	100	0...1,6	1,0	G 1/2" -14
GMM 100-2.5	100	0...2,5	1,0	G 1/2" -14
GMM 100-4	100	0...4	1,0	G 1/2" -14
GMM 100-6	100	0...6	1,0	G 1/2" -14
GMM 100-10	100	0...10	1,0	G 1/2" -14
GMM 100-16	100	0...16	1,0	G 1/2" -14
GMM 100-25	100	0...25	1,0	G 1/2" -14
GMM 100-40	100	0...40	1,0	G 1/2" -14
GMM 100-60	100	0...60	1,0	G 1/2" -14
GMM 100-100	100	0...100	1,0	G 1/2" -14
GMM 100-160	100	0...160	1,0	G 1/2" -14
GMM 100-250	100	0...250	1,0	G 1/2" -14
GMM 100-400	100	0...400	1,0	G 1/2" -14
GMM 100-600	100	0...600	1,0	G 1/2" -14
GMM 100-1000	100	0...1000	1,0	G 1/2" -14

Application range at idle load = Up to full scale.Application range with alternating load = Up to 0.9 x full scale.

GMM 160 — Pressure gauges with glycerine filling

Design: Positive pressure measuring range with glycerine filling
Sealing form 1: flat seal with pin
Damping: due to glycerine filling
Connection 1: BSP external thread, cylindrical
Connection: at bottom

Identification	Nominal size Ø	Scale range	Quality class	Connection
GMM 160-0.6	160	0...0,6	1,0	G 1/2" -14
GMM 160-1	160	0...1	1,0	G 1/2" -14
GMM 160-1.6	160	0...1,6	1,0	G 1/2" -14
GMM 160-2.5	160	0...2,5	1,0	G 1/2" -14
GMM 160-4	160	0...4	1,0	G 1/2" -14
GMM 160-6	160	0...6	1,0	G 1/2" -14
GMM 160-10	160	0...10	1,0	G 1/2" -14
GMM 160-16	160	0...16	1,0	G 1/2" -14
GMM 160-25	160	0...25	1,0	G 1/2" -14
GMM 160-40	160	0...40	1,0	G 1/2" -14
GMM 160-60	160	0...60	1,0	G 1/2" -14
GMM 160-100	160	0...100	1,0	G 1/2" -14
GMM 160-160	160	0...160	1,0	G 1/2" -14
GMM 160-250	160	0...250	1,0	G 1/2" -14
GMM 160-400	160	0...400	1,0	G 1/2" -14
GMM 160-600	160	0...600	1,0	G 1/2" -14
GMM 160-1000	160	0...1000	1,0	G 1/2" -14

Application range at idle load = Up to full scale.Application range with alternating load = Up to 0.9 x full scale.

GMM SCHUTZ — Rubber cap for pressure gauge

Application: Rubber protective cap for pressure gauge with bottom connection.
Material: Rubber
Accessories: **GMM 100,** Pressure gauges with glycerine filling
GVM 63, Vacuum pressure gauges with glycerine filling
GMM 63, Pressure gauges with glycerine filling
Colour: blue

Identification	Nominal size Ø
GMM SCHUTZ 63	63
GMM SCHUTZ 100	100

GMM 63 HFR — Pressure gauges with glycerine filling

Design: Positive pressure measuring range with glycerine filling
Connection 1: BSP external thread, cylindrical
Damping: due to glycerine filling
Mounting: Front ring with mounting bores
Sealing form 1: flat seal with pin
Connection: on back, centric

Identification	Connection	Nominal size Ø	Scale range	Quality class
GMM 63-1 HFR	G 1/4" -19	63	0...1	1,6
GMM 63-1.6 HFR	G 1/4" -19	63	0...1,6	1,6
GMM 63-2.5 HFR	G 1/4" -19	63	0...2,5	1,6
GMM 63-4 HFR	G 1/4" -19	63	0...4	1,6
GMM 63-6 HFR	G 1/4" -19	63	0...6	1,6
GMM 63-10 HFR	G 1/4" -19	63	0...10	1,6
GMM 63-16 HFR	G 1/4" -19	63	0...16	1,6
GMM 63-25 HFR	G 1/4" -19	63	0...25	1,6
GMM 63-40 HFR	G 1/4" -19	63	0...40	1,6
GMM 63-60 HFR	G 1/4" -19	63	0...60	1,6
GMM 63-100 HFR	G 1/4" -19	63	0...100	1,6
GMM 63-160 HFR	G 1/4" -19	63	0...160	1,6
GMM 63-250 HFR	G 1/4" -19	63	0...250	1,6
GMM 63-400 HFR	G 1/4" -19	63	0...400	1,6
GMM 63-600 HFR	G 1/4" -19	63	0...600	1,6

Application range at idle load = 3/4 x full scale.Application range with alternating load = 2/3 x full scale.

RMM 63 HFR — Pressure gauges without glycerine filling

Design: Positive pressure measuring range without glycerine filling
Connection 1: BSP external thread, cylindrical
Connection: on back, centric
Mounting: Front ring with mounting bores
Sealing form 1: flat seal with pin

Identification	Connection	Nominal size Ø	Scale range	Quality class
RMM 63-0.6 HFR	G 1/4" -19	63	0...0,6	2,5
RMM 63-1 HFR	G 1/4" -19	63	0...1	2,5
RMM 63-1.6 HFR	G 1/4" -19	63	0...1,6	2,5
RMM 63-2.5 HFR	G 1/4" -19	63	0...2,5	2,5
RMM 63-4 HFR	G 1/4" -19	63	0...4	2,5
RMM 63-6 HFR	G 1/4" -19	63	0...6	2,5
RMM 63-10 HFR	G 1/4" -19	63	0...10	2,5
RMM 63-16 HFR	G 1/4" -19	63	0...16	2,5
RMM 63-25 HFR	G 1/4" -19	63	0...25	2,5
RMM 63-40 HFR	G 1/4" -19	63	0...40	2,5
RMM 63-60 HFR	G 1/4" -19	63	0...60	2,5
RMM 63-100 HFR	G 1/4" -19	63	0...100	2,5
RMM 63-160 HFR	G 1/4" -19	63	0...160	2,5
RMM 63-250 HFR	G 1/4" -19	63	0...250	2,5
RMM 63-315 HFR	G 1/4" -19	63	0...315	2,5
RMM 63-400 HFR	G 1/4" -19	63	0...400	2,5

Application range at idle load = 3/4 x full scale.Application range with alternating load = 2/3 x full scale.

GMM 100 HFR — Pressure gauges with glycerine filling

Design: Positive pressure measuring range with glycerine filling
Connection 1: BSP external thread, cylindrical
Damping: due to glycerine filling
Mounting: Front ring with mounting bores
Sealing form 1: flat seal with pin
Connection: on back, eccentric

Identification	Connection	Nominal size Ø	Scale range	Quality class
GMM 100-0.6 HFR	G 1/2" -14	100	0...0,6	1,0
GMM 100-1 HFR	G 1/2" -14	100	0...1	1,0
GMM 100-1.6 HFR	G 1/2" -14	100	0...1,6	1,0
GMM 100-2.5 HFR	G 1/2" -14	100	0...2,5	1,0
GMM 100-4 HFR	G 1/2" -14	100	0...4	1,0
GMM 100-6 HFR	G 1/2" -14	100	0...6	1,0
GMM 100-10 HFR	G 1/2" -14	100	0...10	1,0
GMM 100-16 HFR	G 1/2" -14	100	0...16	1,0
GMM 100-25 HFR	G 1/2" -14	100	0...25	1,0
GMM 100-40 HFR	G 1/2" -14	100	0...40	1,0
GMM 100-60 HFR	G 1/2" -14	100	0...60	1,0
GMM 100-100 HFR	G 1/2" -14	100	0...100	1,0
GMM 100-160 HFR	G 1/2" -14	100	0...160	1,0
GMM 100-250 HFR	G 1/2" -14	100	0...250	1,0
GMM 100-400 HFR	G 1/2" -14	100	0...400	1,0
GMM 100-600 HFR	G 1/2" -14	100	0...600	1,0
GMM 100-1000 HFR	G 1/2" -14	100	0...1000	1,0

Application range at idle load = Up to full scale.Application range with alternating load = Up to 0.9 x full scale.

GMM 63 HKR — Pressure gauges with glycerine filling

Design: Positive pressure measuring range with glycerine filling
Connection 1: BSP external thread, cylindrical
Connection: on back, centric
Mounting: Clamping ring
Sealing form 1: flat seal with pin
Damping: due to glycerine filling

Identification	Nominal size Ø	Scale range	Quality class	Connection
GMM 63-1 HKR	63	0...1	1,6	G 1/4" -19
GMM 63-1.6 HKR	63	0...1,6	1,6	G 1/4" -19
GMM 63-2.5 HKR	63	0...2,5	1,6	G 1/4" -19
GMM 63-4 HKR	63	0...4	1,6	G 1/4" -19
GMM 63-06 HKR	63	0...6	1,6	G 1/4" -19
GMM 63-10 HKR	63	0...10	1,6	G 1/4" -19
GMM 63-16 HKR	63	0...16	1,6	G 1/4" -19
GMM 63-25 HKR	63	0...25	1,6	G 1/4" -19
GMM 63-40 HKR	63	0...40	1,6	G 1/4" -19
GMM 63-60 HKR	63	0...60	1,6	G 1/4" -19
GMM 63-100 HKR	63	0...100	1,6	G 1/4" -19
GMM 63-160 HKR	63	0...160	1,6	G 1/4" -19
GMM 63-250 HKR	63	0...250	1,6	G 1/4" -19
GMM 63-400 HKR	63	0...400	1,6	G 1/4" -19
GMM 63-600 HKR	63	0...600	1,6	G 1/4" -19
GMM 63-1000 HKR	63	0...1000	1,6	G 1/4" -19

Application range at idle load = 3/4 x full scale.Application range with alternating load = 2/3 x full scale.

GMM 100 HKR

Pressure gauges with glycerine filling

Design: Positive pressure measuring range with glycerine filling
Connection 1: BSP external thread, cylindrical
Connection: on back, eccentric
Mounting: Clamping ring
Sealing form 1: flat seal with pin
Damping: due to glycerine filling

Identification	Nominal size Ø	Scale range	Quality class	Connection
GMM 100-0.6 HKR	100	0...0,6	1,0	G 1/2" -14
GMM 100-1 HKR	100	0...1	1,0	G 1/2" -14
GMM 100-1.6 HKR	100	0...1,6	1,0	G 1/2" -14
GMM 100-2.5 HKR	100	0...2,5	1,0	G 1/2" -14
GMM 100-4 HKR	100	0...4	1,0	G 1/2" -14
GMM 100-6 HKR	100	0...6	1,0	G 1/2" -14
GMM 100-10 HKR	100	0...10	1,0	G 1/2" -14
GMM 100-16 HKR	100	0...16	1,0	G 1/2" -14
GMM 100-25 HKR	100	0...25	1,0	G 1/2" -14
GMM 100-40 HKR	100	0...40	1,0	G 1/2" -14
GMM 100-60 HKR	100	0...60	1,0	G 1/2" -14
GMM 100-100 HKR	100	0...100	1,0	G 1/2" -14
GMM 100-160 HKR	100	0...160	1,0	G 1/2" -14
GMM 100-250 HKR	100	0...250	1,0	G 1/2" -14
GMM 100-400 HKR	100	0...400	1,0	G 1/2" -14
GMM 100-600 HKR	100	0...600	1,0	G 1/2" -14
GMM 100-1000 HKR	100	0...1000	1,0	G 1/2" -14

Application range at idle load = Up to full scale.Application range with alternating load = Up to 0.9 x full scale.

Compressed air technology

LP MM — Air jet gun

Connection: Hose connection
Temperature max.: 100 °C
Temperature min.: -20 °C
Material: Aluminium

Identification	Inches	for hose ID mm	Working pressure bar
LP 06 MM	1/4"	6	PN 12
LP 09 MM	3/8"	9	PN 12

LSK HR G — Claw coupling (air)

Design: Claw outer thread coupling
Connection 1: BSP external thread, cylindrical
Sealing form 2: Rubber sealing ring
Temperature min.: -40 °C
Material: Cast iron
Product versions: LSK HR G AC, Claw coupling (air), Steel
Accessories: LSK GDOR, Rubber ring for claw coupling
Supplementary design information: with safety double cam
Connection 2: Claw coupling
Standard: DIN 3489
Temperature max.: 95 °C
Surface protection: electro galvanised

Identification	Connecting thread	Cog space mm	Working pressure bar
LSK NW 06 HR G	G 1/4" -19	42	PN 10
LSK NW 10 HR G	G 3/8" -19	42	PN 10
LSK NW 13 HR G	G 1/2" -14	42	PN 10
LSK NW 20 HR G	G 3/4" -14	42	PN 10
LSK NW 25 HR G	G 1" -11	42	PN 10

A coupling with brass seal should be used as the counter coupling.

LSK IR G — Claw coupling (air)

Design: Claw inner thread coupling
Connection 1: BSP cylindrical internal threads
Sealing form 2: Rubber sealing ring
Temperature min.: -40 °C
Material: Cast iron
Product versions: LSK IR G AC, Claw coupling (air), Steel
Accessories: LSK GDOR, Rubber ring for claw coupling
Supplementary design information: with safety double cam
Connection 2: Claw coupling
Standard: DIN 3489
Temperature max.: 95 °C
Surface protection: electro galvanised

Identification	Connecting thread	Cog space mm	Working pressure bar
LSK NW 06 IR G	G 1/4" -19	42	PN 10
LSK NW 10 IR G	G 3/8" -19	42	PN 10
LSK NW 13 IR G	G 1/2" -14	42	PN 10
LSK NW 20 IR G	G 3/4" -14	42	PN 10
LSK NW 25 IR G	G 1" -11	42	PN 10
LSK NW 32 IR G	G 1.1/4" -11	42	PN 10

LSK G — Claw coupling (air)

Design: Claw hose coupling
Connection 1: Hose connection
Sealing form 2: Rubber sealing ring
Temperature min.: -40 °C
Material: Cast iron
Product versions: LSK G AC, Claw coupling (air), Steel
Accessories: LSK GDOR, Rubber ring for claw coupling

Supplementary design information: with safety double cam
Connection 2: Claw coupling
Standard: DIN 3489
Temperature max.: 95 °C
Surface protection: electro galvanised

Identification	for hose ID mm	Inches	Cog space mm	Working pressure bar
LSK NW 06 G	6	1/4"	42	PN 10
LSK NW 10 G	10	3/8"	42	PN 10
LSK NW 13 G	13	1/2"	42	PN 10
LSK NW 15 G	15	5/8"	42	PN 10
LSK NW 19 G	19	3/4"	42	PN 10
LSK NW 25 G	25	1"	42	PN 10
LSK NW 32 G	32	1.1/4"	42	PN 10

LSK SB G — Claw coupling (air), safety collar

Design: Claw hose coupling
Connection 1: Hose connection
Sealing form 2: Rubber sealing ring
Temperature min.: -40 °C
Material: Cast iron
Accessories: LSK GDOR, Rubber ring for claw coupling

Supplementary design information: with safety double nipple and safety collar
Connection 2: Claw coupling
Standard: DIN 3489
Temperature max.: 95 °C
Surface protection: electro galvanised

Identification	for hose ID mm	Inches	Cog space mm	Working pressure bar
LSK NW 13 SB G	13	1/2"	42	PN 10
LSK NW 15 SB G	15	5/8"	42	PN 10
LSK NW 19 SB G	19	3/4"	42	PN 10
LSK NW 25 SB G	25	1"	42	PN 10

LSK HR MODY — Claw coupling (air), MODY

Design: MODY outer thread coupling
Connection 2: Claw coupling
Standard: DIN 3238
Temperature max.: 95 °C
Surface protection: electro galvanised
Accessories: LSK SDOR N, Rubber ring for MODY coupling

Connection 1: BSP external thread, cylindrical
Sealing form 2: Rubber sealing ring
Temperature min.: -40 °C
Material: Malleable cast iron coupling head / Steel nozzle

Identification	Connecting thread	Cog space mm	Working pressure bar
LSK NW 10 HR MODY	G 3/8" -19	42	PN 16
LSK NW 13 HR MODY	G 1/2" -14	42	PN 16
LSK NW 20 HR MODY	G 3/4" -14	42	PN 16
LSK NW 25 HR MODY	G 1" -11	42	PN 16

LSK MODY — Claw coupling (air), MODY

Design: MODY hose coupling
Connection 1: Hose connection
Sealing form 2: Rubber sealing ring
Temperature min.: -40 °C
Material: Malleable cast iron coupling head / Steel nozzle
Accessories: LSK SDOR N, Rubber ring for MODY coupling

Supplementary design information: with safety double cam
Connection 2: Claw coupling
Standard: DIN 3238
Temperature max.: 95 °C
Surface protection: electro galvanised

Identification	for hose ID mm	Inches	Cog space mm	Working pressure bar
LSK NW 10 MODY	10	3/8"	42	PN 16
LSK NW 13 MODY	13	1/2"	42	PN 16
LSK NW 15 MODY	15	5/8"	42	PN 16
LSK NW 19 MODY	19	3/4"	42	PN 16
LSK NW 25 MODY	25	1"	42	PN 16
LSK NW 32 MODY	32	1.1/4"	42	PN 16

LKM HB — Plug-in coupling sleeve (air)

Design: Quick release coupling sleeve
Sealing form 1: 60° inner cone

Connection 1: BSP external thread, cylindrical
Connection 2: Sleeve Ø 7.2 mm

Identification	Connecting thread	Working pressure bar	SW mm
LKM 02 HB	G 1/8" -28	PN 35	22
LKM 06 HB	G 1/4" -19	PN 35	22
LKM 10 HB	G 3/8" -19	PN 35	22
LKM 13 HB	G 1/2" -14	PN 35	22

SW = Width across flats

LKM IR — Plug-in coupling sleeve (air)

Design: Quick release coupling sleeve
Connection 2: Sleeve Ø 7.2 mm

Connection 1: BSP cylindrical internal threads

Identification	Connecting thread	Working pressure bar	SW mm
LKM 02 IR	G 1/8" -28	PN 35	22
LKM 06 IR	G 1/4" -19	PN 35	22
LKM 10 IR	G 3/8" -19	PN 35	22
LKM 13 IR	G 1/2" -14	PN 35	24

SW = Width across flats

LKM MM — Plug-in coupling sleeve (air)

Design: Quick release coupling sleeve
Connection 1: Hose connection
Construction: straight
Connection 2: Sleeve Ø 7.2 mm

Identification	for hose ID mm	Working pressure bar
LKM 06 MM	6	PN 35
LKM 08 MM	8	PN 35
LKM 09 MM	9	PN 35
LKM 10 MM	10	PN 35
LKM 13 MM	13	PN 35

LKM HR ST — Plug-in coupling sleeve (air) with locking mechanism

Design: Quick release coupling sleeve
Connection 1: BSP external thread, cylindrical
Material: Steel / composite material
Supplementary design information: with safety lock
Connection 2: Sleeve Ø 7.2 mm

Identification	Connecting thread	Working pressure bar
LKM 06 HR ST	G 1/4" -19	PN 12
LKM 10 HR ST	G 3/8" -19	PN 12
LKM 13 HR ST	G 1/2" -14	PN 12

Coupling safety lock prevents a hazardous whiplash effect.

LKM MM ST — Plug-in coupling sleeve (air) with locking mechanism

Design: Quick release coupling sleeve
Connection 1: Hose connection
Material: Steel / composite material
Supplementary design information: with safety lock
Connection 2: Sleeve Ø 7.2 mm

Identification	for hose ID mm	Working pressure bar
LKM 06 MM ST	6	PN 12
LKM 08 MM ST	8	PN 12
LKM 09 MM ST	9	PN 12
LKM 10 MM ST	10	PN 12
LKM 13 MM ST	13	PN 12

Coupling safety lock prevents a hazardous whiplash effect.

LKS HB — Plug-in coupling connector (air)

Design: Quick release coupling plug
Sealing form 1: 60° inner cone
Material: Brass

Connection 1: BSP external thread, cylindrical
Connection 2: Connector Ø 7.2 mm

Identification	Connecting thread	Working pressure bar	SW mm
LKS 02 HB	G 1/8" -28	PN 35	13
LKS 06 HB	G 1/4" -19	PN 35	17
LKS 10 HB	G 3/8" -19	PN 35	19
LKS 13 HB	G 1/2" -14	PN 35	24

SW = Width across flats

LKS MM — Plug-in coupling connector (air)

Design: Quick release coupling plug
Connection 2: Connector Ø 7.2 mm

Connection 1: Hose connection
Material: Brass

Identification	for hose ID mm	Working pressure bar
LKS 06 MM	6	PN 35
LKS 08 MM	8	PN 35
LKS 09 MM	9	PN 35
LKS 10 MM	10	PN 35
LKS 13 MM	13	PN 16

LSK GDOR — Rubber ring for claw coupling

Design: Rubber ring for claw couplings
Temperature min.: -40 °C
Material: Silicone
Accessories: **LSK G,** Claw coupling (air)
LSK HR G, Claw coupling (air)
LSK IR G, Claw coupling (air)
LSK SB G, Claw coupling (air), safety collar

Supplementary design information: steam resistant
Temperature max.: 200 °C

Identification	External Ø mm	Internal Ø mm	h mm
LSK GDOR	33	20	10

LSK SDOR N — Rubber ring for MODY coupling

Design: Rubber ring for MODY couplings
Temperature min.: -40 °C
Material: Ohasil
Spare parts: **LSK HR MODY,** Claw coupling (air), MODY
LSK MODY, Claw coupling (air), MODY

Supplementary design information: steam resistant
Temperature max.: 200 °C

Identification	External Ø mm	Internal Ø mm	h mm
LSK SDOR N	30	21	4
SDORN suitable for new seal seats led on both sides.			

T M — Threaded nozzle

Connection 1: BSP external thread, cylindrical
Material: Brass

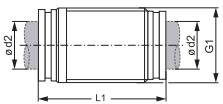
Connection 2: Hose connection

Identification	Connecting thread	for hose ID mm	SW mm	Working pressure bar
T 184 M	G 1/8" -28	4	14	PN 16
T 186 M	G 1/8" -28	6	14	PN 16
T 189 M	G 1/8" -28	9	14	PN 16
T 144 M	G 1/4" -19	4	17	PN 16
T 146 M	G 1/4" -19	6	17	PN 16
T 149 M	G 1/4" -19	9	17	PN 16
T 1413 M	G 1/4" -19	13	17	PN 16
T 386 M	G 3/8" -19	6	19	PN 16
T 389 M	G 3/8" -19	9	19	PN 16
T 3813 M	G 3/8" -19	13	19	PN 16
T 126 M	G 1/2" -14	6	24	PN 16
T 129 M	G 1/2" -14	9	24	PN 16
T 1213 M	G 1/2" -14	13	24	PN 16
T 1219 M	G 1/2" -14	19	24	PN 16
T 349 M	G 3/4" -14	9	27	PN 16
T 3413 M	G 3/4" -14	13	32	PN 16
T 3419 M	G 3/4" -14	19	32	PN 16
T 1019 M	G 1" -11	19	26	PN 16
T 1025 M	G 1" -11	25	38	PN 16
SW = Width across flats				

TR G VB — Connector for Tecalan pipe

Design: Connector
Material: Brass
Construction: straight
Surface protection: nickel plated

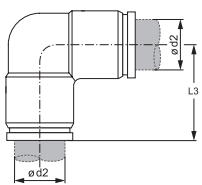
Identification	Ø d2 mm	G1	L1 mm
TR 04 G VB	4	M 11 x 1	28,6
TR 05 G VB	5	M 14 x 1	33,5
TR 06 G VB	6	M 13 x 1	31,2
TR 08 G VB	8	M 15 x 1	33,9
TR 10 G VB	10	M 17 x 1	37,8
TR 12 G VB	12	M 20 x 1	39,7
TR 14 G VB	14	M 24 x 1	45,5



TR W VB — Connector for Tecalan pipe

Design: Connector
Material: Brass
Construction: Angle 90°
Surface protection: nickel plated

Identification	Ø d2 mm	L3 mm
TR 04 W VB	4	18,2
TR 05 W VB	5	19,2
TR 06 W VB	6	19,7
TR 08 W VB	8	23,2
TR 10 W VB	10	27,5
TR 12 W VB	12	25,5
TR 14 W VB	14	29,1

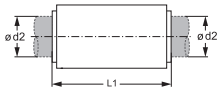


TR G VB T — Connector for Tecalan pipe

Special features: TÜV tested
Construction: straight
Surface protection: electro galvanised

Design: Connector
Material: Steel

Identification	Ø d2 mm	for pipe	L1 mm
TR 06 G VB T	6	6 x 1	35,6
TR 08 G VB T	8	8 x 1	37,6
TR 09 G VB T	9	9 x 1.5	47,0
TR 10 G VB T	10	10 x 1	44,1
TR 11 G VB T	11	11 x 1.5	48,0
TR 12 G VB T	12	12 x 1.5	51,1
TR 15 G VB T	15	15 x 1.5	61,5

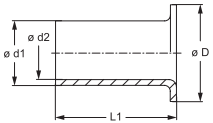


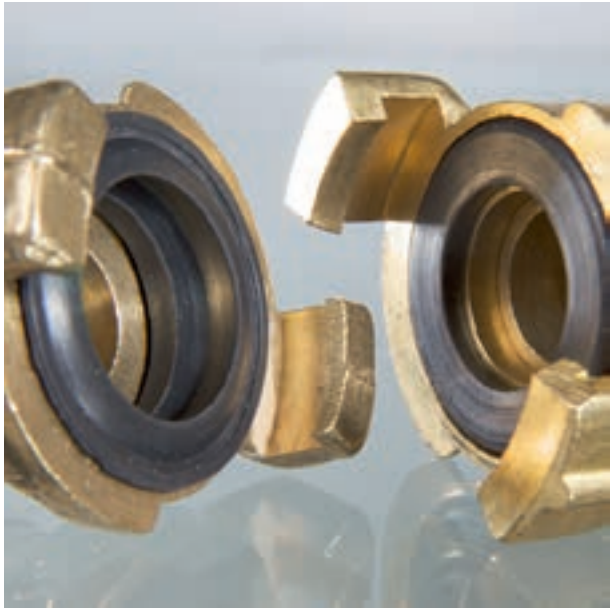
TR EH — Push-in sleeve

Design: Support bushes
Material: Brass

Supplementary design information: for PA 11/12 plastic pipes

Identification	D mm	Ø d1 mm	Ø d2 mm	L1 mm
TR 04-1 EH	3,5	2,0	1,3	8
TR 06-1 EH	5,0	4,0	3,2	10
TR 06-1.5 EH	5,0	3,0	2,2	10
TR 08-1 EH	8,0	6,0	5,0	15
TR 08-1.5 EH	8,0	5,0	4,0	15
TR 10-1 EH	10,0	8,0	6,7	15
TR 10-1.25 EH	10,0	7,5	6,5	10
TR 10-1.5 EH	10,0	7,0		
TR 12-1 EH	12,0	10,0	8,7	15
TR 12-1.5 EH	12,0	9,0	7,7	15
TR 12-2 EH	12,0	8,0	6,7	15
TR 15-1.5 EH	14,0	12,0	10,7	15
TR 15-2 EH	14,0	11,0	7,0	15
TR 18-1.5 EH	17,8	15,0		
TR 18-2 EH	17,8	14,0	12,7	18
TR 20-2 EH	17,8	16,0	14,7	18
TR 22-2 EH	21,8	18,0	16,7	20
TR 25-2.5 EH	21,8	20,0	18,7	20





Water technology

WSK — GEKA claw coupling (water)

Connection 1: Hose connection
Connection 2: Claw coupling
Temperature max.: 95 °C
Material: Hot pressed brass MS 58
Spare parts: WSK GKOR NEU, Form sealing ring for water claw coupling

Sealing form 1: NBR form sealing ring
Temperature min.: 0 °C
Media: Water

Identification	Inches	for hose ID mm	Cog space mm	Working pressure bar
WSK NW 10	3/8"	10	40	PN 50
WSK NW 13	1/2"	13	40	PN 50
WSK NW 16	5/8"	16	40	PN 50
WSK NW 19	3/4"	19	40	PN 50
WSK NW 25	1"	25	40	PN 50
WSK NW 32	1.1/4"	32	40	PN 50
WSK NW 38	1.1/2"	38	40	PN 50

WSK MODY — Claw coupling (water), MODY

Connection 1: Hose connection
Connection 2: Claw coupling
Temperature min.: 0 °C
Media: Water

Sealing form 1: NBR form sealing ring
Design: with adjusting ring
Temperature max.: 95 °C
Material: Hot pressed brass MS 58

Identification	Inches	for hose ID mm	Cog space mm	Working pressure bar
WSK NW 13 MODY	1/2"	13	40	PN 10
WSK NW 19 MODY	3/4"	19	40	PN 10
WSK NW 25 MODY	1"	25	40	PN 10

WSK HR — GEKA claw coupling (water)

Connection 1: BSP external thread, cylindrical
Connection 2: Claw coupling
Temperature min.: 0 °C
Media: Water
Spare parts: WSK GKOR NEU, Form sealing ring for water claw coupling

Sealing form 1: flat sealing
Sealing form 2: NBR form sealing ring
Temperature max.: 95 °C
Material: Hot pressed brass MS 58

Identification	G1	Cog space mm	Working pressure bar
WSK NW 06 HR	G 1/4" -19	40	PN 50
WSK NW 10 HR	G 3/8" -19	40	PN 50
WSK NW 13 HR	G 1/2" -14	40	PN 50
WSK NW 20 HR	G 3/4" -14	40	PN 50
WSK NW 25 HR	G 1" -11	40	PN 50
WSK NW 32 HR	G 1.1/4" -11	40	PN 50
WSK NW 40 HR	G 1.1/2" -11	40	PN 50

WSK IR — GEKA claw coupling (water)

Connection 1: BSP cylindrical internal threads
Connection 2: Claw coupling
Temperature min.: 0 °C
Media: Water
Spare parts: WSK GKOR NEU, Form sealing ring for water claw coupling

Sealing form 1: flat sealing
Sealing form 2: NBR form sealing ring
Temperature max.: 95 °C
Material: Hot pressed brass MS 58

Identification	G1	Cog space mm	Working pressure bar
WSK NW 06 IR	G 1/4" -19	40	PN 50
WSK NW 10 IR	G 3/8" -19	40	PN 50
WSK NW 13 IR	G 1/2" -14	40	PN 50
WSK NW 20 IR	G 3/4" -14	40	PN 50
WSK NW 25 IR	G 1" -11	40	PN 50
WSK NW 32 IR	G 1.1/4" -11	40	PN 50
WSK NW 40 IR	G 1.1/2" -11	40	PN 50

WSK GKOR NEU — Form sealing ring for water claw coupling

Design: Replacement sealing ring for GEKA plus water couplings (new version).
Spare parts: WSK HR, GEKA claw coupling (water)
WSK, GEKA claw coupling (water)
WSK IR, GEKA claw coupling (water)
WSK DUESE SA, Water jet with claw coupling

Material: NBR, black, 65 Shore

Identification	External Ø mm	Internal Ø mm	h mm
WSK GKOR N	33,5	20,5	10,8

WKM IR — Plug-in coupling sleeve (water)

Connection 1: BSP cylindrical internal threads
Sealing form 1: for screw-in pins with shapes A, B and if necessary E

Connection 2: Sleeve Ø 15.0 mm
Design: Quick release coupling sleeve

Identification	Connecting thread
WKM 06 IR	G 1/4" -19
WKM 10 IR	G 3/8" -19

WSK DUESE SA — Water jet with claw coupling

Connection: Claw coupling
Material: Hot pressed brass MS 58
Spare parts: WSK GKOR NEU, Form sealing ring for water claw coupling

Design: Heavy design

Identification	Inches	for hose ID mm	Cog space mm	Mouth piece hole mm	Working pressure bar
WSK DUESE NW 13 SA	1/2"	12	40	5	PN 10
WSK DUESE NW 19 SA	3/4"	19	40	7	PN 10
WSK DUESE NW 25 SA	1"	25	40	8	PN 10

For full jet, sprinkler, mist and shut off.

4 WS IR MG — 4-way piece

Connection 1 - 4: BSP cylindrical internal threads
Material: Brass

Sealing form 1 - 4: for screw-in pins with shapes A, B and if necessary E

Identification	G1 - G4
4 WS 10 IR MG	G 3/8" -19
4 WS 13 IR MG	G 1/2" -14

G1 - G4 = Threads for connections 1-4

SK KG AL

Suction coupling for fire brigade coupling

Connection 1: Hose connection
Design: Suction coupling for outer cover
Material: Aluminium
Product versions : SK KG MG, Suction coupling for fire brigade coupling, Brass

Connection 2: Claw coupling
Sealing form 2: Moulded seal made of black nitrile

Identification	for hose ID mm	Cog space mm	Nominal size Storz
SK KG 31 NW 13 D AL	13	31	25-D
SK KG 31 NW 15 D AL	15	31	25-D
SK KG 31 NW 19 D AL	19	31	25-D
SK KG 31 NW 25 D AL	25	31	25-D
SK KG 44 NW 19 AL	19	44	32
SK KG 44 NW 32 AL	32	44	32
SK KG 44 NW 25 AL	25	44	32
SK KG 52 NW 25 AL	25	51	38
SK KG 52 NW 32 AL	32	51	38
SK KG 52 NW 38 AL	38	51	38
SK KG 66 NW 25 C AL	25	66	52-C
SK KG 66 NW 32 C AL	32	66	52-C
SK KG 66 NW 38 C AL	38	66	52-C
SK KG 66 NW 42 C AL	42	66	52-C
SK KG 66 NW 50 C AL	50	66	52-C
SK KG 66 NW 52 C AL	52	66	52-C
SK KG 66 NW 19 C AL	19	66	52-C
SK KG 66 NW 28 C AL	28	66	52-C
SK KG 66 NW 40 C AL	40	66	52-C
SK KG 66 NW 45 C AL	45	66	52-C
SK KG 66 NW 55 C AL	55	66	52-C
SK KG 66 NW 60 C AL	60	66	52-C

Identification	for hose ID mm	Cog space mm	Nominal size Storz
SK KG 81 NW 65 AL	65	81	65
SK KG 81 NW 38 AL	38	81	65
SK KG 81 NW 52 AL	52	81	65
SK KG 81 NW 75 AL	75	81	65
SK KG 81 NW 70 AL	70	81	65
SK KG 89 NW 52 B AL	52	89	75-B
SK KG 89 NW 65 B AL	65	89	75-B
SK KG 89 NW 70 B AL	70	89	75-B
SK KG 89 NW 75 B AL	75	89	75-B
SK KG 89 NW 80 B AL	80	89	75-B
SK KG 105 NW 75 AL	75	105	90
SK KG 105 NW 90 AL	90	105	90
SK KG 115 NW 100 AL	100	115	100
SK KG 133 NW 90 A AL	90	133	110-A
SK KG 133 NW 100 A AL	100	133	110-A
SK KG 133 NW 110 A AL	110	133	110-A
SK KG 133 NW 125 A AL	125	133	110-A
SK KG 148 NW 125 AL	125	148	125
SK KG 160 NW 150 AL	150	160	150
SK KG 188 NW 150 AL	150	188	165
SK KG 188 NW 160 AL	160	188	165
SK KG 220 NW 205 AL	205	220	205

FK KG IR AL — Fixed coupling for fire brigade couplings

Connection 1: BSP cylindrical internal threads
Connection 2: Claw coupling
Sealing form 2: Moulded seal made of black nitrile
Product versions : FK KG IR MG, Fixed coupling for fire brigade couplings, Brass
Sealing form 1: flat sealing
Design: Fixed coupling with inner thread
Material: Aluminium

Identification	Connecting thread	Cog space mm	Nominal size Storz
FK KG 31 IR 13 D AL	G 1/2" -14	31	25-D
FK KG 31 IR 20 D AL	G 3/4" -14	31	25-D
FK KG 31 IR 25 D AL	G 1" -11	31	25-D
FK KG 31 IR 32 D AL	G 1.1/4" -11	31	25-D
FK KG 44 IR 25 AL	G 1" -11	44	32
FK KG 44 IR 32 AL	G 1.1/4" -11	44	32
FK KG 52 IR 25 AL	G 1" -11	52	38
FK KG 52 IR 32 AL	G 1.1/4" -11	52	38
FK KG 52 IR 40 AL	G 1.1/2" -11	52	38
FK KG 52 IR 50 AL	G 2" -11	52	38
FK KG 66 IR 20 C AL	G 3/4" -14	66	52-C
FK KG 66 IR 25 C AL	G 1" -11	66	52-C
FK KG 66 IR 32 C AL	G 1.1/4" -11	66	52-C
FK KG 66 IR 40 C AL	G 1.1/2" -11	66	52-C
FK KG 66 IR 50 C AL	G 2" -11	66	52-C
FK KG 66 IR 65 C AL	G 2.1/2" -11	66	52-C
FK KG 81 IR 40 AL	G 1.1/2" -11	81	65
FK KG 81 IR 50 AL	G 2" -11	81	65

Identification	Connecting thread	Cog space mm	Nominal size Storz
FK KG 81 IR 65 AL	G 2.1/2" -11	81	65
FK KG 81 IR 75 AL	G 3" -11	81	65
FK KG 89 IR 50 B AL	G 2" -11	89	75-B
FK KG 89 IR 65 B AL	G 2.1/2" -11	89	75-B
FK KG 89 IR 75 B AL	G 3" -11	89	75-B
FK KG 105 IR 75 AL	G 3" -11	105	90
FK KG 115 IR 100 AL	G 4" -11	115	100
FK KG 133 IR 75 A AL	G 3" -11	133	110-A
FK KG 133 IR 100 A AL	G 4" -11	133	110-A
FK KG 133 IR 110 A AL	G 4.1/2" -11	133	110-A
FK KG 133 IR 125 A AL	G 5" -11	133	110-A
FK KG 148 IR 125 AL	G 5" -11	148	125
FK KG 160 IR 150 AL	G 6" -11	160	150
FK KG 188 IR 150 AL	G 6" -11	188	165
FK KG 188 IR 175 AL	G 7"	188	165
FK KG 220 IR 200 AL	G 8"	220	205
FK KG 278 IR 250 AL	G 10"	278	250

FK KG HR AL — Fixed coupling for fire brigade couplings

Connection 1: BSP external thread, cylindrical
Connection 2: Claw coupling
Sealing form 2: Moulded seal made of black nitrile
Product versions : FK KG HR MG, Fixed coupling for fire brigade couplings, Brass
Sealing form 1: flat sealing
Design: Fixed coupling with outer thread
Material: Aluminium

Identification	Connecting thread	Cog space mm	Nominal size Storz
FK KG 31 HR 20 D AL	G 3/4" -14	31	25-D
FK KG 31 HR 25 D AL	G 1" -11	31	25-D
FK KG 31 HR 32 D AL	G 1.1/4" -11	31	25-D
FK KG 44 HR 25 AL	G 1" -11	44	32
FK KG 44 HR 32 AL	G 1.1/4" -11	44	32
FK KG 52 HR 32 AL	G 1.1/4" -11	52	38
FK KG 52 HR 40 AL	G 1.1/2" -11	52	38
FK KG 52 HR 50 AL	G 2" -11	52	38
FK KG 66 HR 25 C AL	G 1" -11	66	52-C
FK KG 66 HR 32 C AL	G 1.1/4" -11	66	52-C
FK KG 66 HR 40 C AL	G 1.1/2" -11	66	52-C
FK KG 66 HR 50 C AL	G 2" -11	66	52-C

Identification	Connecting thread	Cog space mm	Nominal size Storz
FK KG 66 HR 65 C AL	G 2.1/2" -11	66	52-C
FK KG 81 HR 40 AL	G 1.1/2" -11	81	65
FK KG 81 HR 50 AL	G 2" -11	81	65
FK KG 81 HR 65 AL	G 2.1/2" -11	81	65
FK KG 81 HR 75 AL	G 3" -11	81	65
FK KG 89 HR 50 B AL	G 2" -11	89	75-B
FK KG 89 HR 65 B AL	G 2.1/2" -11	89	75-B
FK KG 89 HR 75 B AL	G 3" -11	89	75-B
FK KG 105 HR 75 AL	G 3" -11	105	90
FK KG 115 HR 100 AL	G 4" -11	115	100
FK KG 133 HR 100 A AL	G 4" -11	133	110-A
FK KG 160 HR 150 AL	G 6" -11	160	150

VB KG AL

Adapter for fire brigade coupling

Connection 1 + 2: Claw coupling
Design: Reducing adapter
Product versions : VB KG MG, Adapter for fire brigade coupling, Brass

Sealing form 1 + 2: Moulded seal made of black nitrile
Material: Aluminium

Identification	Cog space mm	Nominal size Storz
VB KG 66-31 CD AL	66/31	52-C / 25-D
VB KG 66-44 AL	66/44	52-C / 32
VB KG 66-52 AL	66/51	52-C / 38
VB KG 81-52 AL	81/51	65 / 38
VB KG 81-66 AL	81/66	65 / 52-C
VB KG 89-66 BC AL	89/66	75-B / 52-C
VB KG 89-81 AL	89/81	75-B / 65
VB KG 105-89 AL	105/89	90 / 75-B
VB KG 115-89 AL	115/89	100 / 75-B
VB KG 115-105 AL	115/105	100 / 90

Identification	Cog space mm	Nominal size Storz
VB KG 133-66 AC AL	133/66	110-A / 52-C
VB KG 133-89 AB AL	133/89	110-A / 75-B
VB KG 133-105 AL	133/105	110-A / 90
VB KG 133-115 AL	133/115	110-A / 100
VB KG 148-115 AL	148/115	125 / 100
VB KG 148-133 AL	148/133	125 / 110-A
VB KG 160-133 AL	160/133	150 / 110-A
VB KG 160-148 AL	160/148	150 / 148
VB KG 188-133 AL	188/133	165 / 110-A
VB KG 188-160 AL	188/160	165 / 150

Fluid service

OEL HLP — Mineral oil-based hydraulic oil

Application: as universal oil, e.g. hydraulic presses, injection moulding machines, construction machinery etc.
Standard: DIN 51524-2
Classification: HLP

Identification	Viscosity class	Packaging unit
OEL HLP 32	ISO VG 32	20 litres
OEL HLP 46	ISO VG 46	20 litres

Note: Do not mix different oils.

OEL HLPD — Hydraulic oil, red mineral oil-based

Application: as universal oil, e.g. hydraulic presses, injection moulding machines, construction machinery etc.
Additional feature: Especially suitable for systems with sensitive control valves.
Classification: HLPD

Identification	Viscosity class	Packaging unit
OEL R 20	ISO VG 46	20 litres

Note: Do not mix different oils.

OEL BIO — Vegetable oil-based hydraulic oil

Classification: HETG
Standard: DIN ISO 15380

Identification	Viscosity class	Packaging unit
OEL BIO	ISO VG 46	20 litres

Note: Do not mix different oils.

OEL PANOLIN — Hydraulic oil, synthetic (Panolin)

Application: e.g. mobile hydraulics
Standard: DIN ISO 15380
Classification: HEES

Identification	Viscosity class	Packaging unit
OEL PANOLIN	ISO VG 46	25 litres

Note: Do not mix different oils.

OEL SYNT — Synthetic ester-based hydraulic oil

Application: e.g. mobile hydraulics
Standard: DIN ISO 15380
Classification: HEES

Identification	Viscosity class	Packaging unit
OEL SYNT	ISO VG 46	20 litres

Note: Do not mix different oils.

OEL W — Mineral oil-based engine oil

Identification	Area	Packaging unit
OEL 10 W	Monograde oil	20 litres
OEL 10 W 40	Multigrade oil	20 litres

Note: Do not mix different oils.

OEL MATTE — Oil binding agent, (matt)

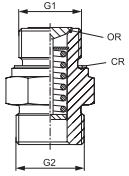
Identification	Dimension
OEL MATTE	43 x 33 cm

OEL BIND — Oil binding agent, (granular)

Identification	Weight kg
OEL BIND	15
No risk to persons, animals, plants and ground water.1 litre oil binder, coarse grain, 1 - 3 mm binds approx. 0.4 litres of oil.Insoluble in water and acids.	

Maintenance and accessories

BOE Oil drain screw with valve

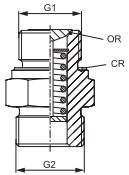


Connection 1: metric cylindrical outer thread
Connection 2: metric cylindrical outer thread
Included in scope of supply: with copper ring and cap
Temperature max.: 200 °C
Accessories: BOE ABLASS, Oil drain hose
BOE ABLASS 90, Oil drain hose

Sealing form 1: Shape A
Design: Drain valve
Temperature min.: -30 °C

Identification	G1	G2	Material
BOE 12-1.5	M 12 x 1.5	M 22 x 1.5	Steel
BOE 14-1.5	M 14 x 1.5	M 22 x 1.5	Steel
BOE 16-1.5	M 16 x 1.5	M 22 x 1.5	Steel
BOE 18-1.5	M 18 x 1.5	M 26 x 1.5	Steel
BOE 20-1.5	M 20 x 1.5	M 26 x 1.5	Steel
BOE 20-1.75	M 20 x 1.75	M 26 x 1.5	Steel
BOE 22-1.5	M 22 x 1.5	M 26 x 1.5	Steel
BOE 22-1.75	M 22 x 1.75	M 26 x 1.5	Steel
BOE 24-1.5	M 24 x 1.5	M 26 x 1.5	Brass
BOE 24-2	M 24 x 2	M 26 x 1.5	Brass
BOE 26-1.5	M 26 x 1.5	M 26 x 1.5	Brass
BOE 30-1.5	M 30 x 1.5	M 26 x 1.5	Brass
BOE 30-2	M 30 x 2	M 26 x 1.5	Brass
BOE 32-1.5	M 32 x 1.5	M 26 x 1.5	Brass
BOE 36-1.5	M 36 x 1.5	M 26 x 1.5	Brass
BOE 36-2	M 36 x 2	M 26 x 1.5	Brass
BOE 38-1.5	M 38 x 1.5	M 26 x 1.5	Brass
Material for seal washer in protective cap: NBR.Seal material on valve seat: FPM (Viton)			

BOE R — Oil drain screw with valve



Connection 1: BSP external thread, cylindrical
Connection 2: metric cylindrical outer thread
Included in scope of supply: with copper ring and cap
Temperature max.: 200 °C
Accessories: BOE ABLASS, Oil drain hose
BOE ABLASS 90, Oil drain hose

Sealing form 1: Shape A
Design: Drain valve
Temperature min.: -30 °C

Identification	G1	G2	Material
BOE R 1/4	G 1/4" -19	M 22 x 1.5	Steel
BOE R 3/8	G 3/8" -19	M 22 x 1.5	Steel
BOE R 1/2	G 1/2" -14	M 26 x 1.5	Steel
BOE R 5/8	G 5/8" -14	M 26 x 1.5	Steel
BOE R 3/4	G 3/4" -14	M 26 x 1.5	Steel / brass
BOE R 7/8	G 7/8" -14	M 26 x 1.5	Steel / brass
BOE R 1	G 1" -11	M 26 x 1.5	Brass
BOE R 1 1/4	G 1.1/4" -11	M 26 x 1.5	Brass
BOE R 1 1/2	G 1.1/2" -11	M 26 x 1.5	Brass
Material for seal washer in protective cap: NBR.Seal material on valve seat: FPM (Viton)			

BOE ABLASS — Oil drain hose

Design: Coupling with PVC hose
Accessories: BOE R, Oil drain screw with valve
BOE, Oil drain screw with valve

Construction: straight

Identification	Connecting thread	Length mm
BOE ABLASS 2	M 22 x 1.5	250
BOE ABLASS 3	M 26 x 1.5	250

BOE ABLASS 90 — Oil drain hose

Design: Coupling with PVC hose
Accessories: BOE, Oil drain screw with valve
BOE R, Oil drain screw with valve

Construction: Angle 90°

Identification	Connecting thread	Length mm
BOE ABLASS 2-90	M 22 x 1.5	250
BOE ABLASS 3-90	M 26 x 1.5	250

Tools

BV — Pipe bending equipment

Design: Pipe bending equipment

Identification	for external pipe Ø mm	Packaging
BV 06-18	06 - 18	in the box
BV 06-18 M	06 - 18	in the metal case
BV 20-25	20 - 25	in the box

BVA — Pipe bending and sawing equipment

Design: Pipe bending and sawing equipment

Included in scope of supply: 6 x bending rollers for tube outer Ø 6/8, 10/ 12, 14, 15, 16, 18 mm
1 x hand lever with extension
1 x pipe cutting equipment to pipe ext. diameters 6 - 42 mm

Identification	Bend for external pipe diameter min. mm	Bend for external pipe diameter max. mm	Saws for external pipe diameter
BVA 06-18-42	6	18	06 - 42

BAV — Pipe bending and sawing equipment

Design: Pipe bending and sawing equipment

Identification	Bend for external pipe diameter min. mm	Bend for external pipe diameter max. mm	Saws for external pipe diameter
BAV 06-12	6	12	06 -12

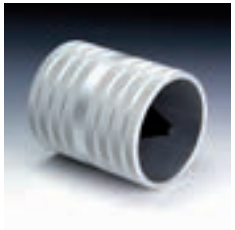
AV — Pipe cutting equipment

Design: Pipe cutting equipment

Material: Steel

Identification	for external pipe Ø mm
AV 06-42	6 - 42

ROHR ENTGRATER — Pipe deburrers



Design: Pipe deburrers
Construction: for internal and external deburring

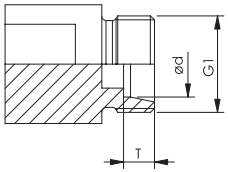
Supplementary design information: Universal pipe deburrer with diameter 12 – 54 mm

Identification	for external pipe Ø mm	for internal pipe Ø mm	Ø D mm	Length mm
ROHRENTGRATER	12 - 54	12 - 54	80	60

VOM — Pre-assembly sockets

Design: Pre-assembly sockets
Surface protection: phosphate treated

Material: Hardened tool steel



Identification	Series	Ø d mm	G1	T +/- 0.05 mm
VOM 04 LL	LL	4	M 8 x 1	4,0
VOM 06 LL	LL	6	M 10 x 1	5,5
VOM 08 LL	LL	8	M 12 x 1	5,5
VOM 10 LL	LL	10	M 14 x 1	7,0
VOM 12 LL	LL	12	M 16 x 1	7,0
VOM NW 04 HL	L	6	M 12 x 1.5	7,0
VOM NW 06 HL	L	8	M 14 x 1.5	7,0
VOM NW 08 HL	L	10	M 16 x 1.5	7,0
VOM NW 10 HL	L	12	M 18 x 1.5	7,0
VOM NW 13 HL	L	15	M 22 x 1.5	7,0
VOM NW 16 HL	L	18	M 26 x 1.5	7,5
VOM NW 20 HL	L	22	M 30 x 2	7,5
VOM NW 25 HL	L	28	M 36 x 2	7,5
VOM NW 32 HL	L	35	M 45 x 2	10,5
VOM NW 40 HL	L	42	M 52 x 2	11,0
VOM NW 03 HS	S	6	M 14 x 1.5	7,0

Series: LL = Very light L = Light S = Heavy

VOM (Continuation) Pre-assembly sockets

Identification	Series	Ø d mm	G1	T +/- 0.05 mm
VOM NW 04 HS	S	8	M 16 x 1.5	7,0
VOM NW 06 HS	S	10	M 18 x 1.5	7,5
VOM NW 08 HS	S	12	M 20 x 1.5	7,5
VOM NW 10 HS	S	14	M 22 x 1.5	8,0
VOM NW 13 HS	S	16	M 24 x 1.5	8,5
VOM NW 16 HS	S	20	M 30 x 2	10,5
VOM NW 20 HS	S	25	M 36 x 2	12,0
VOM NW 25 HS	S	30	M 42 x 2	13,5
VOM NW 32 HS	S	38	M 52 x 2	16,0

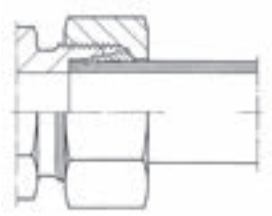
Series: LL = Very light L = Light S = Heavy

Information about fitting, installation, pressure loads and permissible operating temperatures can be found in the technical information for pipe fittings.

Technical information

TECHNICAL INFORMATION ON PIPE FITTINGS

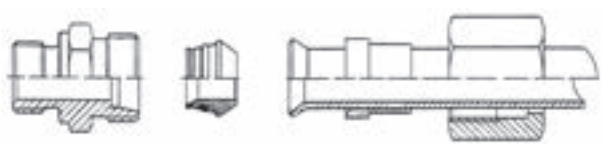
1. DESIGN AND FUNCTION OF CUTTING RING THREADED CONNECTORS



The cutting ring threaded connectors manufactured by HANSA-FLEX have been used successfully in practical applications for many years.
These important components in our line of hydraulic connecting equipment are standardised according to DIN EN ISO 8434-1 and DIN 2353, and their geometrical shape serves to seal hydraulic pipes and fittings easily, reliably and safely.

They can be fitted either into the screwed joint or into specially made devices. In either case the cutting ring and its edges are moved axially as the union nut is tightened.
As the cutting ring moves along a precisely defined assembly path, its cutting edges are forced into the surface of the hydraulic pipe.
A specially shaped limit ridge prevents overtightening, the pipe material that is raised in front of the edges is cold-hardened.
The outer surfaces of the cutting ring transfer the active forces evenly over the entire sealing cone of the fitting; the internal contour is shaped so that the cutting ring is wedged between the union nut and the screwed joint and serves as a spring-loaded element.
This spring effect damps vibrations and increases the resistance of the fitting to alternating bending loads and surge pressures.
When the assembly instructions are followed, repeat fittings can be carried out safely and reliably.
Cutting rings with elastomer seal work according to the same functional principle, but they are furnished with additional elastomer seals to increase operating reliability further still.

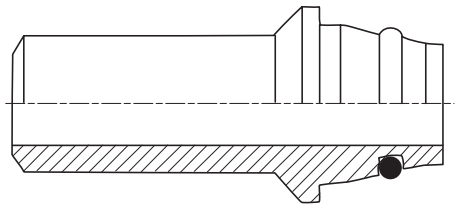
2. DESIGN AND FUNCTION OF FLARE FITTINGS



HANSA-FLEX flare fittings were originally developed for high pressure applications and are used widely in locations that are exposed to strong vibrations.

Of course, they can be fitted on the standard threaded connectors, the end of the pipe just has to be provided with a standardised 37° flare cone in preparation for fitting.
The entire fitting consists of the threaded connector, the spacer ring with O-ring seal, the pressure ring and the union nut.
Sealing is assured on the threaded side by the O-ring of the spacer ring, and on the pipe side sealing is normally provided by the metal surfaces of the flare cone and the spacer ring.

3. DESIGN AND FUNCTION OF THREADED WELD NIPPLES



HANSA-FLEX threaded weld nipples provide another option for connecting standardised hydraulic pipes and threaded connectors:
The sealing cone is fitted with an O-ring and is shaped so as to fit precisely inside the mating part of the threaded connector.
However, the O-ring must be removed before welding, and any stray welding material must be removed from the O-ring groove and the fitting hole.

4. GENERAL NOTES

All of the pipe fittings listed in our catalogue are manufactured in conformance with DIN 2353 or DIN EN ISO 8434-1 and are intended for applications in hydraulic connection equipment.
The HANSA-FLEX pipe fitting product line includes a large number of fitting types that surpass the requirements of this standard. In these special forms, e.g., pipe fittings with spring-back tolerances, the connector dimensions have been adapted to the pertinent standard, so that they can be replaced at any time.

All fittings are designed to withstand the operating pressures specified in the standards, in some cases the requirements of the standard are exceeded.
However, in order to function properly our fittings must have been assembled in strict compliance with the assembly instructions supplied by us.

5. MATERIALS

HANSA-FLEX cutting ring fittings are manufactured from cold-drawn or forged materials and conform to the technical conditions of delivery of pipe fittings according to DIN 3859-1 and the requirements of ISO 8434-1.

	Component	Identification	Material	Standard
Steel	Straight screw-in fittings	11SMnPb30+C crack-tested	1.0718+C	DIN EN 10277-3
	Connecting and reducing fittings			
	Bulkhead fittings			
	Screw-in sockets			
	Union nuts			
	Flange fittings			
	Hollow screws			
	Angle, T and L screw-in fittings	11SMnPb30+C	1.0718+C	DIN EN 10277-3
	Banjo fittings			
	Soldered sockets			
	Welded sockets	S355J2G3	1.0570	DIN EN 10250-2
	Cutting rings	According to selection of manufacturer		
Stainless steel	Bar stock	X2CrNiMo17-12-2	1.4404	EN 10088-2
		X 6 CrNiMoTi 17-12-2	1.4571	EN 10088-2
	Forged blank	X2CrNiMo17-12-2	1.4404	EN 10088-2
		X 6 CrNiMoTi 17-12-2	1.4571	EN 10088-2
Brass		CuZn35Ni2	2.0540	DIN 17660 DIN EN ISO 17672

6. SURFACE PROTECTION

The surfaces of steel fitting bodies, union nuts and cutting rings are protected from corrosion as standard with a CrVI-free coating conforming to DIN EN 15205.
The surfaces of HANSA-FLEX welded sockets are phosphated and oiled.

7. STANDARDISATION

Fittings

HANSA-FLEX pipe fittings are components for use in hydraulic connection equipment and are standardised in accordance with DIN 2353 and DIN EN ISO 8434-1. Their standard designations are often also used in ordering documentation. The following list shows a selection of the various designations:

HANSA-FLEX Identification	Designation according to standard
XVM NW...HL	Pipe fitting ISO 8434-1 – SDSC – L…xM... – B
XVM NW...HS	Pipe fitting ISO 8434-1 – SDSC – S…xM... – B
XVR NW...HL	Pipe fitting ISO 8434-1 – SDSC – L…xG... – B
XVR NW...HS	Pipe fitting ISO 8434-1 – SDSC – S…xG... – B
XVM NW...HL ED	Pipe fitting ISO 8434-1 – SDSC – L…xM... – E
XVM NW...HS ED	Pipe fitting ISO 8434-1 – SDSC – S…xM... – E
XVR NW...HL ED	Pipe fitting ISO 8434-1 – SDSC – L…xG... – E
XVR NW...HS ED	Pipe fitting ISO 8434-1 – SDSC – S…xG... – E
XV NW...HL	Pipe fitting ISO 8434-1 – SC – L…
XV NW...HS	Pipe fitting ISO 8434-1 – SC – S…
XWM NW...HL	Fitting DIN 2353 – HL...B – St
XWM NW...HS	Fitting DIN 2353 – HS...B – St
XWR NW...HL	Fitting DIN 2353 – JL...B – St
XWR NW...HS	Fitting DIN 2353 – JS...B – St
XW NW...HL	Pipe fitting ISO 8434-1 – EC – L…
XW NW...HS	Pipe fitting ISO 8434-1 – EC – S…
XTM NW...HL	Fitting DIN 2353 – OL...B – St

HANSA-FLEX Identification	Designation according to standard
XTM NW...HS	Fitting DIN 2353 – OS...B – St
XTR NW...HL	Fitting DIN 2353 – PL...B – St
XTR NW...HS	Fitting DIN 2353 – PS...B – St
XT NW...HL	Pipe fitting ISO 8434-1 – SDTC – L... – B
XT NW...HS	Pipe fitting ISO 8434-1 – SDTC – S… – B
XSA NW...HS	Pipe fitting ISO 8434-1 – WDSC – S… – B
XSA NW...HL	Pipe fitting ISO 8434-1 – WDSC – L... – B
XSV NW...HS	Pipe fitting ISO 8434-1 – BHC – S… – B
XSV NW...HL	Pipe fitting ISO 8434-1 – BHC – L... – B
XSW NW...HS	Pipe fitting ISO 8434-1 – BHEC – S… – B
XSW NW...HL	Pipe fitting ISO 8434-1 – BHEC – L... – B
XSE NW...HS	Pipe fitting ISO 8434-1 – WDBC – S… – B
XSE NW...HL	Pipe fitting ISO 8434-1 – WDBC – L... – B
UEM NW...L	Pipe fitting ISO 8434-1 – N – L... – B
UEM NW...S	Pipe fitting ISO 8434-1 – N – S... – B
SR D...	Pipe fitting ISO 8434-1 – CR – L... – B
SR D...	Pipe fitting ISO 8434-1 – CR – S... – B

Applicable standards for pipe fittings:

Technical conditions of delivery	DIN 3859-1
Assembly instructions	DIN 3859-2
Test specification	DIN 3859-3
DIN fittings (24°)	DIN 2353
	DIN EN ISO 8434-1
Flare fittings (37°)	DIN EN ISO 8434-2
ORFS fittings	DIN EN ISO 8434-3
Pipe connection side (connector)	DIN 3861
	DIN EN ISO 8434-1
Seamless precision steel pipes	EN 10305-4
Metric cyl. screw-in pins and holes:	DIN 3852-1, DIN 3852–11
	DIN EN ISO 6149-1
	DIN EN ISO 6149-3

Imperial cyl. screw-in pins and holes	DIN 3852-1, DIN 3852–11
	ISO 1179
Conical screw-in pins and holes with	ANSI/ASME B1.20.1-1983
NPT thread	
Cyl. screw-in pins and holes with UN and/or UNF thread	Conforming to ISO/DIS 11926-1/ SAE J514; with UN/UNF thread 2A/2B conforming to ANSI B1.1/ ISO725
Metric fine threads	DIN 13, T5-T7
Imperial threads	DIN EN ISO 228-1

8. OPERATING TEMPERATURES OF 24° CUTTING RING FITTINGS

Material	Pressure reductions for permissible operating temperatures [°C]				
Steel	-20 °C	+20 °C	+50 °C	+100 °C	+120 °C
	0 %				
Stainless steel	-60 °C	+20 °C	+50 °C	+100 °C	+200 °C
	0 %		4 %	11 %	20 %
NBR	-30 °C	+100 °C			
	0 %				
FPM	-15 °C	+200 °C			
	0 %				

Source: DIN 3859-1, DIN 3771-3

EXAMPLE:
Stainless steel fitting
Pressure: 400 bar
Temperature: 200 °C
→ Pressure reduction of 20 % → Pressure reduction of 80 bar (400 x 20 %)
→ Fitting pressure = 400 – 80 = 320 bar

9. OPERATING PRESSURES OF 24° CUTTING RING FITTINGS

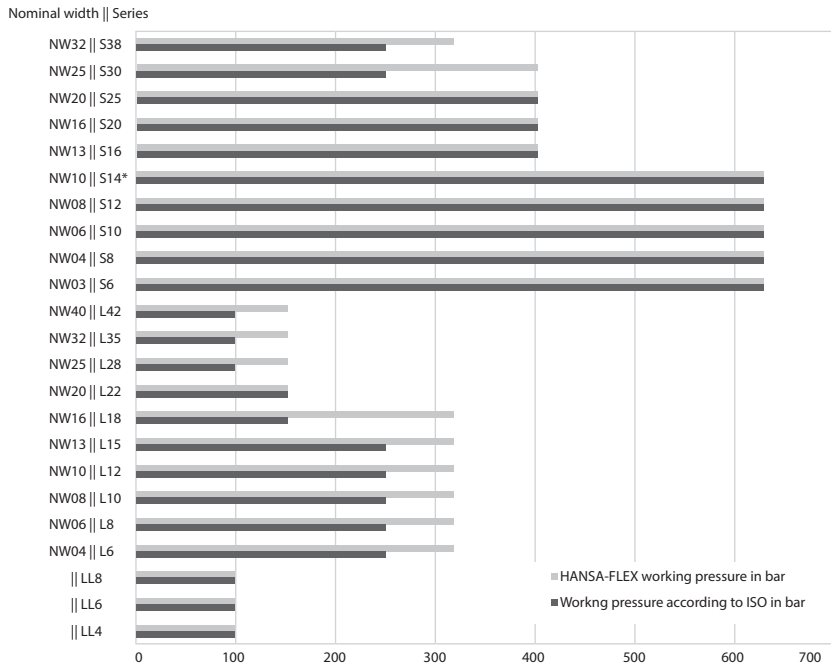
The HANSA-FLEX range of fittings is divided into three series according to pressure level and application:

LL: very light series
L : light series
S: heavy duty series

Information about fittings often includes the nominal pressure, designated PN. The nominal pressure, PN, is merely an index that serves as an identifier or designator for a part or system. The PN designation is used internationally.
With this indication of the PN nominal pressure, HANSA-FLEX cutting ring fittings offer a quadruple safety factor. Flare fittings conforming to ISO 8434-2 also have a safety factor of 4.
It should be noted that this safety factor is contingent on error-free assembly and correct routing of the pipeline system.
However, HANSA-FLEX cutting ring fittings are designed in such a way that the pressure values required according to DIN EN ISO 8434-1 are exceeded.
The pressure ranges indicated are based on the connector shape.
The various screw-in shapes should be noted, deviations may occur under certain circumstances.

Please direct enquiries to the Application Technology department.

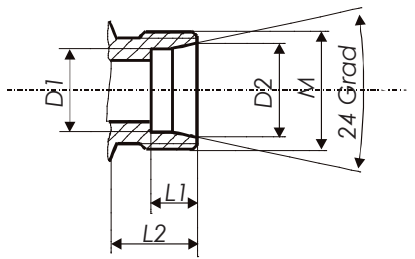
Max. operating pressures of 24° cutting ring fittings



*) is **no longer** standardised and is not approved by Germanischer Lloyd (LARGA)

10. PIPE-SIDE CONNECTION OF CUTTING RING FITTINGS

The pipe-side connection of HANSA-FLEX cutting ring fittings is standardised according to DIN 3861, hole shape W and DIN EN ISO 8434-1, and it is thus guaranteed that it can also be replaced with metric fittings for hydraulic hose lines:



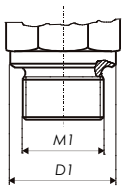
Series	External pipe diameter	Nominal pressure PN in bar	M	L1	L2	D1	D2
LL	4	100	M8x1	4	8	4	5
LL	5	100	M10x1	5.5	8	5	6.5
LL	6	100	M10x1	5.5	8	6	7.5
LL	8	100	M12x1	5.5	9	8	9.5
L	6	315	M12x1.5	7	10	6	8.1
L	8	315	M14x1.5	7	10	8	10.1
L	10	315	M16x1.5	7	11	10	12.3
L	12	315	M18x1.5	7	11	12	14.3
L	15	315	M22x1.5	7	12	15	17.3
L	18	315	M26x1.5	7.5	12	18	20.3
L	22	160	M30x2	7.5	14	22	24.3
L	28	160	M35x2	7.5	14	28	30.3

Series	External pipe diameter	Nominal pressure PN in bar	M	L1	L2	D1	D2
L	35	160	M45x2	10.5	16	35.3	38
L	42	160	M52x2	11	16	42.3	45
S	6	630	M14x1.5	7	12	6	8.1
S	8	630	M16x1.5	7	12	8	10.1
S	10	630	M18x1.5	7.5	12	10	12.3
S	12	630	M20x1.5	7.5	12	12	14.3
S*	14	630	M22x1.5	8	14	14	16.3
S	16	400	M24x1.5	8.5	14	16	18.3
S	20	400	M30x2	10.5	16	20	22.9
S	25	400	M36x2	12	18	25	27.9
S	30	400	M42x2	13.5	20	30	33
S	38	315	M52x2	16	22	38.3	41

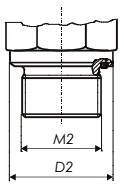
*) Size 14S is **no longer** standardised and is not approved by Germanischer Lloyd

11. SCREW-IN PINS AND HOLES FOR HANSA-FLEX CUTTING RING FITTINGS

HANSA-FLEX cutting ring fittings are available with a wide range of standardised screw-in threads, enabling them to be used for an enormous variety of applications.

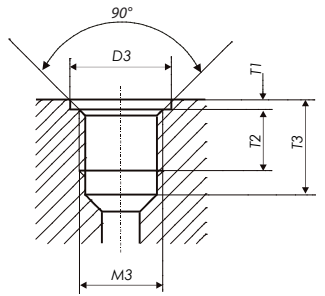


DIN 3852 Part 1 Form B and ISO 1179-4
Sealing by sealing edge



DIN 3852 Part 11 Form E and ISO 9974-2
Sealing by elastomer seal

a) **Metric** screw-in pins and holes according to DIN 3852 Part 1, Form B, and DIN 3852 Part 11 Form E with the associated screw-in hole form X

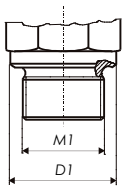


Screw-in hole according to ISO 9974-1 and DIN 3852 Part 1, Form X for screw-in pins Form A, B, and E

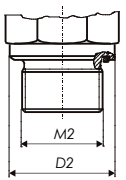
series	External pipe diameter	M1/M2	M3	D1	D2	T1	T2	T3
LL	4	M8x1	M8x1	12	-	1	8	13.5
LL	6	M10x1	M10x1	14	13.9	1	8	13.5
LL	8	M10x1	M10x1	14	13.9	1	8	13.5
L	6	M10x1	M10x1	14	13.9	1	8	13.5
L	8	M12x1.5	M12x1.5	17	16.9	1.5	12	18.5
L	10	M14x1.5	M14x1.5	19	18.9	1.5	14	18.5
L	12	M16x1.5	M16x1.5	21	21.9	1.5	12	18.5
L	15	M18x1.5	M18x1.5	23	23.9	2	12	18.5
L	18	M22x1.5	M22x1.5	27	26.9	2.5	14	20.5
L	22	M26x1.5	M26x1.5	31	31.9	2.5	16	22.5
L	28	M33x2	M33x2	39	39.9	2.5	18	26
L	35	M42x2	M42x2	49	49.9	2.5	20	28

series	External pipe diameter	M1/M2	M3	D1	D2	T1	T2	T3
L	42	M48x2	M48x2	55	54.9	2.5	22	30
S	6	M12x1.5	M12x1.5	17	16.9	1.5	12	18.5
S	8	M14x1.5	M14x1.5	19	18.9	1.5	12	18.5
S	10	M16x1.5	M16x1.5	21	21.9	1.5	12	18.5
S	12	M18x1.5	M18x1.5	23	23.9	2	12	18.5
S	14	M20x1.5	M20x1.5	25	25.9	2	14	20.5
S	16	M22x1.5	M22x1.5	27	26.9	2.5	14	20.5
S	20	M27x2	M27x2	32	31.9	2.5	16	24
S	25	M33x2	M33x2	39	39.9	2.5	18	26
S	30	M42x2	M42x2	49	49.9	2.5	20	28
S	38	M48x2	M48x2	55	54.9	2.5	22	30

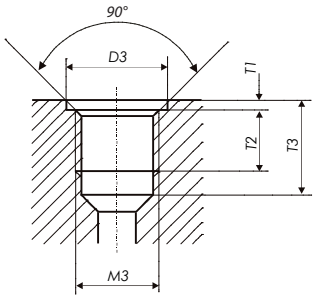
b) **Imperial** screw-in pins and holes according to DIN 3852 Part 2, Form B, and DIN 3852 Part 11 Form E with the associated screw-in hole form X



DIN 3852 Part 2 Form B and ISO 1179-4
Sealing by sealing edge



DIN 3852 Part 11 Form E and ISO 1179-1
Sealing by elastomer seal

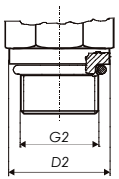


Screw-in hole according to ISO 9974-1 and DIN 3852 Part 2, Form X for screw-in pins Form A, B, and E

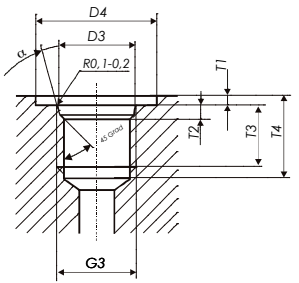
Series	External pipe diameter	G1/G2	G3	D1	D2	T1	T2	T3
LL	4	G 1/8"A	G 1/8"	14	13.9	1	8	13
LL	6	G 1/8"A	G 1/8"	14	13.9	1	8	13
LL	8	G 1/8"A	G 1/8"	14	13.9	1	8	13
L	6	G 1/8"A	G 1/8"	14	13.9	1	8	13
L	8	G 1/4"A	G 1/4"	18	18.9	1.5	12	18.5
L	10	G 1/4"A	G 1/4"	18	18.9	1.5	12	18.5
L	12	G 3/8"A	G 3/8"	22	21.9	2	12	18.5
L	15	G 1/2"A	G 1/2"	26	26.9	2.5	14	22
L	18	G 1/2"A	G 1/2"	26	26.9	2.5	14	22
L	22	G 3/4"A	G 3/4"	32	31.9	2.5	16	24
L	28	G 1"A	G 1"	39	39.9	2.5	18	27
L	35	G 1 1/4"A	G 1 1/4"	49	49.9	2.5	20	29

Series	External pipe diameter	G1/G2	G3	D1	D2	T1	T2	T3
L	42	G 1 1/2"A	G 1 1/2"	55	54.9	2.5	22	31
S	6	G 1/4"A	G 1/4"	18	18.9	1.5	12	18.5
S	8	G 1/4"A	G 1/4"	18	18.9	1.5	12	18.5
S	10	G 3/8"A	G 3/8"	22	21.9	2	12	18.5
S	12	G 3/8"A	G 3/8"	22	21.9	2	12	18.5
S	14	G 1/2"A	G 1/2"	26	26.9	2.5	14	22
S	16	G 1/2"A	G 1/2"	26	26.9	2.5	14	22
S	20	G 3/4"A	G 3/4"	32	31.9	2.5	16	24
S	25	G 1"A	G 1"	39	39.9	2.5	18	27
S	30	G 1 1/4"A	G 1 1/4"	49	49.9	2.5	20	29
S	38	G 1 1/2"A	G 1 1/2"	55	54.9	2.5	22	31

c) Screw-in pins and holes for pipe fittings with cylindrical US threaded connections conforming to ISO 11926-2/3



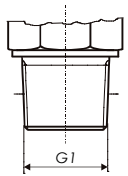
Screw-in pin with UN-UNF-2A thread and O-ring seal conforming to ISO 11926-2 and -3



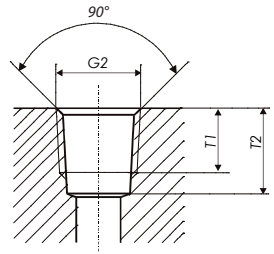
Screw-in hole with UN/UNF 2B thread for O-ring seal conforming to ISO 11926-1

Series	External pipe diameter	G1/G2	D2	D3	D4	T1	T2	T3	T4	α	O-ring
L	6, 8, 10	7/16"-20 UNF	16	12.4	21	1.6	2.4	11.5	14	12°	8.92 x 1.83
L	8	1/2"-20 UNF	17	14	23	1.6	2.4	11.5	14	12°	10.52 x 1.83
L	6, 10, 12	9/16"-18 UNF	17.6	15.6	25	1.6	2.5	12.7	15.5	12°	11.89 x 1.98
L	12, 15, 18	3/4"-16 UNF	22.3	20.6	30	2.4	2.5	14.3	17.5	15°	16.36 x 2.2
L	12, 18, 22	7/8"-14 UNF	25.5	23.9	34	2.4	2.5	16.7	20	15°	19.18 x 2.46
L	22, 28	1 1/16"-12 UN	31.9	29.2	41	2.4	3.3	19	23	15°	23.47 x 2.95
L	22, 28, 35	1 5/16"-12 UN	38.2	35.5	49	3.2	3.3	19	23	15°	29.74 x 2.95
L	35, 42	1 5/8"-12 UN	48	43.5	58	3.2	3.3	19	23	15°	37.47 x 3
L	42	1 7/8"-12 UN	55	49.8	65	3.2	3.3	19	23	15°	43.69 x 3
S	6, 8	7/16"-20 UNF	16	12.4	21	1.6	2.4	11.5	14	15°	8.92 x 1.83
S	6	1/2"-20 UNF	17	14	23	1.6	2.4	11.5	14	15°	10.52 x 1.83
S	10, 12	9/16"-18 UNF	17.6	15.6	25	1.6	2.5	12.7	15.5	15°	11.89 x 1.98
S	12, 14	3/4"-16 UNF	22.3	20.6	30	2.4	2.5	14.3	17.5	15°	16.36 x 2.2
S	16, 20	3/4"-16 UNF	22.3	20.6	30	2.4	2.5	14.3	17.5	15°	16.36 x 2.2
S	16, 20	7/8"-14 UNF	25.5	23.9	34	2.4	2.5	16.7	20	15°	19.18 x 2.46
S	20, 25	1 1/16"-12 UN	31.9	29.2	41	2.4	3.3	19	23	15°	23.47 x 2.95
S	25, 30	1 5/16"-12 UN	38.2	35.5	49	3.2	3.3	19	23	15°	29.74 x 2.95
S	30, 38	1 5/8"-12 UN	48	43.5	58	3.2	3.3	19	23	15°	37.47 x 3
S	38	1 7/8"-12 UN	55	49.8	65	3.2	3.3	19	23	15°	43.69 x 3

d) Screw-in pins and holes for pipe fittings with NPT thread conforming to ANSI/ASME B1.20.1-1983



Screw-in pin with NPT screw-in thread conforming to ANSI/ASME B1.20.1-1983



Screw-in hole for NPT thread conforming to ANSI/ASME B1.20.1-1983

Series	External pipe diameter	G1/G2	T1	T2
L	6	1/8"-27 NPT	6.9	11.6
L	8	1/4"-18 NPT	10	16.4
L	10	1/4"-18 NPT	10	16.4
L	12	3/8"-18 NPT	10.3	17.4
L	15	1/2"-14 NPT	13.6	22.6
L	18	1/2"-14 NPT	13.6	22.6
L	22	3/4"-14 NPT	14.1	23.1
L	28	1"-11.5 NPT	16.8	27.8
L	35	1 1/4"-11.5 NPT	17.3	28.3
L	42	1 1/2"-11.5 NPT	17.3	28.3

Series	External pipe diameter	G1/G2	T1	T2
S	6	1/4"-18 NPT	10	16.4
S	8	1/4"-18 NPT	10	16.4
S	10	3/8"-18 NPT	10.3	17.4
S	12	3/8"-18 NPT	10.3	17.4
S	14	1/2"-14 NPT	13.6	22.6
S	16	1/2"-14 NPT	13.6	22.6
S	20	3/4"-14 NPT	14.1	23.1
S	25	1"-11.5 NPT	16.8	27.8
S	30	1 1/4"-11.5 NPT	17.3	28.3
S	38	1 1/2"-11.5 NPT	17.3	28.3

12. TIGHTENING TORQUES FOR SCREW-IN PINS IN HANSA-FLEX CUTTING RING FITTINGS

The following list of tightening torques applies for steel fittings with screw-in pins Form B and E conforming to DIN 3852, for locking screws and banjo couplings, all with HANSA-FLEX CrVI-free surface and a mating part manufactured from the same material.

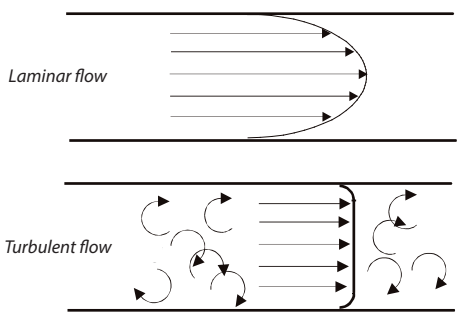
Tightening torques for stainless steel fittings and for fittings with UN/UNF threads available upon request.
In order to achieve an optimum seal, conical screw-in threads must be provided with an additional sealing means, e.g., Teflon tape.

Note: These are guidance values only! – Applies for steel			
Thread	Tightening torque [Nm]	Tightening torque [Nm]: Locking screws	Tightening torque [Nm]: Banjo fittings
G 1/8“	25	12	25
G 1/4“	40	18	40
G 3/8“	90	40	80
G 1/2“	120	75	120
G 3/4“	210	110	180
G 1“	370	190	300
G 1 1/4“	500	240	300
G 1 1/2“	600	300	600

Note: These are guidance values only! – Applies for steel			
Thread	Tightening torque [Nm]	Tightening torque [Nm]: Locking screws	Tightening torque [Nm]: Banjo fittings
M10x1	25	12	25
M12x1.5	30	18	30
M14x1.5	50	20	50
M16x1.5	70	35	60
M18x1.5	90	50	70
M20x1.5	120	60	110
M22x1.5	130	70	130
M26x1.5	180	85	140
M27x2	220	100	150
M33x2	330	150	280
M42x2	500	260	280
M48x2	650	350	500

13. DETERMINATION OF PRESSURE LOSS IN PIPELINES

The pressure losses that inevitably occur in pipeline systems can be recorded either by measuring equipment or by calculation.
Determination of these losses precisely by calculation is associated with considerable effort, but at this point we are reproducing a few simple equations that can be used to determine approximate pressure losses in straight pipelines and fittings.
The pressure losses and flow resistance in a line system are dependent on the internal diameter of the pipe, the flow velocity and the properties of the hydraulic oil (density and viscosity).
Pressure losses are caused by "fluid friction", i.e., the friction between the oil and the pipe walls, and the internal friction within the fluid.
Above a certain velocity, the laminar flow of the oil becomes a turbulent flow. Turbulent flows lead to greater heat generation in the system, with consequential losses of pressure and performance.



The behaviour of the flow is also characterised by the Reynolds number Re.
If this Re number exceeds a given value, the laminar oil flow becomes a turbulent flow.
In pipelines, laminar flow is most desirable. Turbulent flow occurs most often in valves, couplings and ball valves.

The pressure losses in straight pipelines can be determined approximately with the aid of the following equations:

$$\Delta p = \lambda \times \frac{l \times \rho \times V^2 \times 10}{d \times 2} \quad \text{in bar}$$

Δp = Pressure loss in a straight pipeline (laminar or turbulent flow) in bar
λ = Pipe friction index
ρ = Density of the hydraulic oil in kg/dm³, ρ = 0.89 kg/dm³ = 890 kg/m³
l = Line length in metres m
v = Flow velocity of the oil in the line in m/s
d = Internal diameter of the line in mm
ν = Kinematic viscosity in cSt or mm²/s
Q = Fluid stream in the line in l/min

Pipe friction number for laminar flow, Re'2320

$$\lambda_{lam.} = 64/\mathrm{Re}$$

Pipe friction number for turbulent flow, Re∃2320

$$\lambda_{turb.} = \frac{0.316}{\sqrt[4]{\mathrm{Re}}}$$

Reynolds number

$$\mathrm{Re} = \frac{V \times d}{\nu} \times 10^3$$

Flow velocity

$$V = \frac{Q}{6 \times d^2 \times \frac{\pi}{4}} \times 10^2$$

Example:
For a straight pipeline having l = 1 m and internal diameter d = 25 mm.
The flow volume Q is 150 l/min and the flow velocity of the oil is 5 m/s.
A standard hydraulic oil HLP 46 is used, having a kinematic viscosity of
$\nu = 46\ mm^2/s = 46\ cSt$ and a density of 0.89 kg/dm³
Calculate the pressure loss occurring over the total length of 1 m.

Solution:
1. Determination of Reynolds number Re:

$$Re = \frac{V \times d}{\nu} \times 10^3 = \frac{5\ m/s \times 25\ mm}{46\ mm^2/s} \times 10^3 = 2713$$

In this case, the Reynolds number is greater than 2320, so turbulent flow conditions exist.

2. Determination of the pipe friction number for turbulent flow

$$\lambda_{turb.} = \frac{0.316}{\sqrt[4]{Re}} = \frac{0.316}{\sqrt[4]{2713}} = 0.0437$$

3. Calculation of pressure loss over the total length

$$\Delta p = \lambda \times \frac{l \times \rho \times V^2 \times 10}{d \times 2} = 0.0437\ \frac{1\ m \times 0.89\ kg/dm^3 \times \left(5\ m/s\right)^2 \times 10}{2 \times 25\ mm} = 0.194\ bar$$

However, it should be noted that these equations are only valid for straight pipeline sections. But a pipeline system consists of straight and angled sections, also fittings and other products from the inventory of hydraulic connection technology.
Therefore, the pressure losses in the individual elements must be determined separately, either by calculation or measurement, and finally added together to yield the total loss.
For the purpose of determining approximate pressure losses in individual components a drag coefficient ξ is assumed

The pressure loss in a component can be determined according to the following equation:

$$\Delta p = \xi \times \rho \times \frac{1}{2} V^2$$

Δp = Pressure loss in the component in bar
ξ = Drag coefficient (no unit)
ρ = Density of the hydraulic oil in kg/dm³, ρ = 0.89 kg/dm³ = 890 kg/m³
v = Flow velocity of the oil in the line in m/s
It should be noted that the pressure losses can be affected by many other factors occurring in the components represented, and these calculations only allow of an approximate determination. Therefore, in important situations, tests should be carried out on a test bench.

ASSEMBLY INSTRUCTIONS FOR CUTTING RING / COMPRESSION FITTING

Hydraulic lines are capable of causing serious personal injury and environmental damage, but this danger is very often underestimated in practice. Incorrect assembly or improper use of threaded connectors, pipes, and accessories can compromise the product's functional reliability, causing it to fail and possibly pose a threat to people and equipment. In extreme cases, violently spraying oil and ruptured lines can even cause fatal injuries.
We therefore recommend most strongly that these assembly instructions be strictly followed!

Machinery manufacturers and operators must also fulfil additional obligations. They are responsible for:

- ensuring that pipelines and threaded connections are used in compliance with the respective specifications
- guaranteeing scheduled monitoring and systematic inspections by authorised personnel with the appropriate qualification and knowledge of hose line equipment
- detecting and eliminating defects

This active assumption of responsibility is enshrined in the legal framework. Based on the principles of industrial safety, the equipment and product safety act, the machine and pressure device directive and the ordinance on industrial safety and health, tasks are specified further and set out in procedural regulations for those concerned.
This guide supplements the pertinent standards, guidelines and regulations. It reflects the current state of the art. No claims are made regarding completeness.

Note: All tools and materials must be checked before each assembly procedure to ensure that they are good condition.

CONTENT

For complete cutting ring assembly in an assembly stud, always use assembly studs that have a corresponding depth dimension T!

	T mm ± 0.05			T mm ± 0.05
VOM NW04 HL	7.00		VOM NW03 HS	7.00
VOM NW06 HL	7.00		VOM NW04 HS	7.00
VOM NW08 HL	7.00		VOM NW06 HS	7.50
VOM NW10 HL	7.00		VOM NW08 HS	7.50
VOM NW13 HL	7.00		VOM NW10 HS	8.00
VOM NW16 HL	7.50		VOM NW13 HS	8.50
VOM NW20 HL	7.50		VOM NW16 HS	10.50
VOM NW25 HL	7.50		VOM NW20 HS	12.00
VOM NW32 HL	10.50		VOM NW25 HS	13.50
VOM NW40 HL	11.00		VOM NW32 HS	16.00
The tolerances for the LL series are the same as the tolerances for the L series				

! Pipes must be cut to size at right angles ±0.5° before all pipe fitting operations. Pipe cutters or angle grinders may not be used for this.
! Lightly deburr the insides and outsides of pipes.
! After deburring, clean the pipes.
! Use support bushes for thin-walled pipes.
! Markings (position of the nut) make it easier to determine the number of turns for path-dependent assembly.
! If necessary, use appropriate spanner extensions.

1. FULL CUTTING RING ASSEMBLY IN HARDENED ASSEMBLY STUD (VOMNW…)

INTRODUCTION

- **This instruction describes the complete assembly of a cutting ring (SRD) on the pipe in an assembly stud (VOMNW…). This is not pre-assembly!**

PREPARATION

- Lightly lubricate the thread and cone of the assembly stud and the thread of the union nut.
- Slide the union nut and cutting ring onto the pipe, making sure that the cutting ring is in the correct position; the cutting edges of the cutting ring must face towards the end of the pipe, otherwise assembly will be incorrect.

CUTTING RING ASSEMBLY

- Tighten the union nut until the force required to turn it* increases noticeably; at the same time, push the pipe firmly against the limit stop in the assembly stud, otherwise the pipe will not be cut properly. The pipe must not be allowed to turn during assembly.

- Tighten union nut 1½ turns with a spanner.

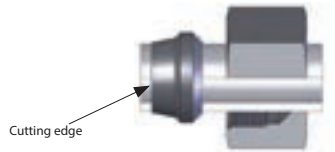
INSPECTION

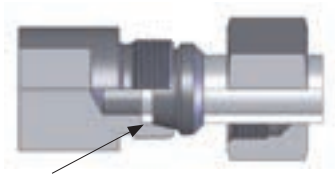
- Disassemble the pipe or threaded connection and check that a clearly visible shoulder of cut material is present in front of the first (front) cutting edge. At this point, the cutting ring may be allowed to rotate, but must not move axially.

RE-ASSEMBLY

- Oil the threads of the union nut and the screw sleeve. Thread the union nut onto the screw fitting until the force required to turn it* increases noticeably. Turn the union nut of the threaded connection or pipe about 30° to 60° further with the spanner (tighten / tighten fully).

  The cones of the assembly studs are subject to normal wear and must be checked at regular intervals with taper gauges.





* Definition of "noticeably increased force":
Tighten the union nut until the point at which it becomes noticeably more difficult to turn the union nut. At this point, for example, minor damage on the thread caused by the union nut getting caught must be overcome.
With sealing cone screw-on fittings with O-ring (AOL / AOS), the pre-stressing of the O-ring must be bridged and the sealing cone must lie metallically flush against the cone of the HL/HS connector.

2. FULL CUTTING RING ASSEMBLY IN SCREW SLEEVE

INTRODUCTION

- **This instruction describes the complete assembly of a cutting ring (SRD) on the pipe in a screw sleeve. This is not pre-assembly!**

PREPARATION

- Lightly oil the cone of the screw sleeve and the thread of the union nut.
- Slide the union nut and cutting ring onto the pipe, making sure that the cutting ring is in the correct position; the cutting edges of the cutting ring must face towards the end of the pipe, otherwise assembly will be incorrect.

CUTTING RING ASSEMBLY

- Tighten the union nut until the force required to turn it* increases noticeably; at the same time, push the pipe firmly against the limit stop in the assembly stud, otherwise the pipe will not be cut properly. The pipe must not be allowed to turn during assembly.
- Tighten union nut 1½ turns with a spanner. Brace the screw sleeve with a spanner.

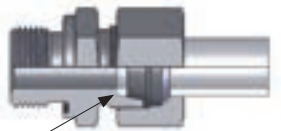
INSPECTION

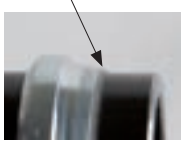
- Disassemble the pipe and check that a clearly visible shoulder of cut material is present in front of the first (front) cutting edge. At this point, the cutting ring may be allowed to rotate, but must not move axially.

RE-ASSEMBLY

- Oil the thread of the union nut, the cutting ring and the screw sleeve thread. Thread the union nut onto the screw fitting until the force required to turn it* increases noticeably. Turn the union nut of the threaded connection or pipe about 30° to 60° further with the spanner (tighten / tighten fully).

Each screw sleeve must be used only once to assemble a cutting ring on the pipe; using the same sleeve again may impair its function. For pipes with a diameter greater than 30 mm we recommend assembling in a bench vice.





* Definition of "noticeably increased force":
Tighten the union nut until the point at which it becomes noticeably more difficult to turn the union nut. At this point, for example, minor damage on the thread caused by the union nut getting caught must be overcome.
With sealing cone screw-on fittings with O-ring (AOL / AOS), the pre-stressing of the O-ring must be bridged and the sealing cone must lie metallically flush against the cone of the HL/HS connector.

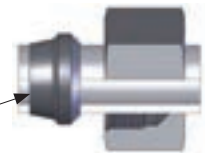
3. PRE-ASSEMBLY IN ASSEMBLY STUD OR SCREW SLEEVE

INTRODUCTION

- **This instruction describes the pre-assembly of a cutting ring (SRD) on the pipe in a pipe screw sleeve or assembly stud.**

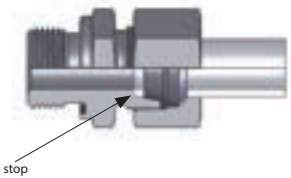
PREPARATION

- Lightly oil the cone of the screw sleeve and the thread of the union nut.
- Slide the union nut and cutting ring onto the pipe, making sure that the cutting ring is in the correct position; the cutting edges of the cutting ring must face towards the end of the pipe, otherwise assembly will be incorrect.



CUTTING RING ASSEMBLY

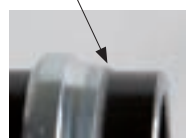
- Tighten the union nut until the force required to turn it* increases noticeably; at the same time, push the pipe firmly against the limit stop in the screw sleeve, otherwise the pipe will not be cut properly. The pipe must not be allowed to turn during assembly.



- Tighten union nut 1/4 turn with a spanner. Brace the screw sleeve with a spanner.

INSPECTION

- Disassemble the pipe and check that a clearly visible shoulder of cut material is present in front of the first (front) cutting edge. In this case, the cutting ring may be allowed to rotate, but must not move axially.



* Definition of "noticeably increased force":
Tighten the union nut until the point at which it becomes noticeably more difficult to turn the union nut. At this point, for example, minor damage on the thread caused by the union nut getting caught must be overcome.
With sealing cone screw-on fittings with O-ring (AOL / AOS), the pre-stressing of the O-ring must be bridged and the sealing cone must lie metallically flush against the cone of the HL/HS connector.

4. FINISHING ASSEMBLY OF MANUFACTURER-ASSEMBLED THREADED CONNECTORS IN SCREW SLEEVE

- In these threaded connections, the cutting ring has been pre-assembled by the manufacturer.
- Check that the cutting ring is positioned and seated correctly, and that the shoulder of cut material is present.
- Oil the thread of the union nut, the cutting ring and the screw sleeve thread.
- Tighten the union nut until the force required to turn it increases noticeably*.
- Tighten union nut 1/4 turns, bracing the screw sleeve with a spanner.

We recommend switching to HANSA-FLEX 24° sealing cone screw-on fittings.

5. ASSEMBLING 24° SEALING CONE SCREW-ON FITTINGS (AOL/AOS)

- Lightly oil the cone of the screw sleeve and the thread of the union nut.
- Place screw fitting (sealing cone) evenly on the theaded connection.
- Thread the union nut of the sealing cone screw-on fitting onto the screw fitting until the force required to turn it* increases noticeably.
- Turn the union nut of the sealing cone screw-on fitting or pipe about 30° to 60° but not more than 1/4 turn further with the spanner (tighten / tighten fully).

* Definition of "noticeably increased force":
Tighten the union nut until the point at which it becomes noticeably more difficult to turn the union nut. At this point, for example, minor damage on the thread caused by the union nut getting caught must be overcome.
With sealing cone screw-on fittings with O-ring (AOL / AOS), the pre-stressing of the O-ring must be bridged and the sealing cone must lie metallically flush against the cone of the HL/HS connector.

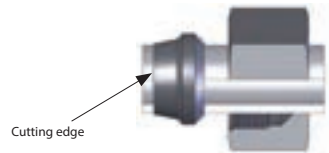
6. ASSEMBLY IN HARDENED ASSEMBLY STUD (VOMNW…)

INTRODUCTION

– **This instruction describes the pre-assembly of a cutting ring (SRD...VA) on the stainless steel pipe in the assembly stud and the finishing assembly of the cutting ring in the screw sleeve.**

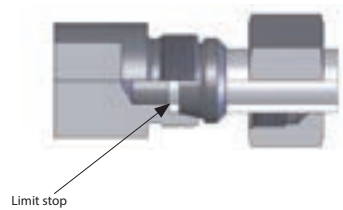
PREPARATION

– Grease the thread and cone of the assembly stud and the thread of the union nut with HANSA-FLEX fitting grease.
– Slide the union nut and cutting ring onto the pipe, making sure that the cutting ring is in the correct position; the cutting edges of the cutting ring must face towards the end of the pipe, otherwise assembly will be incorrect.



CUTTING RING ASSEMBLY

– Tighten the union nut until the force required to turn it* increases noticeably; at the same time, push the pipe firmly against the limit stop in the assembly stud, otherwise the pipe will not be cut properly.



– Tighten union nut 1/4 turn with a spanner.

INSPECTION

– Disassemble the pipe or threaded connection and check that a clearly visible shoulder of cut material is present in front of the first (front) cutting edge. In this case, the cutting ring may be allowed to rotate, but must not move axially.

FINISHING ASSEMBLY

– Grease the threads of the union nut and the screw sleeve with HANSA-FLEX assembly grease. Thread the union nut onto the screw fitting until the force required to turn it* increases noticeably. Continue turning union nut about 1/2 turn with the spanner.

RE-ASSEMBLY

– Grease the threads of the union nut and the screw sleeve with HANSA-FLEX assembly grease. Thread the union nut onto the screw fitting until the force required to turn it* increases noticeably. Turn the union nut of the threaded connection or pipe about 1/4 of a turn further with the spanner (tighten / tighten fully).

The cones of the assembly studs are subject to normal wear and must be checked at regular intervals with taper gauges. Each screw sleeve must be used only once for finishing assembly on the pipe; using the same sleeve again may impair its function.

It is not permitted to carry out pre-assembly in the screw sleeve!

Material shoulder

* Definition of "noticeably increased force":
Tighten the union nut until the point at which it becomes noticeably more difficult to turn the union nut. At this point, for example, minor damage on the thread caused by the union nut getting caught must be overcome.
With sealing cone screw-on fittings with O-ring (AOL / AOS), the pre-stressing of the O-ring must be bridged and the sealing cone must lie metallically flush against the cone of the HL/HS connector.

7. FINISHING ASSEMBLY OF MANUFACTURER-ASSEMBLED STAINLESS STEEL THREADED CONNECTORS IN SCREW SLEEVE

- In these threaded connections, the cutting ring has been pre-assembled by the manufacturer.
- Check that the cutting ring is positioned and seated correctly, and that the shoulder of cut material is present.
- Grease the thread of the union nut, the cutting ring and the thread of the screw sleeve with HANSA-FLEX assembly grease.
- Tighten the union nut until the force required to turn it increases noticeably*.
- Tighten union nut about 1/2 turn, bracing the screw sleeve with a spanner.

We recommend switching to HANSA-FLEX sealing cone screw-on fittings.

* Definition of "noticeably increased force":
Tighten the union nut until the point at which it becomes noticeably more difficult to turn the union nut. At this point, for example, minor damage on the thread caused by the union nut getting caught must be overcome.
With sealing cone screw-on fittings with O-ring (AOL / AOS), the pre-stressing of the O-ring must be bridged and the sealing cone must lie metallically flush against the cone of the HL/HS connector.

8. CORRECT SELECTION OF SUPPORT BUSHES FOR THIN-WALLED PIPES MADE FROM STEEL AND STAINLESS STEEL

HANSA-FLEX designation VSH..ID
VSH..IDVA

Wall thickness (mm)	4	5	6	8	10	12	14	15	16	18	20	22	25	28	30	35	38	42	Pipe diameter (mm)
3																			
2,5																			
2																			
1,5																			
1																			
0,75																			

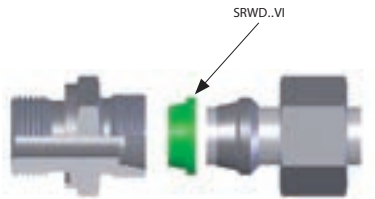
= Use support bushes

= Use support bushes for vibrations, oscillations and if the connection is loosened frequently (harsh operating conditions)

Support bushes must be inserted in the pipe before the cutting ring is assembled in all cases.
It is not permitted to assemble the support bushes later!

9. ASSEMBLING THE SRWD..VI SOFT SEAL

- **The SRWD..VI soft seal cannot be assembled unless the cutting ring has already been assembled correctly.**
- Disassemble the pipe and check that a clearly visible shoulder of cut material is present in front of the first (front) cutting edge.
- Slide the SRWD..VI soft seal over the cutting ring.
- Thread the union nut onto the screw fitting until the force required to turn it* increases noticeably.



a) **Fully assembled cutting ring:** Turn the union nut of the threaded connection or pipe about 30° to 60° further with the spanner (tighten / tighten fully).
b) **Pre-assembled cutting ring:** Turn the union nut of the threaded connection or pipe 1/4 turn further with the spanner on pre-assembled cutting rings.

- We recommend replacing the SRWD..VI soft seal whenever the connection is disassembled and re-assembled.

Any other tightening path on the cutting rings and pipe fittings reduces the pressure load capacity and service life of the connections and threaded connections.
As a result, the cutting ring will slip off and leaks will occur!

* Definition of "noticeably increased force":
Tighten the union nut until the point at which it becomes noticeably more difficult to turn the union nut. At this point, for example, minor damage on the thread caused by the union nut getting caught must be overcome.
With sealing cone screw-on fittings with O-ring (AOL / AOS), the pre-stressing of the O-ring must be bridged and the sealing cone must lie metallically flush against the cone of the HL/HS connector.

GENERAL TECHNICAL INFORMATION FOR INDUSTRY

1. SELECTION OF HOSE AND FITTINGS

- The permissible operating pressures and prescribed negative overpressures for the hose must not be exceeded, or must be maintained. The nominal pressures or calculated pressures of the fittings must be observed. For the hose line, the smallest value must be used in the design for pressure purposes.
- The permissible temperatures for hose and fitting materials must be observed. Prescribed pressure reductions depending on the operating temperature curve must be taken into account.
- The effects of permeability, compressibility and popcorning on the behaviour of the hose materials during operation must be considered (manufacturer's instructions). In this case, the permissible material temperatures and the properties of the fluids in conjunction with the hose materials are of critical importance. Startup and shutdown processes must be included in calculations.
  The effects are manifested in gas permeability, bubble formation on the outer layer, crater-like damage to the inner layer, delamination of areas of the outer layer, changes in the hardness, elasticity and volume of the hose materials.
- The abrasive behaviour of the fluid on the inner layer must be borne in mind (manufacturer's information on resistances of the internal layers of the hose).
- Impairment of the outer layer by mechanical and chemical effects must be borne in mind (e.g., effect of fatty acids on the outer layer in meat processing facilities).
- The fittings must be protected from corrosion by selecting the material and the protection type according to requirements. Most importantly, crevice corrosion, which cannot be checked, must be prevented completely.
- The electrical resistance of hose lines must be borne in mind and adjusted to the operator's requirements by testing.
  - M hose lines: Conductivity assured by metal conductors, $R < 10^2$ Ohm [Ω]
  - Ω hose lines (OMEGA hose lines): Conductivity assured by conductive or dissipative materials $R < 10^6$ Ohm [Ω]

  Electrical resistance must be checked regularly. The hose line must be dry and measurement must be carried out with the hose line fully extended on a non-conductive support.
  According to BGR 132, a hose line is
  - conductive if $R < 10^3$ [Ω/m],
  - dissipative if its resistance is between $R = 10^3$ [Ω/m] and $R = 10^6$ [Ω/m] and
  - insulating if resistance $R > 10^6$ [Ω/m]

- Material selection must be based on the "General Properties" or "Lists of Resistant Materials" supplied by component manufacturers or suppliers. Plant norms, approvals and the specifications of the customer must also be taken into account.

2. CORRECT ASSEMBLY

- Hose and fitting must be selected with due regard for the intended use, geometric and safety constraints on the basis of the manufacturer's and the customer's instructions.
- A choice must be made between detachable and non-detachable connections (safety principle).
- The hose line must be identified by a marking conforming to BGI 572; such identification must be made by the manufacturer or by the supplier and assembler.
- Hose fittings must not be assembled except by trained and properly instructed personnel. The manufacturer's assembly instructions or customer requirements are binding to the extent that they reflect the state of the art and have been tested.
- Conductivity and electrical resistance must be demonstrated to comply with the order specification.
- Pressure tests must be carried out in accordance with the order.
- The scope of documentation and condition upon shipment of the hose lines must be agreed.

3. CORRECT STORAGE

- Store clean and dry.
- Protect from direct sunshine or UV radiation.
- Avoid storing with kinks or under tension.
- Avoid temperatures above 30°C and below -20°C at all costs.

- In general, BGI 572 applies.
- If the products have been stored for longer than 3 years, a "Periodic Test" in accordance with the Ordinance on Industrial Health & Safety must be completed before they are used again.

4. CORRECT ROUTING

- Hose lines must be installed in such a manner that they can be accessed at all times, and that their natural position and movement is not restricted.
- Under no circumstances must hose lines be exposed to torsion, tension or compression loads.
- Hose lines must not be kinked, particularly not behind the fitting.
- The hose must not be bent beyond its smallest specified bending radius.
- Hose lines must be protected from external mechanical, thermal or chemical influences.
- If required, test the electrical resistance.
  The permissibility of unavoidable flattened areas in the bend must be tested when assembling permanently (manufacturer).
- It must be assured that the fitting seals are seated properly.
  If necessary, a hose protector must be provided (round or flat helical kink protection).
- Safe handling must be assured.
- It must not be possible to mix up parts when coupling.
- Any necessary pressurising and relief devices (components) must be provided.
- Ensure that any necessary empty hose operation after use is possible.
- Provide any necessary earthing means.

5. DESCRIBE MODE OF OPERATION IN AN OPERATING MANUAL, REGULAR, CORRESPONDING INSTRUCTION OF EMPLOYEES. PROVIDE AND USE SUITABLE PERSONAL PROTECTION GEAR.

- In order to be able to operate hose lines safely, all technical, organisational and personal protection measures must be implemented and followed. Technical and organisational measures always have priority. If such measures are not sufficient to ensure adequate protection from all hazards, effective personal protection equipment must be provided and used.

- In general, BGI 572 applies in such cases.
- Evidence of all tests must be retained.
- Ensure that the hose lines are used for their intended purpose in explosion-protected rooms, areas and systems on the basis of an explosion protection document.
- Ensure proper use of hose lines, particularly steam hose lines for wet and saturated steam.

6. REGULAR TESTING

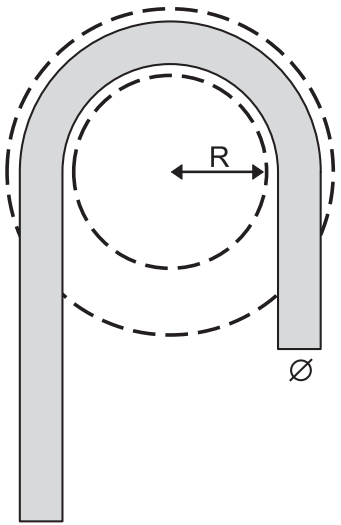
- Hose lines must be tested by a qualified expert before their first use and at regular intervals after first use (chemical hoses at least 1 x year / steam hoses at least 1 x semester).
  Essential elements of tests are:

  - Inspection of condition:
    Hose adequately cleaned.
    Crush points/kinks/deformations.
    Chemical embrittlement or mechanical damage to the hose cover and hose mantle.
    Hose fitting damaged or corroded.
    Seals damaged or missing.

  - Pressure and leak tests:
    Leaks, escaping media, pores, bulges, bubbles, deformations.
    Impermissible extension, torsion.
    Attachment or fitting not perfectly tight, leaking.

  - Test of electrical conductivity
    Measure electrical resistance on "OHM" and "M" hoses.
    Results of tests must be documented.

7. BENDING RADIUS



Bending radius: "R" is the radius of the smallest possiblle circle into which the hose can be bent without kinking.

Mandrel-ready hose
6 x inner diameter of the hose

Hose with coil (smooth outer surface)
8 x inner diameter up to 100 mm
10 x inner diameter up to 100 mm

Hose with coil (corrugated outer surface)
6 x inner diameter up to 100 mm
8 x inner diameter up to 100 mm

These values must be multiplied by 4/5 when the hose is pressurised. The bending radius is still dependent on the construction and composition of the hose.

8. INFORMATION ON VEHICLE AIR CONDITIONING LINES FOR VEHICLE AIR CONDITIONING SYSTEM

Air conditioning lines and air conditioner hoses are necessary for the air conditioning system, usually so that the R134a coolant and the coolant oil / compressor oil can be transported together through the air conditioning system and its various components under pressure (up to 35 bar). The main components of a vehicle air conditioning system are the compressor, the condenser, the drier, the expansion valve and fixed throttle, the evaporator and the air conditioning lines.

Other components and minor parts are also necessary to ensure that the vehicle air conditioning system is capable of functioning properly. These include various pressure switches, temperature sensors, temperature switches, control and adjustment units, cable sets, fan motors, servomotors, condenser fans, etc.

Air conditioning lines in passenger and commercial vehicles are exposed to extreme environmental conditions. Therefore, the air conditioning lines in a vehicle air conditioning system are among the first components to develop leaks. The environmental conditions acting on a passenger vehicle include the radiated heat from the engine/exhaust manifold, vibrations from the engine and chassis with mechanical loading, etc.

The various types of fault and damage include cracked or ruptured aluminium pipes, leaking coolant hose sealing mass, and corroded aluminium or steel pipes. Wear-through due to contact and friction (vibration) against other vehicle components in the engine compartment, and the other components of the air conditioning system are also not uncommon. Even simple plastic cable ties are capable of wearing right through the wall of an aluminium pipe over an extended period of time.
A leak in the air conditioning system allows the coolant and coolant oil in the system to escape and the vehicle air conditioning system loses pressure. As a consequence, the vehicle air conditioning sysem no longer provides the intended performance, the interior of the vehicle is not cooled adequately and the components of the air conditioning system are not sufficiently lubricated (particularly the compressor).
It is imperative to seal the ends of the hose line. If moisture or dirt gets into the air conditioning system, the components will be damaged.
If the air conditioning line is used inside (buses, cabs, etc.), the hose must be insulated to prevent condensed water from dripping.

Parts directory

Suggestions and criticisms

We are always glad to offer our customers additional advice. If you have questions, criticisms or suggestions, we would be very happy to hear from you.

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