Fittings and Accessories

For oil and grease. For Centralized Lubrication Systems and General Use

Fittings and Accessories

This brochure provides an overview of metallic pipe unions for fluid engineering.

This brochure is divided into the sections

- Accessories for tubes and hoses
- SKF Quick Connectors for pressures up to 300 bar and 350 bar
- Solderless pipe unions with cutting sleeve acc. to DIN EN ISO 8434-1 and DIN 2353, DIN EN ISO 9974-1/DIN 2353 and elastomer washer
- Tubes and hoses
- Accessories
- Reservoirs

Dimensions in mm.

CAD models for the products shown in this brochure can be downloaded at:
skf-lubrication.partcommunity.com

Contents

Accessories for tubes and hoses

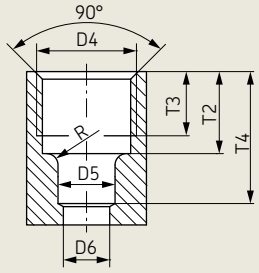
Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

Counterbores
DIN 3854/DIN 3862 – for solderless tube connection

Specification of counterbores	Tube ø	$D5^{B11}$	D6	D4	T3	T2	T4	R
1102 [1]	2,5	2,5	1,5	M6×0,75	4,5	5,5	8,5	1,3
1404	4	4	3	M8×1	6,5	8,5	12,5	1,6
1406	6	6	4,5	M10×1	7	9	14	1,6
1408	8	8	6,5	M14×1,5	9	11,5	18,5	1,6
1410	10	10	8,5	M16×1,5	9	11,5	19,5	1,6
1412	12	12	10,5	M18×1,5	9,5	12	22	1,6

1) not shown in DIN standard

Counterbore



Form counterbores
to tap ports for solderless tube connection

Form counterbore Order No.	Tube ø	for counter-bore	L1	D1	D2	twist drill D6	D3	T1	2
902-111	2,5	1102	60,5	10		1,5	5	4,5	5,5
904-411	4	1404	65	10		3	6,5	7,5	8,5
906-411	6	1406	66	12	10	4,5	8,5	8	9
908-411	8	1408	70	16		6,5	12	10,5	11,5
910-411	10	1410	72	18		8,5	14	10,5	11,5
912-411	12	1412	75	20		10,5	16	11	12

Provision of counterbore → Figure 1

Form counterbore

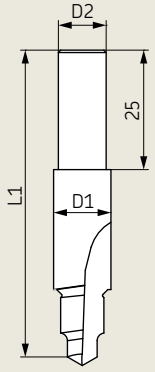
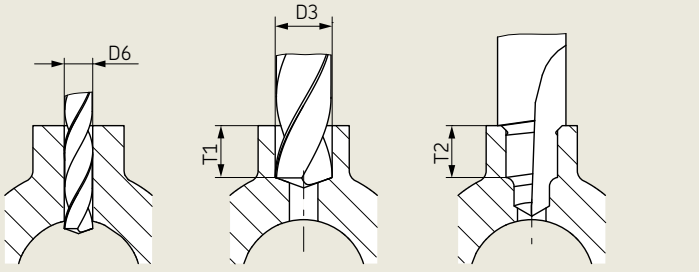


Figure 1

Provision of counterbore



predrill holes | bore hole to be tapped | counterbore with form counterbore up to the stop

Form counterbore enlarges bore hole diam. d4 to core hole for ISO thread..

Important note #3:
When using a hand drill, take care not to tilt the counterbore out of the drill axis. To avoid damages drill steadily without interruption. Increase pressure slightly at the stop.

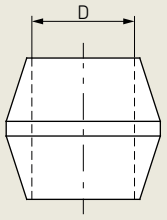
Accessories for tubes and hoses

Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

Double tapered sleeves – DIN 3862

Order No.	for tube ø D
Brass	
402-001 [1]	2,5
404-001	4
406-001	6
408-001	8
410-001	10
412-001	12
Stainless steel	
404-001-S3	4
406-001-S3	6
408-001-S3	8

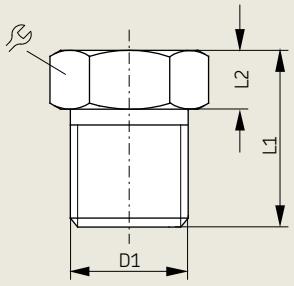
Double tapered sleeves



Socket unions – DIN 3871

Order No.	for tube ø	D1	L1	L2		Series
Steel, galvanized surface						
402-002 [1]	2,5	M6×0,75	9	3	7	
404-002	4	M8×1	12	4	8	LL
406-002	6	M10×1	13	4	10	
408-202	8	M14×1,5	16	4,5	14	
410-002	10	M16×1,5	17	5,5	17	L
412-002	12	M18×1,5	18	6	19	
Stainless steel						
404-002-S3	4	M8×1	12	4	8	
406-002-S3	6	M10×1	13	4	10	
408-002-S3	8	M14×1,5	16	4,5	14	

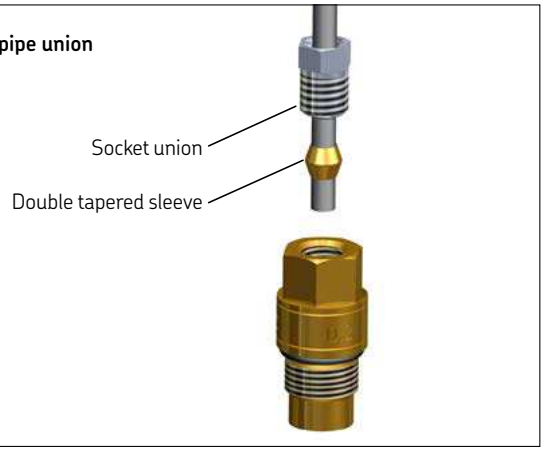
Socket unions



1) not shown in DIN standard

LL-series (extra light version), L-series (light version)

Solderless pipe union



Installation (steel and copper tubing)

1. Push socket union and double tapered sleeve onto tube end.
2. Insert tube end into tapped port up to the stop.
3. First tighten socket union finger-tight by hand. Then turn another 1 1/2 turns.

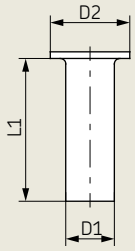
Accessories for tubes and hoses

Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

Reinforcing sockets (if plastic tubing is used)

Order No.	for tube	D1	D2	L1
Brass				
402-603	2.5×0.5	1.4	2.3	8
404-603	4×0.85	2.2	3.8	10
406-603	6×1	3.9	5.8	12
406-613	6×1.25	3.4	5.8	12
408-603	8×1.25	5.4	7.8	15
410-603	10×1.5	6.9	9.8	18
412-603	12×1.5	8.9	11.8	20

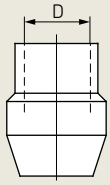
Reinforcing socket



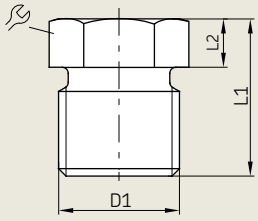
Tapered sleeves – DIN 3862

Order No.	for tube ø D
Brass	
402-611	2.5
404-611	4
406-611	6
408-611	8
410-611	10
412-611	12

Tapered sleeve



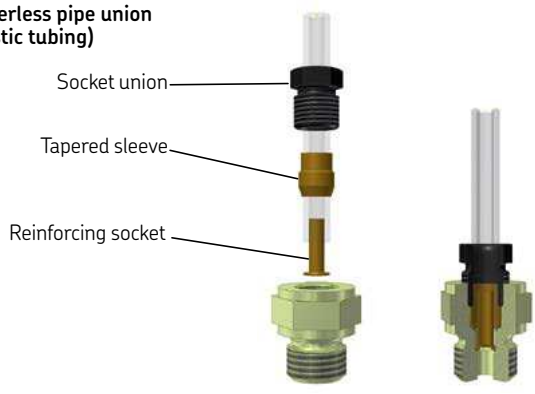
Socket union



Socket unions – DIN 3871

Order No.	for tube ø	D1	L1	L2	
Steel, galvanized surface					
402-612	2.5	M6×0.75	9	3	7
404-612	4	M8×1	12	4	8
406-612	6	M10×1	13	4	10
408-612	8	M14×1.5	16	4.5	14
410-612	10	M16×1.5	17	5.5	17
412-612	12	M18×1.5	18	6	19
Brass					
404-612-MS	4	M8×1	12	4	8
406-612-MS	6	M10×1	13	4	10
408-612-MS	8	M14×1.5	16	4.5	14
410-612-MS	10	M16×1.5	17	5.5	17

Solderless pipe union (plastic tubing)



Installation (plastic tubing)

1 Insert reinforcing socket into plastic tube.
2 Push socket union and tapered sleeve onto tube end.
3 Insert tube end into counterbored port up to the stop.
4 First tighten socket union finger-tight by hand. Then turn another 1 1/2 turns.

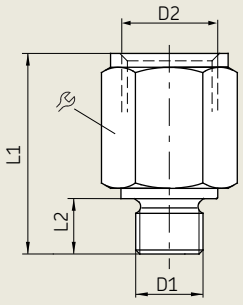
Accessories for tubes and hoses

Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

Adaptors with cylindrical thread to DIN 71428 (sealed by flat washer to DIN 7603)

Order No.	Tube ø	D1	D2	L1	L2	
Steel, galvanized surface						
402-004		M6		13	5.5	9
402-003	**2.5**	M6×0.75	M6×0.75	13	5.5	9
402-006		M8×1		15	7.5	11
404-004		M8×1		24	14	11
404-005		M8×1		32	22	11
404-061		M5		20	5.5	11
404-063		M8		22	8	11
404-003	4	M8×1	M8×1	18	7.5	11
404-006		M10×1		18	7.5	14
404-040		G 1/8 A		18	8	14
404-162		M12×1		18	9	17
404-164		M14×1.5		18	9	17
406-158		M8×1		23	7.5	14
406-004		M10×1		18	7.5	14
406-162		M12×1		19	9	17
406-054	6	G 1/4 A	M10×1	20	10	17
301-005		M14×1.5		18	9	17
406-166		M16×1.5		19	9	19
406-055		G 3/8 A		21	10	22
408-004		M10×1		28	7.5	17
408-154		G 1/8A		29	8	17
408-160		G 1/4 A		30	16	17
408-162		M12×1		29	9	17
301-020	8	G 1/4 A	M14×1.5	23	10	17
301-001		M14×1.5		26	9	17
408-005		M16×1.5		22	9	19
408-006		M18×1.5		22	10	22
408-022		M22×1.5		24	12	27
410-160		M10×1		30	7.5	19
410-162		M12×1		31	9	19
410-163		G 1/4 A		30	10	19
410-164		M14×1.5		29	9	19
410-169	10	G 1/4 A	M16×1.5	52	16	19
410-004		M16×1.5		23	9	19
410-018		M18×1.5		24	10	22
410-171		G 1/2 A		24	12	27
410-022		M22×1.5		24	12	27
412-162		M12×1		35	9	22
412-163		G 1/4A		35	10	22
412-164	12	M14×1.5	M18×1.5	33	9	22
412-169		G 1/4 A		41	16	22
412-004		M18×1.5		24	10	22
412-014		M22×1.5		26	12	27

Adaptor



Adaptors with cylindrical thread to DIN 71428 (sealed by flat washer to DIN 7603)

Order No.	Tube ø	D1	D2	L1	L2	
Brass						
301-134[1]	–	M10×1	G 1/4	23	7.5	17
301-034[1]	–	M14×1.5	G 1/4	22	9	17
267-001.17		G 1/8 A		24	8	14
406-163		M12×1		19	9	17
D301-005-MS	6	M14×1.5	M10×1	20	9	17
406-167		M16×1.5		19	9	19
267-001.19		M18×1.5		21	10	22
D408-004-MS		M10×1		29	7.5	17
D301-001-MS	8	M14×1.5	M14×1.5	28	9	17
D301-020-MS		G 1/4 A		30	10	17
267-001.13		G 1/8 A		24	12	27
Stainless steel						
301-005-S3	6	M14×1.5	M10×1	18	9	17
406-004-S3	6	M10×1	M10×1	18	7.5	14
406-158-S3	6	M8×1	M10×1	23	7.5	14
301-020-S3	8	G 1/4 A	M14×1.5	23	10	17

1) Pressure gauge screws: pressure gauge screw unions → page 34.

Accessories for tubes and hoses

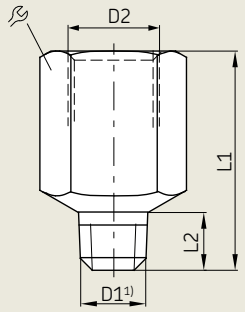
Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

Adaptors with tapered thread

Tapered threads are used without washers;
sealed by tapered outer thread and sealant according to DIN 3852-1.
It is not necessary to provide the ports with seal faces.

Order No.	Tube ø	D1 [1]	D2	L1	L2	
Steel, galvanized surface						
402-003K	2.5	M6×0.75 tap.	M6×0.75	11.5	4.5	8
402-006K		M8×1 tap.		15	8	9
402-008K		M10×1 tap.		16	7.5	12
404-662K	4	M6 tap.	M8×1	19	5	11
404-663K		M6 tap.		20	6	11
404-673K		M6×0.75 tap.		20	6	11
404-047K		M7 tap.		20	6	11
404-003K		M8×1 tap.		17	7.4	11
404-045		M8×1 tap.		62.5	7.4	11
404-006K		M10×1 tap.		16	7.4	11
401-004-512		M10×1 tap.		25	7.4	11
404-040K		R 1/8 tap.		16	6	11
404-040K-US		1/8 NPTF		20	6.7	11
404-054K		R 1/4 tap.		14	9	14
404-072		1/4-28 UNF		20	5.6	11
401-004-903		1/4 BSF		20	5	11
401-004-904		116 BSF		18	5	11
406-004K	6	M10×1 tap.	M10×1	23	7.4	14
456-004K		R 1/8 tap.		21	6	14
406-054K		R 1/4 tap.		20	9	17

Adaptor



1) Tapered thread according to DIN 158. short, resp. according to DIN 2999

Reducing adapters with cylindrical thread (sealed by flat washer to DIN 7603)

Order No.	D1	D2	L1	L2		Figure
Steel, galvanized surface						
843-130-021	M3					
843-130-022	M4	M5	22	10	3 [2]	2
843-130-023	M5					
406-044-S1	M10×1 tap.	G 1/4	22.5	8	17	
P-78.01	M12×1	G 1/4	27	8.5	19	
401-013-161	G 1/4 A	G 1/2	40	12	27	
401-016-371	M16×1.5	G 1/4	30	12	19	
243-001.10	M16×1.5	G 1/2	31	9	27	
267-001.36	M18×1.5	G 3/8	32	10	22	3
243-001.20	M18×1.5	G 1/2	32	10	27	
44-1755-2029	M20×1.5	G 1/4	28	12	24	
401-011-132	G 1/2 A	G 1	49	14	41	
433-890-131	G 1/2 A	G 1 1/4	53	14	55	
401-013-171	G 3/4 A	G 1/2	41	16	32	
401-013-111	G 1 A	G 1/2	29	18	41	
Brass, galvanized surface						
406-024	M10×1	G 1/8	20	8	14	3
Brass						
401-016-312	M10×1	G 1/4	26.5	7.5	17	3
401-019-352	M14×1,5	G 1/8	20	9	17	
267-001.47	G 3/8 A	G 1/4	31	10	22	3
267-001.60		G 1/2	34		27	
401-019-132	G 1/2 A	G 1/8	24	12	27	3
DZ333		G 1/4	24		27	
401-013-131		G 1/2	40,5		27	
DZ334		G 3/8	31		27	
267-001.03		G 3/4	40		36	

2) With female threade

Figure 2

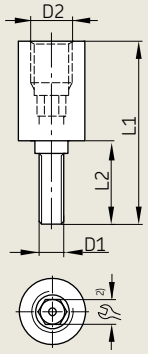
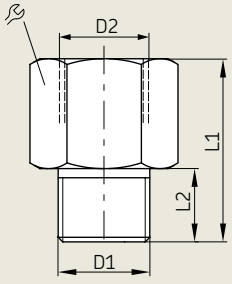


Figure 3



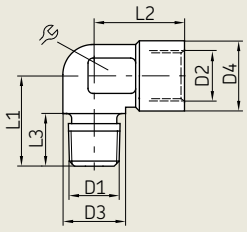
Accessories for tubes and hoses

Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

Elbows with tapered thread to DIN 71429 (→ Figure 4)

Order No.	Tube ø	D1 [1]	D2	D3	D4	L1	L2	L3	
Die-cast zinc									
504-510K	4	M10×1 tap.	M8×1	13	13	21	16	10	
514-018K	4	R 1/8 tap.	M8×1	13	13	21	16	10	
506-508K	6	M8×1 tap.	M10×1	12,5	14	18	18	10,5	14
506-510K	6	M10×1 tap.	M10×1	12,5	14	18	18	10,5	
506-512K	6	M12×1 tap.	M10×1	12,5	14	18	18	10,5	
508-512K	8	M12×1 tap.	M14×1,5	14	19,5	19,5	24	10	

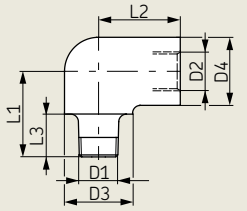
Figure 4



Elbows with tapered thread (→ Figure 5)

Order No.	Tube ø	D1 [1]	D2	D3	D4	L1	L2	L3
Steel								
502-206K	2.5	M6 tap.	M6×0.75	–	8	10	9.5	6
403-006-651	6	R 1/4 tap.	M10×1	14	14	17	17.5	8.5
Brass								
506-202K	6	M10×1 tap.	M10×1	17	17	22	21	11

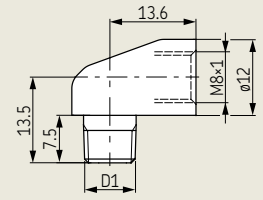
Figure 5



Elbows with tapered thread (→ Figure 6)

Order No.	Tube ø	D1 [1]
Brass		
504-200K		M6 tap.
504-201K		M8×1 tap.
504-202K	4	M10×1 tap.
504-203K		M6x0.75 tap.
514-018K-S1		R 1/8 tap.

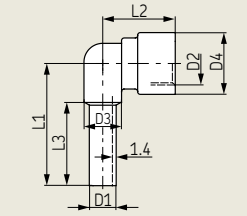
Figure 6



Elbows with tube end for pipe union (→ Figure 7)
(for installation in counterbores as per DIN 3854/DIN 3862)

Order No.	Tube ø	D1	D2	D3	D4	L1	L2	L3
Brass								
DY958	6	6	M10×1	8	14	30.8	21	22
DY960	8	8	M14×1.5	11	18	37	24.5	27
DY961	10	10	M16×1.5	15	23	42.5	26.5	29
DY962	12	12	M18×1.5	15	23	46	26.5	32

Figure 7

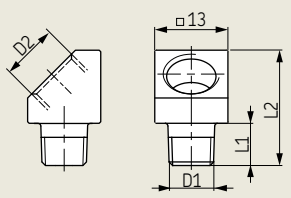


Elbows

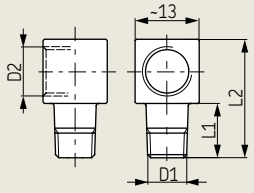
Order No.	D1	D2	L1	L2	Fig.
Steel, galvanized surface					
406-155K	R 1/8 tap.	M10×1	7.5	20.5	a
406-165K	R 1/8 tap.	G 1/8	7.5	20.5	a
406-145K	M8×1 tap.	M10×1	7.5	21	a
406-045K	M10×1 tap.	M10×1	7.5	21	a
406-094K	M8×1.25 tap.	M8×1.25	11	24	b
406-089K	M8×1 tap.	M10×1	11	24	b
406-090K	M10×1 tap.	M10×1	11	24	b
406-091K	R 1/8 tap.	G 1/8	11	24	b
406-092K	M10×1 tap.	M10×1	17	30	b
406-093K	R 1/8 tap.	M10×1	11	24	b

Elbow

a)



b)



1) Tapered thread according to DIN 158. short, resp. according to DIN 2999.

Accessories for tubes and hoses

Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

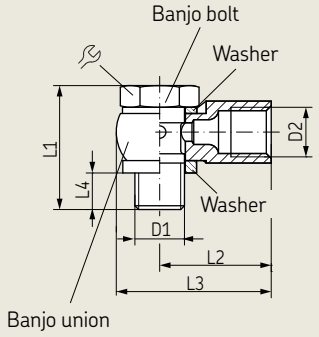
Banjo fittings to DIN 71430 Form A

Elbow

Order No.	Tube ø	D1	D2	L1	L2	L3	L4		Banjo bolt [2]	Banjo union [3]
502-161 [1]	2.5	M6	M6×0.75	20	13	19	4.5	9	**502-056**	**502-051**
502-101 [1]	2.5	M6×0.75	M6×0.75	18	13	19	5	9	**502-053**	**502-051**
502-102 [1]	2.5	M8×1	M6×0.75	20	14	21	6.5	11	**502-054**	**502-052**
504-161 [1]	4	M6	M8×1	20	17	24	4.1	9	**502-056**	**504-651**
504-162 [1]	4	M6×0.75	M8×1	18	17	24	4.5	9	**502-053**	**504-651**
504-411 [1]	4	M8	M8×1	23	18	25	7.5	11	**502-154**	**504-851**
504-401 [1]	4	M8×1	M8×1	20	18	25	7	11	**502-054**	**504-851**
504-101	4	M8×1	M8×1	26	18	25	6.5	11	**504-073**	**504-072**
504-102	4	M10×1	M8×1	26	19	27.5	6.5	14	**504-054**	**504-052**
504-108	4	G 1/8 A	M8×1	27	19	27.5	6.8	14	**504-027**	**504-052**
506-140	6	M10×1	M10×1	26	21	28.5	6.5	14	**504-054**	**506-033**
506-142	6	M12×1	M10×1	34	25	35.2	7.5	17	**558-012**	**506-030**
506-012	6	M14×1.5	M10×1	34	25	35.2	7.5	17	**508-006**	**506-005**
506-145	6	M16×1.5	M10×1	35	30	41	8.7	19	**510-017**	**506-034**
506-108	6	G 1/8 A	M10×1	27	21	28.5	7	14	**504-027**	**506-033**
506-214	6	G 1/4 A	M10×1	35	25	35.2	8.5	17	**508-023**	**506-005**
508-142	8	M12×1	M14×1.5	34	27	37	7.5	17	**558-012**	**508-030**
508-144	8	M14×1.5	M14×1.5	34	27	37	7.5	17	**508-006**	**508-007**
508-145	8	M16×1.5	M14×1.5	35	30	41	8.7	19	**510-017**	**508-054**
508-024	8	G 1/4 A	M14×1.5	35	27	37	8.5	17	**508-023**	**508-007**
510-142	10	M12×1	M16×1.5	34	30	40	7.5	17	**558-012**	**510-041**
510-145	10	M16×1.5	M16×1.5	35	30	41	10.7	19	**510-017**	**510-044**
510-024	10	G 1/4 A	M16×1.5	35	30	40	7.5	17	**508-023**	**510-023**

1) Miniature design, banjo union steel

Banjo fitting Form A

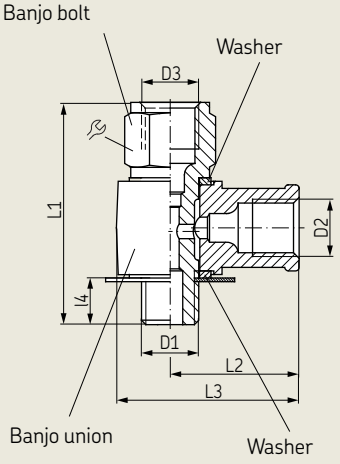


Banjo fittings to DIN 71430 Form B

L-Form

Order No.	Tube ø	D1	D2	D3	L1	L2	L3	L4		Banjo bolt [2]	Banjo union [3]
504-114	4	M8×1	M8×1	M8×1	31	18	25.5	6.5	11	**504-075**	**504-072**
504-115	4	M10×1	M8×1	M8×1	31	19	27.5	6.5	14	**504-056**	**504-052**
504-105	4 / 6	M10×1	M8×1	M10×1	33	19	27.5	6.5	14	**506-006**	**504-052**
405-619-061	4 / 6	G 1/8 A	M8×1	M10×1	33	19	27.5	6.3	14	**402-606-191**	**504-052**
506-114	6	M10×1	M10×1	M10×1	33	21	28.5	6.3	14	**506-006**	**506-033**
506-342	6	M12×1	M10×1	M10×1	38	25	35.2	7.5	17	**558-612**	**506-030**
506-101	6	M14×1.5	M10×1	M10×1	40	25	35.2	7.5	17	**508-303**	**506-005**
586-342	6 / 8	M12×1	M10×1	M14×1.5	44	25	35.2	7.5	17	**558-812**	**506-030**
506-013	6 / 8	M14×1.5	M10×1	M14×1.5	43	25	35.2	7.5	17	**508-008**	**506-005**
506-345	6 / 10	M12×1	M10×1	M16×1.5	48.5	25	35	7.7	19	**558-912**	**506-030**
506-346	6 / 10	M16×1.5	M10×1	M16×1.5	50	30	41	8.7	19	**510-010**	**506-034**
508-342	8	M12×1	M14×1.5	M14×1.5	44	27	37	7.5	17	**558-812**	**508-030**
508-012	8	M14×1.5	M14×1.5	M14×1.5	43	27	37	7.5	17	**508-008**	**508-007**
508-034	8	G 1/4 A	M14×1.5	M14×1.5	44	27	37	7.5	17	**508-033**	**508-007**
568-342	8 / 6	M12×1	M14×1.5	M10×1	38	27	37	7.5	17	**558-612**	**508-030**
508-304	8 / 6	M14×1.5	M14×1.5	M10×1	40	27	37	7.5	17	**508-303**	**508-007**
508-345	8 / 10	M12×1	M14×1.5	M16×1.5	48.5	27	37	7.7	19	**558-912**	**508-030**
508-346	8 / 10	M16×1.5	M14×1.5	M16×1.5	50	30	41	8.7	19	**510-010**	**508-054**
510-342	10	M12×1	M16×1.5	M16×1.5	48.5	30	40	7.5	19	**558-912**	**510-041**
510-344	10	M16×1.5	M16×1.5	M16×1.5	50	30	41	8.7	19	**510-010**	**510-044**
510-343	10	G 1/4 A	M16×1.5	M16×1.5	48.5	30	40	7.5	19	**558-913**	**510-023**
510-346	10 / 6	M16×1.5	M16×1.5	M10×1	50	30	41	8.7	19	**506-018**	**510-044**
510-341	10 / 8	M12×1	M16×1.5	M14×1.5	44	30	40	7.5	17	**558-812**	**510-041**

Banjo fitting Form B



2) Material banjo bolt: steel, galavanized surface
3) Material banjo union: die-cast zinc

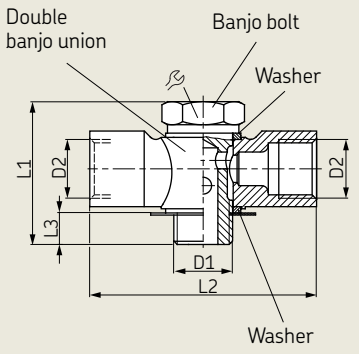
Accessories for tubes and hoses

Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

Banjo fittings to DIN 71430 Form C

Tee Order No.	Tube ø	D1	D2	L1	L2	L3		Banjo bolt [1]	Double banjo union [2]
504-109	4	M8×1	M8×1	26	38	6.5	11	**504-073**	**504-071**
504-112	4	M10×1	M8×1	26	38	6.5	14	**504-054**	**504-051**
506-242	6	M12×1	M10×1	34	48	7.5	17	**558-012**	**506-032**
506-025	6	M14×1.5	M10×1	34	48	7.5	17	**508-006**	**506-007**
508-242	8	M12×1	M14×1.5	34	54	7.5	17	**558-012**	**508-032**
508-013	8	M14×1.5	M14×1.5	34	54	7.5	17	**508-006**	**508-005**
508-025	8	G 1/4 A	M14×1.5	35	54	7.5	17	**508-023**	**508-005**
510-242	10	M12×1	M16×1.5	34	60	7.5	17	**558-012**	**510-042**

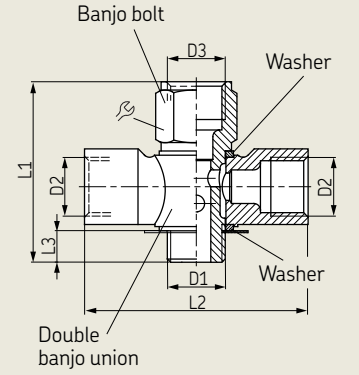
Banjo fitting Form C



Banjo fittings to DIN 71430 Form D

Cross Order No.	Tube ø	D1	D2	D3	L1	L2	L3		Banjo bolt [1]	Double banjo union [2]
504-110	4	M8×1	M8×1	M8×1	31	38	6.5	11	**504-071**	**504-071**
504-111	4	M10×1	M8×1	M8×1	31	38	6.5	14	**504-056**	**504-051**
504-106	4 / 6	M10×1	M8×1	M10×1	33	38	6.5	14	**506-006**	**504-051**
506-442	6	M12×1	M10×1	M10×1	38	48	7.5	17	**558-612**	**506-032**
506-014	6	M14×1.5	M10×1	M10×1	40	48	7.5	17	**508-303**	**506-007**
586-442	6 / 8	M12×1	M10×1	M14×1.5	44	48	7.5	17	**558-812**	**506-032**
506-026	6 / 8	M14×1.5	M10×1	M14×1.5	43	48	7.5	17	**508-008**	**506-007**
508-442	8	M12×1	M14×1.5	M14×1.5	44	54	7.5	17	**558-812**	**508-032**
508-014	8	M14×1.5	M14×1.5	M14×1.5	43	54	7.5	17	**508-008**	**508-005**
568-442	8 / 6	M12×1	M14×1.5	M10×1	38	54	7.5	17	**558-612**	**508-032**
508-305	8 / 6	M14×1.5	M14×1.5	M10×1	40	54	7.5	17	**508-303**	**508-005**
510-442	10	M12×1	M16×1.5	M16×1.5	48.5	60	7.5	19	**558-912**	**210-042**

Banjo fitting Form D

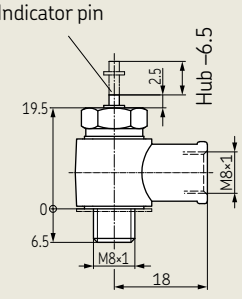


1) Material banjo bolt: steel, galavanized surface
2) Material banjo union: die-cast zinc

Banjo fitting with indicator pin for lubricant distributor

Order No.	Tube ø
169-200-008	4

Banjo fitting with indicator pin



Accessories for tubes and hoses

Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

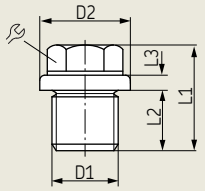
Screw plugs (sealed by flat washer to DIN 7603)

Order No.	D1	D2	L1	L2	L3		Fig.
Steel, galvanized surface							
DIN910-R1-8-5.8	G 1/8 A	14	17	8	3	11	
DIN910-R1-4×8-5.8	G 1/4 A	18	17	8	3	14	
DIN910-R3-8-5.8	G 3/8 A	22	21	12	3	17	
DIN910-R1-2-5.8	G 1/2 A	26	26	14	4	19	a
DIN910-R3-4-5.8	G 3/4 A	32	30	16	4	24	
DIN910-R1-5.8	G 1 A	39	32	16	5	27	
402-011	M6×0.75	–	9	5	–	10	
404-011	M8×1	–	9.5	5.5	–	11	
406-011	M10×1	–	12	7	–	12	
408-211	M12×1	–	12	7	–	17	b
408-011	M14×1.5	–	12	7	–	17	
410-011	M16×1.5	–	14	8	–	19	
412-011	M18×1.5	–	15	10	–	22	
DIN 908-M10×1-5.8	M10×1	14	11	8	3	5 [1]	
DIN 908-M12×1,5-5.8	M12×1.5	17	15	12	3	6 [1]	c
DIN 908-M14×1,5-5.8	M14×1.5	19	15	12	3	6 [1]	
DIN 908-G1-8A-5.8	G 1/8 A	14	11	8	3	5 [1]	
DIN 908-G1-4A-5.8	G 1/4 A	18	15	12	3	6 [1]	c
DIN 908-G3-8A-5.8	G 3/8 A	22	15	12	3	8 [1]	

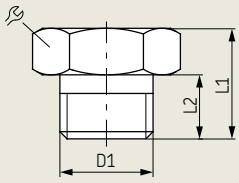
1) Hexagon socket

Screw plugs

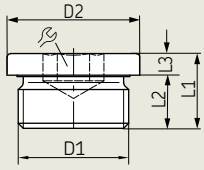
a)



b)



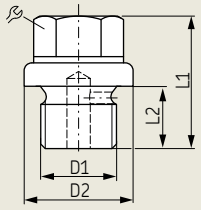
c)



Vent plugs (sealed by flat washer to DIN 7603)

Order No.	D1	D2	L1	L2	
Steel, galvanized surface					
833-020-022	M8×1	12	13.5	7.5	11
833-330-016	M 10×1	14	17	8	11
44-1855-6021	M12×1	17	13.5	7.5	17
833-330-021	G 1/8 A	14	17	8	11
833-340-034	G 1/4	18	17	8	14

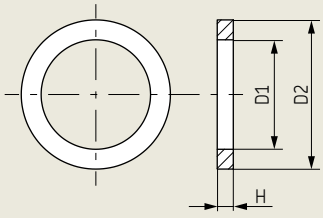
Vent plug



Flat washers

Order No.	D1	D2	H	Suitable for thread mm	inches
Aluminum					
504-019-AL	10.2	13.9	1.1	M10	G 1/8
Copper					
DIN7603-A6×10-CU	6.2	9.9	1	M6	–
DIN7603-A8×11.5-CU	8.2	11.4	1	M8	–
504-019	10.2	13.9	1.1	M10	G 1/8
508-215-CU	12.2	15.9	1.4	M12	–
508-320-CU	12.2	15.9	2	M12	–
DIN7603-A12×18-CU	12.2	14.9	1	M12	–
508-108	13.3	17.9	1.5	–	G 1/4
DIN7603-A14×18-CU	14.2	17.9	1.5	M14	–
DIN7603-A16×20-CU	16.2	19.9	1.5	M16	–
DIN7603-A17×21-CU	17.2	20.9	1.5	–	G 3/8
DIN7603-A18×22-CU	18.2	21.9	1.5	M18	–
DIN7603-A20×24-CU	20.2	23.9	1.5	M20	–
DIN7603-A21×26-CU	21.2	25.9	1.5	–	G 1/2
DIN7603-A22×27-CU	22.2	26.9	1.5	M22	–
DIN7603-A27×32-CU	27.3	31.9	2	M27	–
DIN7603-A30×36-CU	30.3	35.9	2	M30	–
DIN7603-A33×39-CU	33.3	38.9	2	M33	–

Flat washer



More screw plugs → page 39

Accessories for tubes and hoses

Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

Threaded sockets (→ Figure 8)

Order No.	D1	L1	
Steel			
404-203	M8×1	13	3.5
406-203	M10×1	15	3.5
406-243-B [1]	M10×1	18	3.5
408-243-B [1]	M12×1	19	5.5
458-012	M12×1	17	5.5
458-012-B [1]	M12×1	17	5.5
408-023	M14×1.5	18	5.5
410-003	M16×1.5	19	7
410-003-B [1]	M16×1.5	19	7
Stainless steel			
408-033-S3	G 1/4 A	15	5.5

1) Coated with microencapsulated adhesive

Figure 8

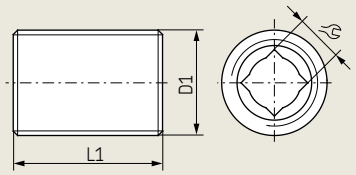
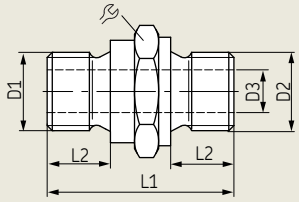


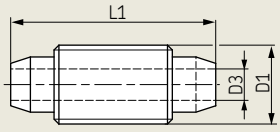
Figure 9



Threaded sockets

Order No.	D1	D2	D3	L1	L2		Figure
Steel, galvanized surface							
406-103	M10×1	M12×1	5	20	6	14	
408-103	M12×1	M14×1.5	6	21	7	17	9
853-750-024	G 1/4 A	G 1/4 A	7	31	10.5	19	
Brass							
406-233	M10×1	–	4	26	–	–	10

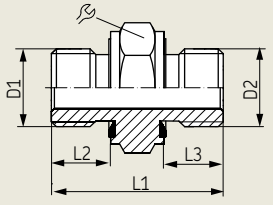
Figure 10



Threaded sockets with profile sealing according to DIN 3869 (→ Figure 11)

Order No.	D1	D2	L1	L2	L3		Seal
Steel, galvanized surface							
402-116-161	G 1/4 A	G 1/4 A	29	10	10	19	NBR
402-116-165	G 1/2	G 1/2	37	10	12	32	

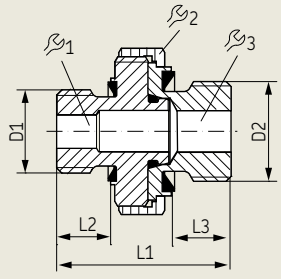
Figure 11



Threaded sockets with profile sealing according to DIN 3869 (→ Figure 12)
Leak-free connectors with soft seal. continuously adjustable

Order No.	D1	D2	L1	L2	L3	1	2	3	Seal
Steel, galvanized surface									
995-014-014	G 1/4	G 1/4	26	8	8	4	24	5	
Brass									
995-340-000	M10×1	M10×1	19.5	6.5	6.5	4	16	4	
995-340-350	M10×1	M12×1	21	6.5	7.2	4	19	5	NBR
995-350-000	M12×1	M12×1	21.5	7	7.2	5	19	5	
995-340-000-S8	M10×1	M10×1	19.5	6.5	6.5	4	16	4	
995-340-350-S8	M10×1	M12×1	21	6.5	7.2	4	19	5	FKM
995-350-000-S8	M12×1	M12×1	21.5	7	7.2	5	19	5	

Figure 12



Accessories for tubes and hoses

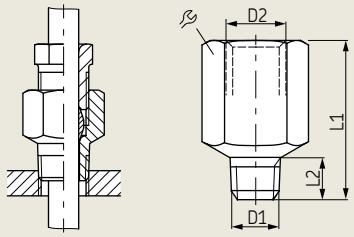
Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

Bulkhead connectors with tapered thread
(for tight tube feedthrough through a wall without tube discontinuity)

Order No.	Tube ø	D1[1)]	D2	L1	L2	
Steel, galvanized surface						
404-003DK	4	M8×1 tap.	M8×1	17	7.4	11
404-006DK	4	M10×1 tap.	M8×1	16	7.4	11
406-004DK	6	M10×1 tap.	M10×1	18	7.4	14
301-001DK	8	M14×1.5 tap.	M14×1.5	24	11	17
410-004DK	10	M16×1.5 tap.	M16×1.5	24	11	19

1) Tapered thread according to DIN 158. short

Bulkhead connector

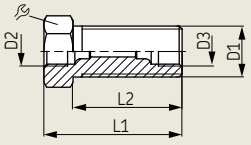


Straight bulkhead fittings according to DIN 71429 Form A

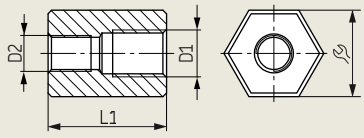
Order No.	Tube ø	D1	D2	D3	L1	lL2		Fig.
Steel, galvanized surface								
404-008	4	M14×1.5	M8×1	M8×1	27	19	17	
404-009	4	M14×1.5	M8×1	M8×1	38	30	17	
406-008	6	M14×1.5	M10×1	M10×1	30	20	17	
406-005	6 / 8	M16×1.5	M14×1.5	M10×1	35	23	19	a
408-008	8	M20×1.5	M14×1.5	M14×1.5	40	28	24	
410-008	10	M20×1.5	M16×1.5	M16×1.5	42	27	24	
412-008	12	M24×1.5	M18×1.5	M18×1.5	48	33	27	
44-1755-2019	4	G 1/4	M10×1	–	33		24	b

Straight bulkhead fitting

a)



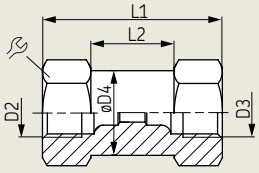
b)



Connectors

Order No.	Tube ø	D2	D3	ø D4	L1	L2	
Steel, galvanized surface							
404-010	4	M8×1	M8×1	10.8	27	13	11
406-010	6	M10×1	M10×1	13.8	30	10	14
406-805	6 / 8	M14×1.5	M10×1	16.8	35	11	17
408-010	8	M14×1.5	M14×1.5	16.8	40	14	17
410-010	10	M16×1.5	M16×1.5	18.8	42	13	19
412-010	12	M18×1.5	M18×1.5	21.8	48	18	22

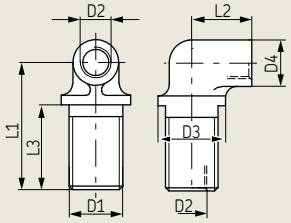
Connector



Elbow bulkhead fittings according to DIN 71429 Form B

Order No.	Tube ø	D1	D2	D3	D4	L1	L2	L3
Die-cast zinc								
504-003	4	M14×1.5	M8×1	18	12	33	16	22
Brass								
504-103	4	M14×1.5	M8×1	18	12	33	18	22
506-004	6		M10×1	16.5	14	27	17.5	15

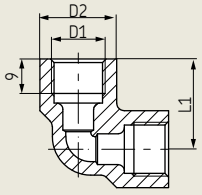
Elbow bulkhead fitting



Elbows to DIN 71433 Form C

Order No.	Tube ø	D1	D2	L1
Die-cast zinc				
408-013	8	M14×1.5	20	23.5
410-013	10	M16×1.5	21	26

Elbow



Accessories for tubes and hoses

Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

Bracketed connectors

Order No.	Tube ø	Fig.
Die-cast zinc		
504-004	4	a
Brass		
506-010	6	b

Bracketed connectors

Order No.	Tube ø	D1	B	H	L1	Fig.
Aluminum						
DAR506	6	M10×1	15	20	12	c
DAR508	8	M14×1.5	20	25	15	

Bracketed connectors

Order No.	Tube ø	D1	D2	Fig.
Steel, galvanized surface				
DAR510	10	M16×1.5	M16×1.5	d
DAR510-S1	8 / 10	M14×1.5		

Bracketed connectors

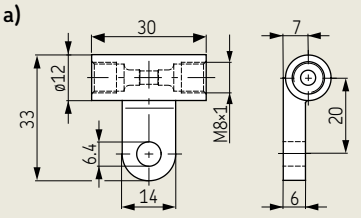
Order No.	Tube ø	Fig.
Steel, galvanized surface		
DAR524	4	e
DAR534	4	f

Tube-to-tube-connector with air vent

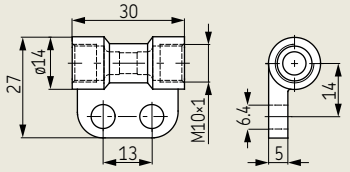
Order No.	Tube ø	D1	B	H	L1
Aluminum					
995-001-104	4	M8×1	20	50	40
995-001-106	6	M10×1			

Bracketed connectors

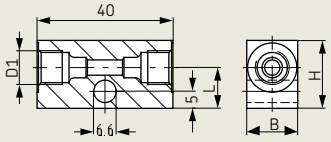
a)



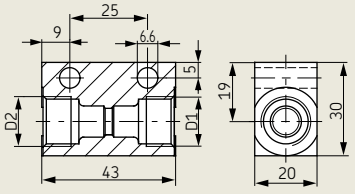
b)



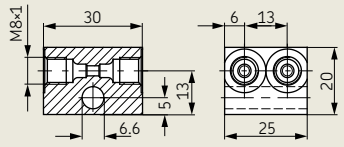
c)



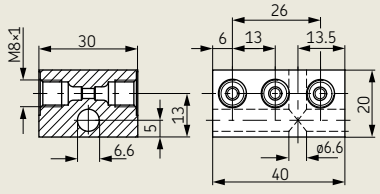
d)



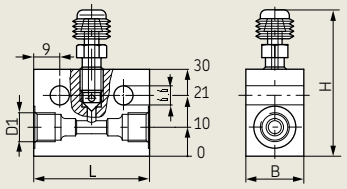
e)



f)



Tube-to-tube-connector with air vent



Accessories for tubes and hoses

Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

Tee connectors to DIN 71433

Order No.	Tube ø	D1	D2	D3	L1	L2	Fig.
Die-cast zinc							
Form A							
504-008	4	M8×1	M8×1	12	15	30.5	
506-008	6	M10×1	M10×1	14	18	36	a
510-102	10	M16×1.5	M16×1.5	20	25	50	
Form B							
506-408	6 / 4	M10×1	M8×1	14	18	36	

Tee connectors to DIN 71433

Order No.	Tube ø	D2	Fig.
Die-cast zinc			
Form B			
508-602-2	8 / 6	M10×1	
Form A			b
508-002-2	8	M14×1.5	

Tee connectors to DIN 71433 Form A

Order No.	Tube ø	Fig.
Die-cast zinc		
504-045	4	c
Brass		
DY964	6	d

Tee connectors to DIN 71433

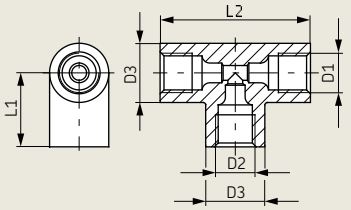
Order No.	Tube ø	D1	D2	D3	A	B	C	H	H1	L1	L2	Fig.
Aluminum												
Form A												
DAT506	6	M10×1	M10×1	6.6	22	20	9	30	9	40	20	
DAT508	8	M14×1.5	M14×1.5	6.6	32	20	9	40	9	50	29	e
DAT512	12	M18×1.5	M18×1.5	6.6	42	25	9	40	9	60	29	
Form B												
DAT510-S5	6	M16×1.5	M10×1	7	25	25	13.5	40	15	52	29	
Steel, galvanized surface												
Form A												
DAT510	10	M16×1.5	M16×1.5	7	25	20	13.5	40	15	52	29	e

Tee connectors to DIN 71433 Form B

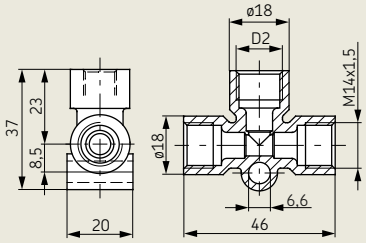
Order No.	Tube ø	Fig.
Steel, galvanized surface		
DAT510-S1	8 (1×) 10 (2×)	f

Tee connectors

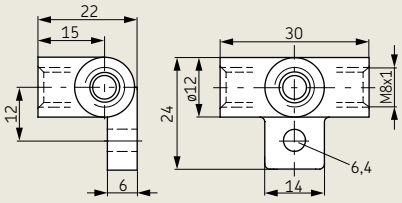
a)



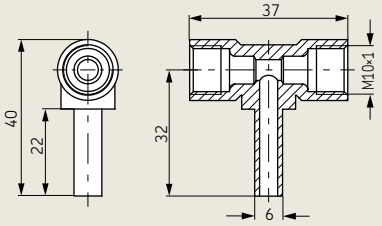
b)



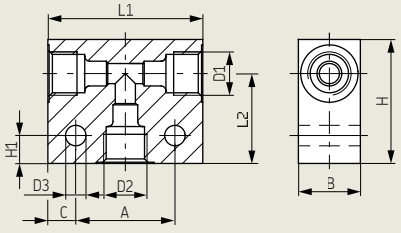
c)



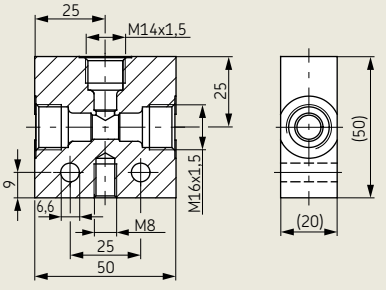
d)



e)



f)



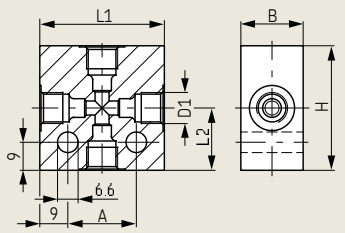
Accessories for tubes and hoses

Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

Cross joints

Order No.	Tube ø	D1	A	B	H	L1	L2
Aluminum							
DAK504-S1	4/6	M10×1/ M8×1	22	20	40	40	20
DAK506	6	M10×1	22	20	40	40	20
DAK508	8	M14×1.5	32	20	50	50	25
DAK510	10	M16×1.5	25	20	56	50	28
DAK512	12	M18×1.5	42	25	60	60	30

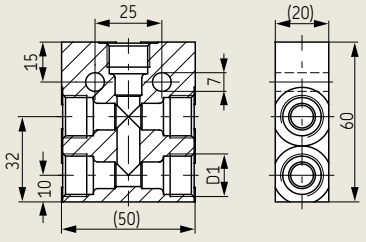
Cross joint



Cross joint

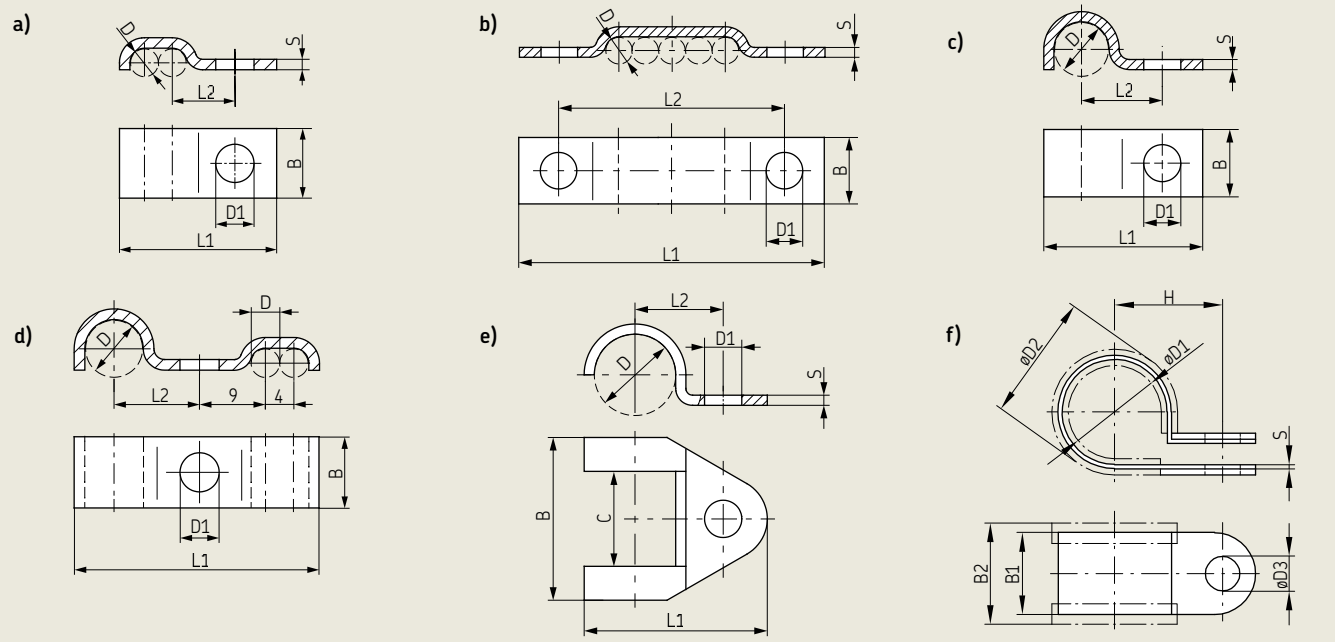
Order No.	Tube ø	D1
Steel, galvanized surface		
DAK510-S1	10	M16×1.5

Cross joint DAK510-S1



Accessories for tubes and hoses

Fixing clips



Fixing clips

Order No.	for tube øD	for tube	B	D1	L1	L2	S	Fig.
Mild steel								
602-002	2.5	2		3.5	13.8	5		
604-002	4	2	10	5.5	22.6	9	1.5	a
604-003	4	3		5.5	26.6	9		
604-014	4	4			42	30		
604-015	4	5	10	5.5	46	34	1.5	b
604-016	4	6			50	38		
604-018	4	8			58	46		
DIN 72573-2×6-ST	6	2			39	27		
DIN 72573-3×6-ST	6	3			45	33		
DIN 72573-4×6-ST	6	4			51	39		
DIN 72573-5×6-ST	6	5			57	45		
DIN 72573-6×6-ST	6	6			64	52		
DIN 72573-2×8-ST	8	2			43	31		
DIN 72573-3×8-ST	8	3	10	4.8	51	39	1	b
DIN 72573-4×8-ST	8	4			59	47		
DIN 72573-5×8-ST	8	5			68	56		
DIN 72573-6×8-ST	8	6			76	64		
DIN 72573-2×10-ST	10	2			45	33		
DIN 72573-3×10-ST	10	3			55	43		
DIN 72573-4×10-ST	10	4			67	55		
DIN 72573-5×10-ST	10	5			77	65		
Stainless steel								
DIN72571-1×6	6	1			20.5	10		
DIN72573-1×6	6	1			32	20		
DIN72573-2×6	6	2			38	26		
DIN72573-3×6	6	3	10	4.8	45	33	1	b
DIN72573-4×6	6	4			51	39		
DIN72573-5×6	6	5			57	45		
DIN72573-6×6	6	6			64	52		

Fixing clips

Order No.	for tube øD	B	C	D1	L1	L2	S	Fig.
Steel								
602-001	2.5			3.5	11.25	5		
604-001	4			5.5	18.5	9		
606-010	6	10	–	5.5	20.5	10	1.5	c
608-001	8			5.5	23.5	12		
610-001	10 or 1/8"			5.5	25.5	13		
612-001	12	20	–	6.8	35	18	2	c
608-003	8 / 4	10	–	5.5	34	12	1.5	d
604-004	12	24	14	5.5	27	13	1.5	
606-014	14 or 1/4"	30	15	6.3	32.5	16	2	e
608-004	18 or 3/8"	36	20	7	40	21	2	
610-004	20 or 1/2"	36	20	7	40	21	2	

Fixing clips

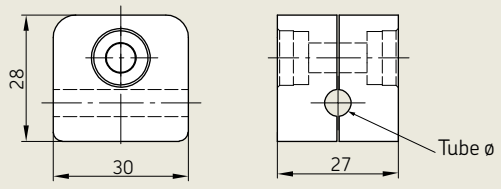
Order No.	ø D1	ø D2	ø D3	B1	B2	H	S	Fig.
Steel, galvanized								
941-206-104	6	11.8	5.2	12	15	11	0.5	
941-206-108	6	11.8	6.4	15	18.5	4.2	0.6	
941-208-108	8	15.4	6.4	15	18.5	15.2	0.6	
941-209-104	9	5	5.2	12	5	12.5	0.5	
941-209-105	9	15	6.4	15	18.5	15.7	0.6	
941-210-104	10	17.4	6.4	15	18.5	16.2	0.6	
941-212-104	12	19.4	6.4	15	18.5	17.2	0.6	
941-213-104	13	20.4	6.4	15	18.5	7.7	0.6	f
941-215-104	15	22.4	6.4	5	18.5	18.7	0.8	
941-217-104	17	23	5.2	12	15	16.5	0.5	
941-217-105	17	23	6.4	15	8.5	19.7	0.8	
941-218-101	18	24	6.4	15	8.5	20.2	0.6	
941-220-104	20	27.6	6.4	15	8.5	21.2	0.8	
941-222-100	22	28	6.4	15	18.5	22.2	0.8	
941-225-104	25	31	6.4	15	18.5	23.7	0.8	

Accessories for tubes and hoses

Pipe bracket to DIN 3015

Order No.	Tube ø
941-606-000	6
941-608-000	8
941-610-000	10

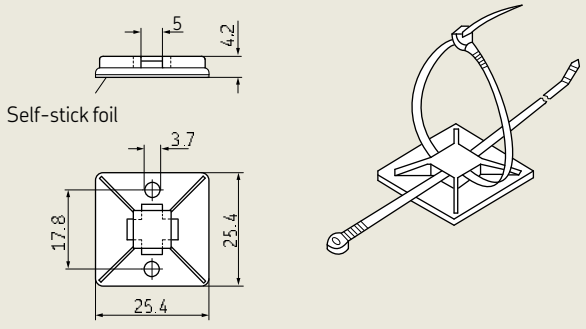
Pipe bracket 941-606-000



Mounting base

Order No.
179-990-186

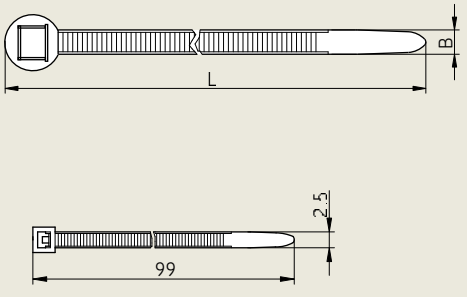
Mounting base



Cable strap

Order No.	L	B
Polyamide		
898-610-000	197	4.9
898-710-000	302	4.9
898-710-001	360	7.5
For automatic pincers:		
Polyamide		
898-510-000		1 piece

Cable strap



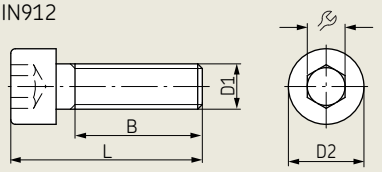
Accessories for tubes and hoses

Fixing bolts

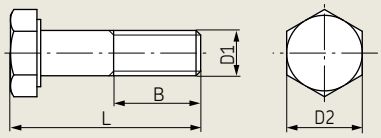
Order No.	D1	L	D2	B	
Steel					
DIN912-M4×20-8.8	M4	20	7	14	3
DIN912-M6×16-8.8	M6	16	10	18	5
DIN912-M6×25-8.8	M6	25	10	18	5
DIN912-M6×60-8.8	M6	60	10	18	5
DIN912-M8×16-8.8	M8	16	13	12	6
DIN931-M6×30-5.8	M6	30	10	18	10
DIN933-M4×10-8.8	M4	10	7	14	–
DIN933-M5×12-8.8	M5	12	8	16	–
DIN933-M6×16-8.8	M6	16	10	18	–
DIN933-M6×20-8.8	M6	20	10	18	–
DIN933-M6×25-8.8	M6	25	10	18	–
DIN933-M8×20-8.8	M8	20	13	22	–
DIN933-M8×25-8.8	M8	25	13	22	–
DIN933-M10×40-8.8	M10	40	17	26	–
DIN7513-BM4×20	M4	20	7	–	–
DIN7513-BM4×25	M4	25	7	–	–
DIN7513-BM5×10	M5	10	8.5	–	–
DIN7513-BM6×16	M6	16	10	–	–
DIN7513-BM6×25	M6	25	10	–	–
Stainless steel					
DIN912-M3×8-A4	M3	8	–	–	–
DIN912-M4×12-A4	M4	12	–	–	–
DIN912-M5×10-A2	M5	10	–	–	–

Fixing bolts

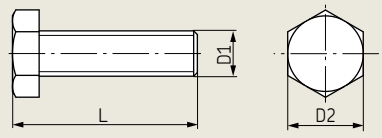
DIN912



DIN931 / DIN933



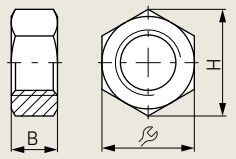
DIN7513



Hexagon nuts

Order No.	Thread	B		H
Steel				
DIN934-M5-8	M5	4	8	9.2
DIN934-M6-8	M6	5	10	11.5
DIN936-M14×1.5-5	M14×1.5	8	22	25.4
DIN936-M16×1.5-5	M16×1.5	8	24	27.7
DIN936-M20×1.5-5	M20×1.5	9	30	34.6
DIN985-M3-6	M3	2.7	5.5	6
DIN985-M6-6	M6	4.5	10	11
DIN985-M8-6	M8	6	13	14.4
DIN985-M12-6	M12	9	19	21

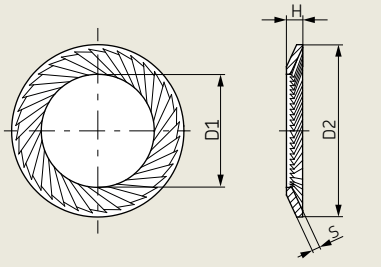
Hexagon nut



Lock washer

Order No.	for bolt	D1	D2	S	H
Spring steel					
650-050	M5	5.3	9	0.6	0.9
650-060	M6	6.4	10	0.7	0.9
650-080	M8	8.4	13	0.8	1.2
650-100	M10	10.5	16	1	1.5
650-120	M12	13	18	1.1	1.5
650-140	M14	15	22	1.2	1.8
650-160	M16	17	24	1.3	1.9
650-180	M18	19	27	1.5	2.2
650-200	M20	21	30	1.5	2.2

Lock washer



Distributor manifolds

Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

Standard manifolds in conjunction with metering units, configurable → pages 21–23 (→ www.skf-lubrication.partcommunity.com)

Order code V L – _ _ _ _ _ _

Product series

Number of ports

01 = 1 port **03** = 3 ports **05** = 5 ports **08** = 8 ports
02 = 2 ports **04** = 4 ports **06** = 6 ports **10** = 10 ports

Design of outlet thread

A = Normal profile, M8×1 with counterbore for O-ring
B = Normal profile, M10×1 with counterbore for O-ring
C = Normal profile, M14×1.5 with counterbore for flat washer
D = Small profile, M8×1 with counterbore for flat washer (can only be selected for main line connection M3)
E = Small profile, M10×1 with counterbore for flat washer (can only be selected for main line connection M3)
F = Normal profile, M8×1 with counterbore for flat washer
G = Normal profile, M10×1 with counterbore for flat washer

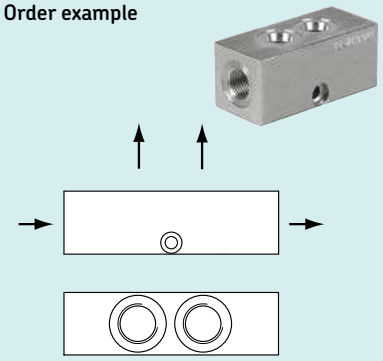
Material

A = Aluminum; **E** = Stainless steel (only for outlet threads A, B, E, G)

Design of main line connection

G1 = G 1/8 to DIN 3852-2, Form X, small
G2 = G 1/4 to DIN 3852-2, Form X, small
M1 = M10×1 to DIN 3852-1, Form X, small
M2 = M14×1.5 to DIN 3852-1, Form X, small
M3 = M10×1 with counterbore for solderless pipe connection per DIN 3862
M4 = M14×1.5 with counterbore for solderless pipe connection per (can only be selected for normal profile)

Order example



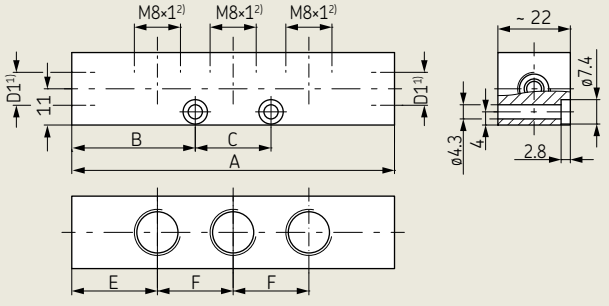
VL-02AAM3

- Product series VL
- 2 ports
- Normal profile made of aluminum
- M8×1 internal thread with counterbore for O-ring
- M10×1 main line connection with counterbore for solderless pipe connection per DIN 3862

Distributor manifold, normal profile A/F

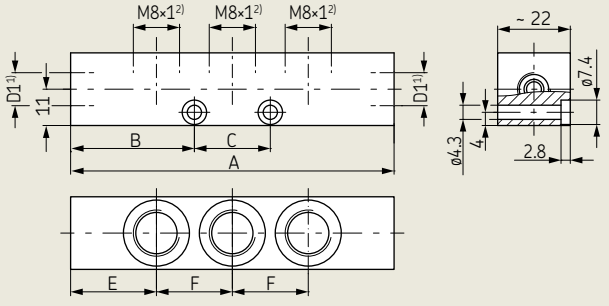
Main line connection D1	Number of ports	Dimensions [mm] A	B	C	E	F
M10×1 (M3)	1	40	20	–	20	–
	2	55	27.5	–	20	1x15
	3	70	27.5	15	20	2x15
	4	85	27.5	30	20	3x15
	5	100	27.5	45	20	4x15
	6	115	27.5	60	20	5x15
	8	145	27.5	90	20	7x15
	10	175	27.5	120	20	9x15
M10×1 (M1) G 1/8 (G1)	1	34	17	–	17	–
	2	49	24.5	–	17	1x15
	3	64	24.5	15	17	2x15
	4	79	24.5	30	17	3x15
	5	94	24.5	45	17	4x15
	6	109	24.5	60	17	5x15
	8	139	24.5	90	17	7x15
	10	169	24.5	120	17	9x15
M14×1.5 (M4)	1	48	24	–	24	–
	2	63	31.5	–	24	1x15
	3	78	31.5	15	24	2x15
	4	93	31.5	30	24	3x15
	5	108	31.5	45	24	4x15
	6	123	31.5	60	24	5x15
	8	153	31.5	90	24	7x15
	10	183	31.5	120	24	9x15
M14×1.5 (M2) G 1/4 (G2)	1	46	23	–	23	–
	2	61	30.5	–	23	1x15
	3	76	30.5	15	23	2x15
	4	91	30.5	30	23	3x15
	5	106	30.5	45	23	4x15
	6	121	30.5	60	23	5x15
	8	151	30.5	90	23	7x15
	10	181	30.5	120	23	9x15

Distributor manifold, normal profile A



1) For solderless pipe connection per DIN 3862
2) DIN 3852-3 Form W

Distributor manifold, normal profile F



1) For solderless pipe connection per DIN 3862
2) DIN 3852-1 Form XK

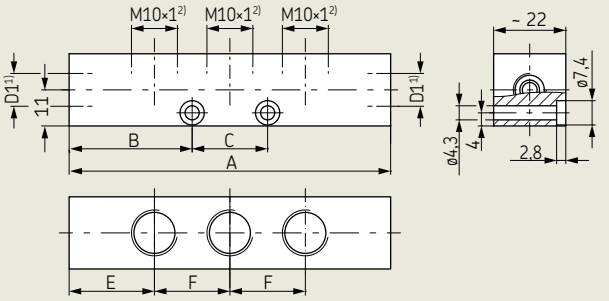
Distributor manifolds

Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

Distributor manifold, normal profile B/G

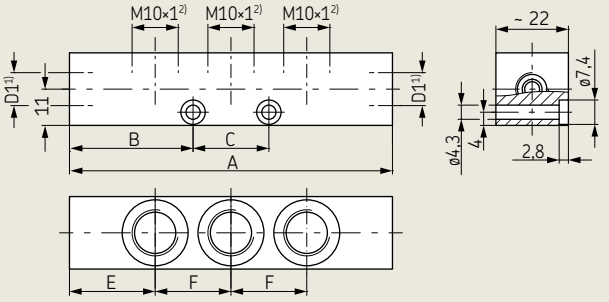
Main line connection D1	Number of ports	Dimensions [mm] A	B	C	E	F
M10×1 (M3)	1	40	20	–	20	–
	2	57	28.5	–	20	1x17
	3	74	28.5	17	20	2x17
	4	91	28.5	34	20	3x17
	5	108	28.5	51	20	4x17
	6	125	28.5	68	20	5x17
	8	159	28.5	102	20	7x17
	10	193	28.5	136	20	9x17
M10×1 (M1) G 1/8 (G1)	1	34	17	–	17	–
	2	51	25.5	–	17	1x17
	3	68	25.5	17	17	2x17
	4	85	25.5	34	17	3x17
	5	102	25.5	51	17	4x17
	6	119	25.5	68	17	5x17
	8	153	25.5	102	17	7x17
	10	187	25.5	136	17	9x17
M14×1.5 (M4)	1	52	26	–	26	–
	2	69	34.5	–	26	1x17
	3	86	34.5	17	26	2x17
	4	103	34.5	34	26	3x17
	5	120	34.5	51	26	4x17
	6	137	34.5	68	26	5x17
	8	171	34.5	102	26	7x17
	10	205	34.5	136	26	9x17
M14×1.5 (M2) G 1/4 (G2)	1	46	23	–	23	–
	2	63	31.5	–	23	1x17
	3	80	31.5	17	23	2x17
	4	97	31.5	34	23	3x17
	5	114	31.5	51	23	4x17
	6	131	31.5	68	23	5x17
	8	165	31.5	102	23	7x17
	10	199	31.5	136	23	9x17

Distributor manifold, normal profile B



1) For solderless pipe connection per DIN 3862
2) DIN 3852-3 Form W, small

Distributor manifold, normal profile G

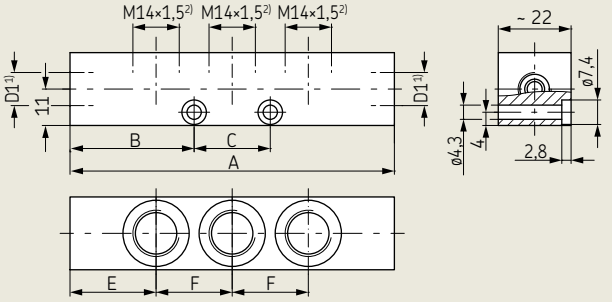


1) For solderless pipe connection per DIN 3862
2) DIN 3852-1 Form XK, small

Distributor manifold, normal profile C

Main line connection D1	Number of ports	Dimensions [mm] A	B	C	E	F
M10×1 (M3)	1	60	18	24	30	–
	2	70	35	–	23	1x24
	3	94	35	24	23	2x24
	4	118	35	48	23	3x24
	5	142	35	72	23	4x24
	6	166	35	96	23	5x24
	8	214	35	144	23	7x24
	10	262	35	192	23	9x24
M14×1.5 (M4)	1	68	22	24	34	–
	2	78	39	–	27	1x24
	3	102	39	24	27	2x24
	4	126	39	48	27	3x24
	5	150	39	72	27	4x24
	6	174	39	96	27	5x24
	8	222	39	144	27	7x24
	10	270	39	192	27	9x24

Distributor manifold, normal profile C



1) For solderless pipe connection per DIN 3862
2) DIN 3852-1 Form XK, small

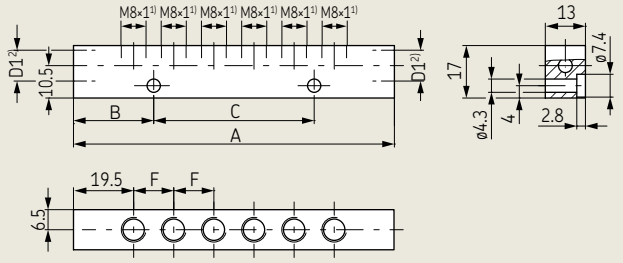
Distributor manifolds

Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

Distributor manifold, small profile D

Main line connection D1	Number of ports	Dimensions [mm] A	B	C	F
M10×1 (M3)	1	39	19,5	–	–
	2	52	26	–	1x13
	3	65	32,5	–	2x13
	4	78	39	–	3x13
	5	91	45,5	–	4x13
	6	104	26	52	5x13
	8	130	39	52	7x13
	10	156	39	78	9x13

Distributor manifold, small profile D

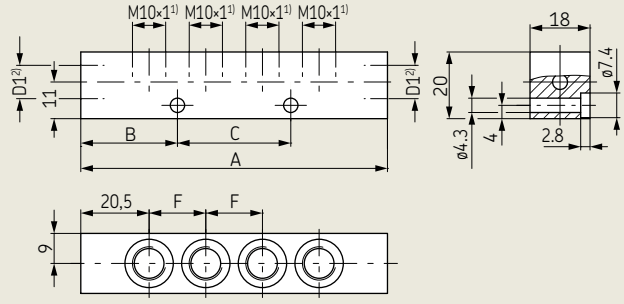


1) Depth 5.5 mm with surface suitable for flat washers
2) DIN 3852-3 Form W

Distributor manifold, small profile E

Main line connection D1	Number of ports	Dimensions [mm] A	B	C	F
M10×1 (M3)	1	41	20,5	–	–
	2	58	26	–	1x17
	3	75	37,5	–	2x17
	4	92	29	34	3x17
	5	109	29	51	4x17
	6	126	29	68	5x17
	8	160	29	102	7x17
	10	194	29	136	9x17

Distributor manifold, small profile E



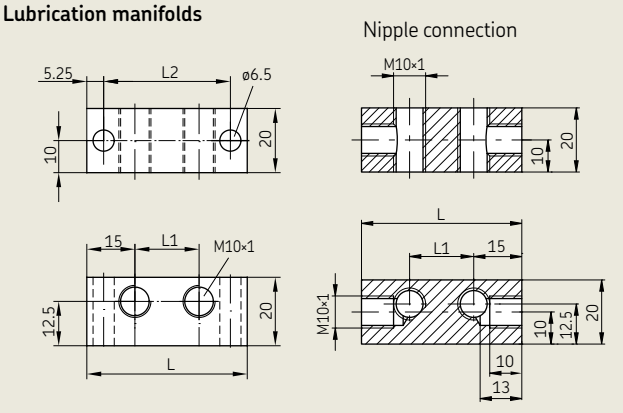
1) Depth 8 mm
2) For solderless pipe connection per DIN 3862

Lubrication manifolds

Order No.	L	L1	L2	Number of threaded holes
Steel, galvanized surface				
871-340-006	30	–	19,5	1
871-340-008 1)	30	–	19,5	1
871-360-006	50	20	39,5	2
871-360-008 1)	50	20	39,5	2
871-380-006	70	40	59,5	3
871-390-020	210	20	199,5	10
871-390-023	270	20	200	13

1) Nipple connection; corresponding conical grease nipple with valve, order no. 996-001-890

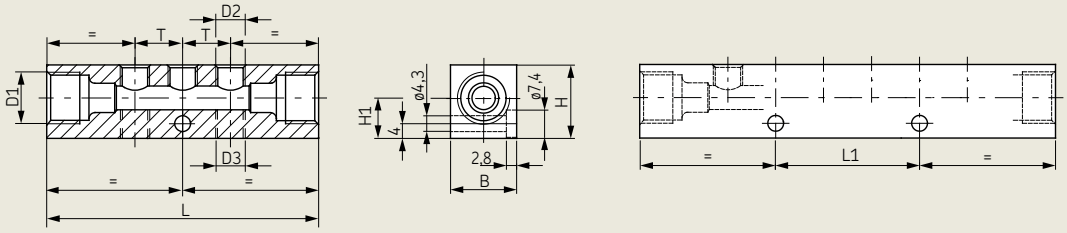
Lubrication manifolds



Distributor manifolds

Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

Distributor manifold



Distributor manifolds

Main tube port tube ø	Order No.	Number-of port	D1	D2		D3		L	L1	H	H1	B	T
Aluminum alloy													
	VL-322-541	2	M8×1	2x	M8×1	–		49	–	17	10.5	13	13
4	**VL-323-541**	3	M8×1	3x	M8×1	–		62	–	17	10.5	13	13
	324-581	4	M8×1	4x	M8×1								
	VL-01EAM3	1	M10×1		M10×1	–		41	–	20	11	18	–
	VL-02EAM3	2	M10×1	2x	M10×1	–		58	–	20	11	18	17
	VL-03EAM3	3	M10×1	3x	M10×1	–		75	–	20	11	18	17
	VL-04EAM3	4	M10×1	4x	M10×1	–		92	34	20	11	18	17
	VL-05EAM3	5	M10×1	5x	M10×1	–		109	51	20	11	18	17
6	**VL-06EAM3**	6	M10×1	6x	M10×1	–		126	68	20	11	18	17
	VL-08EAM3	8	M10×1	8x	M10×1	–		160	52	20	11	18	17
	VL-329-761	9	M10×1	9x	M10×1	–		177	119	20	11	18	17
	VL-10EAM3	10	M10×1	10x	M10×1	–		194	136	20	11	18	17
	331-761	11	M10×1	11x	M10×1	–		211	153	20	11	18	17
	332-761	12	M10×1	12x	M10×1	–		228	170	20	11	18	17
				(above)		(below)							
	325-561		M10×1										
	322-861	2	M10×1	1x	M10×1	1x	M10×1	41		20	11	18	–
	324-861	4	M10×1	2x	M10×1	2x	M10×1	58	–	20	11	18	18
	326-663	6	M10×1	3x	M10×1	3x	M10×1	77	52	17	11	18	18
	328-861	8	M10×1	4x	M10×1	4x	M10×1	92	34	20	11	18	18
6	**330-861**	10	M10×1	5x	M10×1	5x	M10×1	109	51	20	11	18	18
	332-861	12	M10×1	6x	M10×1	6x	M10×1	126	68	20	11	18	18
	334-861	14	M10×1	7x	M10×1	7x	M10×1	143	85	20	11	18	18
	336-861	16	M10×1	8x	M10×1	8x	M10×1	160	102	20	11	18	18
	338-861	18	M10×1	9x	M10×1	9x	M10×1	177	119	20	11	18	18
	340-861	20	M10×1	10x	M10×1	10x	M10×1	194	136	20	11	18	18
	VL-02DAM3	2	M10×1	2x	M8×1	–		52	–	17	10.5	13	13
	VL-03DAM3	3	M10×1	3x	M8×1	–		65	–	17	10.5	13	13
	VL-04DAM3	4	M10×1	4x	M8×1	–		78	–	17	10.5	13	13
	VL-05DAM3	5	M10×1	5x	M8×1	–		91	–	17	10.5	13	13
6	**VL-06DAM3**	6	M10×1	6x	M8×1	–		104	52	20	11	18	13
	VL-07DAM3	7	M10×1	7x	M8×1	–		117	39	20	11	18	13
	VL-08DAM3	8	M10×1	8x	M8×1	–		130	52	17	10.5	13	13
	VL-10DAM3	10	M10×1	10x	M8×1	–		156	78	17	10.5	13	13
	321-581	1	M14×1.5	1x	M8×1	–		48	–	20		18	–
	322-581	2	M14×1.5	2x	M8×1	–		61	–	20	11	18	13
	323-581	3	M14×1.5	3x	M8×1	–		74	–	20	11	18	13
	323-661-S1	3	M14×1.5	3x	M10×1	–		94	–	20	11	18	22
	324-581	4	M14×1.5	4x	M8×1	–		87	–	20	11	18	13
	325-581	5	M14×1.5	5x	M8×1	–		74		20	11	18	13
8	**326-581**	6	M14×1.5	6x	M8×1	–		113	39	20	11	18	13
	328-581	8	M14×1.5	8x	M8×1	–		139	65	20	11	18	13
	329-581	9	M14×1.5	9x	M8×1	–		152	78	20	11	18	17
	330-581	10	M14×1.5	10x	M8×1	–		165	91	20	11	18	13
	330-581-S1	10	M14×1.5	10x	M8×1	–		201	85	20	11	18	17
	331-581	11	M14×1.5	11x	M8×1	–		178	104	20	11	18	13
	332-581	12	M14×1.5	12x	M8×1	–		191	117	20	11	18	13

SKF Quick Connectors for oil and grease

For pressures up to 300 bar, 3-O-ring

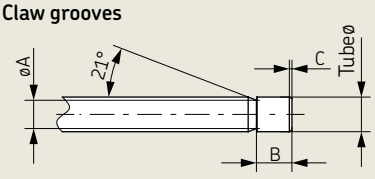
Insertion depth for plastic and stell tubing

for tube ø	Insertion depth [mm]
3-O-ring quick connector (→ page 25–27)	
4	19
6	22
8	24
1-O-ring quick connector (→ page 28–29)	
6	16

Claw grooves

for tube ø	A +0.3	B ±0.2	C
4	3.1	5	0.3 ... 0.7
6	4.9	6.2	0.4 ... 0.9
8	6.9	6.2	0.5 ... 0.9

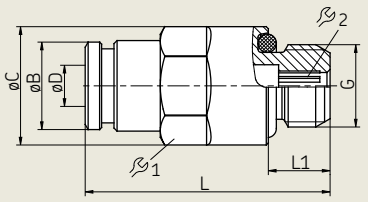
Claw grooves



Adaptors with cylindrical thread (→ Figure 13)

Order No.	Tube øD	G	L1	ø B	ø C	L	1	2	Seal
451-004-260-VS	4	M6	4.5	8.8	11.5	25	10	2.5	NBR
404-073-VS	4	M6×0.75	4.5	8.8	11.5	25.3	10	2.5	NBR
404-063-VS	4	M8	6	8.8	11.5	23.8	10	2.5	NBR
404-003-VS	4	M8×1	6	8.8	11.5	23.8	10	2.5	NBR
404-003-S8-VS	4	M8×1	6	8.8	11.5	23.8	10	2.5	FPM
404-006-VS	4	M10×1	6	8.8	13.5	23.8	12	2.5	NBR
404-006-S8-VS	4	M10×1	6	8.8	13.5	23.8	12	2.5	FPM
404-040-VS	4	G 1/8	6	8.8	13.5	23.8	12	2.5	NBR
406-158-VS	6	M8×1	6	11.7	13.2	30.5	12	3	NBR
406-004-VS	6	M10×1	6	11.7	13.5	27	12	4	NBR
406-004-S8-VS	6	M10×1	6	11.7	13.5	27	12	4	FPM
456-004-VS	6	G 1/8	6	11.7	13.5	27	12	4	NBR
456-004-S8-VS	6	G 1/8	6	11.7	13.5	27	12	4	FPM
406-054-VS	6	G 1/4	7	11.7	16.4	28	12	4	NBR
406-162-VS	6	M12×1	7	11.7	15.4	28	14	4	NBR
406-162-S8-VS	6	M12×1	7	11.7	15.4	28	14	4	FPM
408-004-VS	8	M10×1	6	13.9	15.2	32.3	14	5	NBR
408-004-S8-VS	8	M10×1	6	13.9	15.2	32.3	14	5	FPM
408-162-VS	8	M12×1	7	13.9	15.2	32.8	14	6	NBR
408-162-S8-VS	8	M12×1	7	13.9	15.2	32.8	14	6	FPM
408-054-VS	8	G 1/4	7	13.9	16.4	30.8	15	6	NBR

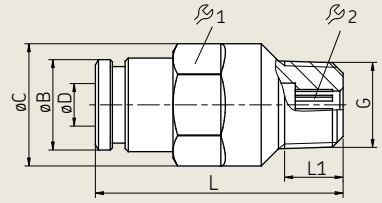
Figure 13



Adaptors with tapered thread (→ Figure 14)

Order No.	Tube øD	G	L1	ø B	ø C	L	1	2	Seal
451-004-462-VS	4	M6 tap.	5.5	8.8	11.5	25.8	10	2.5	NBR
451-004-471-VS	4	M6×0.75 tap.	5.5	8.8	11.5	25.8	10	2.5	NBR
451-004-498-VS	4	M8×1 tap.	5.5	8.8	11.5	23.3	10	2.5	NBR
451-004-518-VS	4	M10×1 tap.	5.5	8.8	11.5	22.8	10	2.5	NBR
404-673K-V1-VS	4	1/4-28 SAE LT	5.1	8.8	11.5	26.3	10	2.5	NBR
404-040K-V1-VS	4	1/8 NPTF	8	8.8	11.5	24.8	10	2.5	NBR
451-006-468-VS	6	M6 tap.	5.5	11.7	13.5	30	12	2.5	NBR
451-006-498-VS	6	M8×1 tap.	5.5	11.7	13.5	29.5	12	4	NBR
451-006-518-VS	6	M10×1 tap.	5.5	11.7	13.5	27	12	4	NBR
406-423W-VS	6	R 1/8	6.5	11.7	13.5	28.5	12	4	NBR
406-423N-VS	6	1/8 NPT	7.5	11.7	13.5	28.5	12	4	NBR

Figure 14



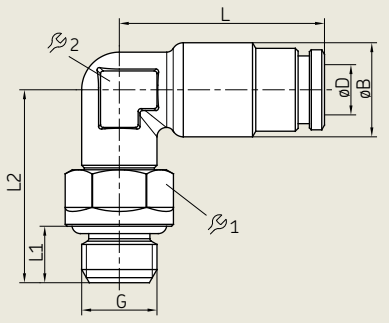
SKF Quick Connectors for oil and grease

For pressures up to 300 bar, 3-O-ring

Banjo fittings with with cylindrical thread (→ Figure 15)

Order No.	Tube øD	G	L1	ø B	L	L2	1	2	Seal
504-100-VS	4	M6×1	4.5	10	21.8	17.5	9	9	NBR
504-101-VS	4	M8×1	6	10	21.8	20.5	10	9	NBR
504-101-S8-VS	4	M8×1	6	10	21.8	20.5	10	9	FPM
504-102-VS	4	M10×1	6	10	21.8	20.5	12	9	NBR
504-102-S8-VS	4	M10×1	6	10	21.8	20.5	12	9	FPM
504-108-VS	4	G 1/8	6	10	21.8	20.5	12	9	NBR
504-108-S8-VS	4	G 1/8	6	10	21.8	20.5	12	9	FPM
506-139-VS	6	M8×1	6	12.5	26	21	10	10	NBR
506-139-S8-VS	6	M8×1	6	12.5	26	21	10	10	FPM
506-140-VS	6	M10×1	6	12.5	26	21	12	10	NBR
506-140-S8-VS	6	M10×1	6	12.5	26	21	12	10	FPM
506-108-VS	6	G 1/8	6	12.5	26	21	12	10	NBR
506-108-S8-VS	6	G 1/8	6	12.5	26	21	12	10	FPM
506-142-VS	6	M12×1	7	12.5	26	23	14	10	NBR
506-142-S8-VS	6	M12×1	7	12.5	26	23	14	10	FPM
506-143-VS	6	G 1/4	7	12.5	26	23	15	10	NBR
508-142-VS	8	M12×1	7	14.5	28.8	23	14	12	NBR
508-142-S8-VS	8	M12×1	7	14.5	28.8	23	14	12	FPM

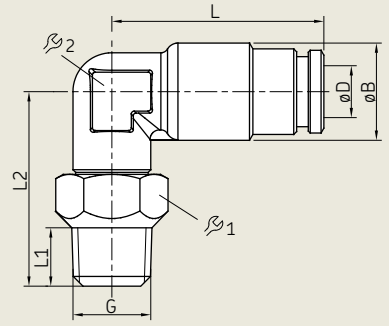
Figure 15



Banjo fittings with tapered thread (→ Figure 16)

Order No.	Tube øD	G	L1	ø B	L	L2	1	2	Seal
455-546-048-VS	4	M6 tap.	6	10	21.8	20	10	9	NBR
455-546-048-S8-VS	4	M6 tap.	6	10	21.8	20	10	9	FPM
455-529-048-VS	4	M8×1 tap.	6	10	21.8	20	10	9	NBR
455-529-048-S8-VS	4	M8×1 tap.	6	10	21.8	20	10	9	FPM
455-531-048-VS	4	M10×1 tap.	6	10	21.8	20	12	9	NBR
455-531-048-S8-VS	4	M10×1 tap.	6	10	21.8	20	12	9	FPM
455-569-048-VS	4	R 1/8	7.5	10	21.8	20.5	12	9	NBR
455-529-068-VS	6	M8×1 tap.	6	12.5	26	20,5	10	10	NBR
455-529-068-S8-VS	6	M8×1 tap.	6	12.5	26	20,5	10	10	FPM
455-531-068-VS	6	M10×1 tap.	6	12.5	26	20.5	12	10	NBR
455-531-068-S8-VS	6	M10×1 tap.	6	12.5	26	20.5	12	10	FPM
455-546-068-VS	6	M6×1 tap.	6	12.5	26	20.5	10	10	NBR
455-565-068-VS	6	R 1/4	11	12.5	26	24.5	14	10	NBR

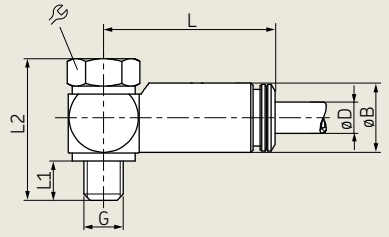
Figure 16



Banjo fittings with banjo bolt and cylindrical thread (→ Figure 17)

Order No.	Tube øD	G	L1	ø B	L	L2		Seal
504-161-VS	4	M6	5	8.8	22.3	19.5	9	NBR
504-401-S1-VS	4	M5	5	8.8	21.8	18	8	NBR
504-411-VS	4	M8	7	8.8	23.8	20	12	NBR
504-401-VS	4	M8×1	7	8.8	23.8	20	12	NBR
504-103-VS	4	M10×1	7	8.8	24.8	22.5	14	NBR
445-519-041-VS	4	G 1/8	7	8.8	24.8	22.5	14	NBR

Figure 17



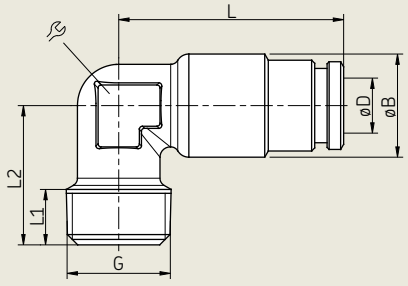
SKF Quick Connectors for oil and grease

For pressures up to 300 bar, 3-O-ring

Elbows, with tapered thread

Order No.	Tube øD	G	L1	ø B	L	L2		Seal
453-004-471-VS	4	M6 tap.	6	10	21.8	14	9	NBR
453-004-471-S8-VS	4	M6 tap.	6	10	21.8	14	9	FPM
504-201-VS	4	M8×1 tap.	6	10	21.8	13.5	9	NBR
504-201-S8-VS	4	M8×1 tap.	6	10	21.8	13.5	9	FPM
504-202-VS	4	M10×1 tap.	6	10	21.8	13.5	9	NBR
504-202-S8-VS	4	M10×1 tap.	6	10	21.8	13.5	9	FPM
514-018-VS	4	R 1/8	7.5	10	21.8	15	9	NBR
514-018-S8-VS	4	R 1/8	7.5	10	21.8	15	9	FPM
504-200K-V1-VS	4	1/4-28 SAE LT	5.1	10	21.8	15.5	9	NBR
514-018K-V1-VS	4	1/8 NPTF	7	10	21.8	15	9	NBR
453-006-468-VS	6	M6 tap.	6	12.5	26	15	10	NBR
453-006-468-S8-VS	6	M6 tap.	6	12.5	26	15	10	FPM
506-508-VS	6	M8×1 tap.	6.5	12.5	26	14	10	NBR
506-508-S8-VS	6	M8×1 tap.	6.5	12.5	26	14	10	FPM
506-510-VS	6	M10×1 tap.	6	12.5	26	14	10	NBR
506-510-S8-VS	6	M10×1 tap.	6	12.5	26	14	10	FPM
506-511-VS	6	R 1/8	8.5	12.5	26	16.5	10	NBR
506-511-S8-VS	6	R 1/8	8.5	12.5	26	16.5	10	FPM
506-511K-V1-VS	6	1/8 NPT	8.5	12.5	26	16.5	10	NBR
506-512-VS	6	M12×1 tap.	7	12.5	26	15	10	NBR
453-006-651-VS	6	R 1/4	11.5	12.5	26	19.5	10	NBR

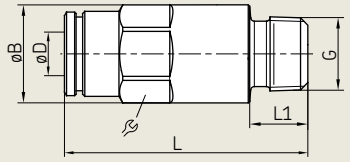
Elbow



Check valves

Order No.	Tube øD	G	Opening pressure [bar]	Pressure, max. [bar]	L1	ø B	L	L2		Seal
VPKG-RV4-VS	4	R 1/8	$3^{\pm1}$	300	7.9	10	32.3	–	9	NBR
VPKM-RV-VS	6	M10×1 tap.	3^{+2}	300	8	13.5	33.5	–	12	NBR
VPKG-RV-VS	6	R 1/8	3^{+2}	300	8	13.5	33.5	–	12	NBR

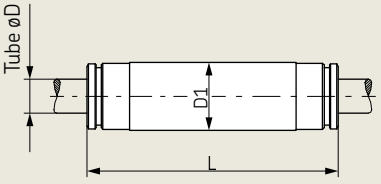
Check valve



Connectors

Order No.	Tube øD	D1	L	Seal
454-504-041-VS	4	10	38.5	NBR
406-426-VS	6	12	44.5	NBR

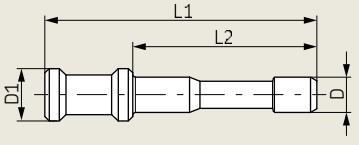
Connector



Locking pin

Order No.	Tube øD	D1	L1	L2
450-204-002	4	6	31	21
450-206-002	6	8	37	25

Locking pin



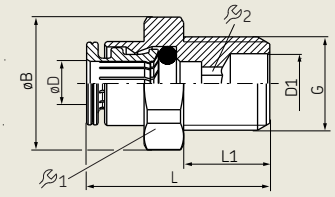
SKF Quick Connectors for grease

For pressures up to 350 bar, 1-O-ring

Straight screw-in connectors (→ Figure 18)

Order No.	Tube øD	G	L1	ø B	L	1	2	Seal
226-14139-1	6	G 1/4	12	18.5	25.5	17	4	NBR

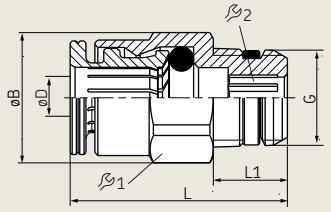
Figure 18



Straight screw-in connectors with PTFE threaded seal (→ Figure 19)

Order No.	Tube øD	G	L1	ø B	L	1	2	Seal
226-14111-1	6	R 1/8	7.5	13.2	22	12	4	NBR

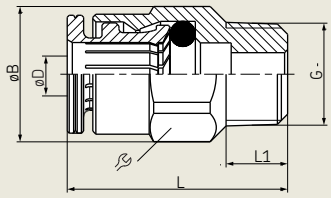
Figure 19



Adaptors with tapered thread (→ Figure 20)

Order No.	Tube øD	G	L1	ø B	L		Seal
226-14111-4	6	M6×1 tap.	6	13.2	24	12	NBR
226-14111-2	6	M8×1 tap.	6	13.2	23	12	NBR
226-14111-3	6	M10×1 tap.	6	13.2	21.5	12	NBR
226-10622-8	6	R 1/8	7.5	13.2	22	12	NBR

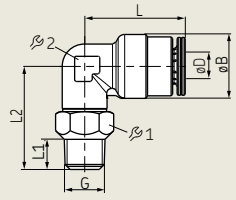
Figure 20



Banjo fittings with tapered thread

Order No.	Tube øD	G	L1	ø B	L	L2	1	2	Seal
226-14157-3	6	M6×1 tap.	6	12.7	20	20.5	10	9	NBR
226-14157-1	6	M8×1 tap.	6	12.7	20	20.5	10	9	NBR
226-14157-2	6	M10×1 tap.	6	12.7	20	20.5	12	9	NBR
226-13756-9	6	R 1/8	7.5	12.7	20	21	12	9	NBR

Banjo fittings

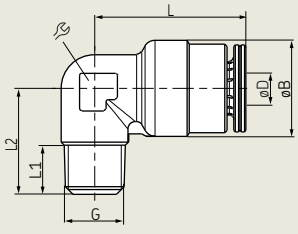


Elbows with tapered thread

Order No.	Tube øD	G	L1	ø B	L	L2		Seal
226-14123-4	6	M6×1 tap.	6	12.7	20	15	9	NBR
226-14123-2	6	M8×1 tap.	6.5	12.7	20	14	9	NBR
226-14123-3	6	M10×1 tap.	6	12.7	20	14	9	NBR
226-14123-5	6	R 1/8	7.5	12.7	20	15.5	9	NBR
226-13753-9 [1]	6	R 1/8	7.5	12.7	20	15.5	9	NBR

1) with threaded seal

Elbows



Insertion depth for 1-O-ring quick connector → page 25

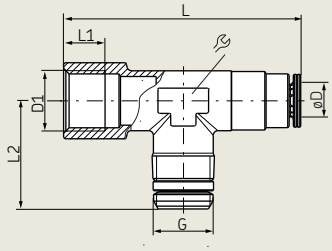
SKF Quick Connectors for grease

For pressures up to 350 bar, 1-O-ring

Tee screw-in connector

Order No.	Tube øD	G	D1	L1	L	L2		Seal
226-14097-5	6	R 1/4	G 1/4	9	51.5	23.5	14	NBR

T-Tee screw-in connector

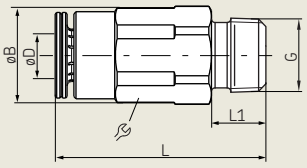


Check valves for progressiv distributors

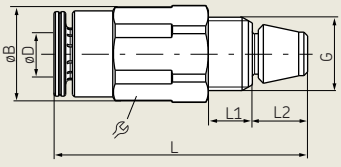
Order No.	Tube øD	G	L1	ø B	L	L2		Seal	Fig.
226-10337-3	6	M10×1 tap.	8	11.7	27.5	–	12	NBR	a
226-14091-4	6	M10×1	6	12.8	34.5	7.5	12	NBR	b
226-10328-4	6	M10×1	6	12.8	34.5	7.5	12	FKM	b

Check valves

a)



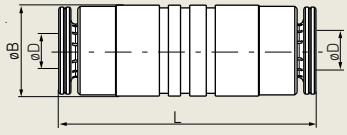
b)



Connector

Order No.	Tube øD	ø B	L	Seal
226-13773-4	6	12	34	NBR

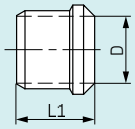
Connector



Fittings

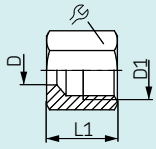
Solderless pipe union with cutting-sleeve acc. to DIN EN ISO 8434-1 and DIN 2353

Cutting sleeves to DIN 3861/ISO 8434-1



Order No.	D (Tube ø)	L1	Pressure [bar]	Series
Steel. galvanized surface (Cr-6-free)				
Form A				
404-301	4	6		
406-331	6	7	100	LL
96-5708-0058	8	7		
96-5710-0058	10	7		
406-301	6	9.5		
408-301	8	10	250	AS (L) [1]
410-301	10	10		
412-301	12	10.5		
415-301	15	10	160	L
418-301	18	10.5		
Stainless steel				
99-5704-0058	4	6		LL
406-301-S3	6	9.5	100	L
406-331-S3	6	7		LL
99-2712-0058	12	10		L
Zinc-nickel, Cr-6-free				
406-351	6	7	100	LL
408-351	8	7		
406-361	6	11.5	250	L
408-361	8	11.5		

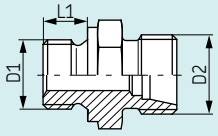
Union nuts to DIN 3861/ISO 8434-1



Order No.	D (Tube ø)	D1	L1		Pressure [bar]	Series
Steel, galvanized surface (Cr-6-free)						
404-302	4	M8×1	11	10		
406-332	6	M10×1	12	12	100	LL
96-5608-0058	8	M12×1	12	14		
96-5610-0058	10	M14×1	12.5	17		
406-302	6	M12×1.5	14.5	14	250	L
408-302	8	M14×1.5	14.5	17	250	L
410-302	10	M16×1.5	16	19		
412-302	12	M18×1.5	16	22		
415-302	15	M22×1.5	18	27	250	L
418-302	18	M26×1.5	18	32		
Stainless steel						
99-5604-0058	4	M8×1	11.5	10	100	LL
406-332-S3	6	M10×1	12	12		
406-302-S3	6	M12×1.5	14.5	14	100	L
99-5612-0058	12	M18×1.5	16	22	250	L
Zinc-nickel, Cr-6-free						
406-352	6	M10×1	11,5	12	100	**LL**
408-352	8	M12×1	12	14		
406-362	6	M12×1,5	14,5	14	250	**L**
408-362	8	M14×1,5	14,5	17		

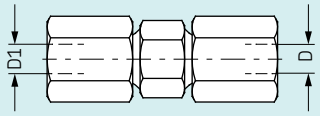
Straight screw-in glands

with short threaded end for screw into thread
for use with a counterbore acc. to DIN 3854 / DIN 3862
for solderless pipe union



Order No.	Tube øD	D1	D2	L1	Series
Steel, galvanized surface (Cr-6-free)					
406-303	6	M10×1	M12×1.5	8	
406-323	6	M10×1 tap.	M10×1	–	
406-333	6	M8×1 tap.	M10×1	–	L
408-313	8	M14×1.5	M14×1.5	9	
410-313	10	M16×1.5	M16×1.5	9	
410-323	10	M14×1.5	M16×1.5	9	

Straight connectors (tube to tube)



Order No.	Tube ø D, D1	Series	Reducing connectors Order No.	Tube ø D	Tube ø D1	Series
Steel, galvanized surface (Cr-6-free)						
404-404	4	LL	**504-410**	6	4	
			504-412	8	4	
406-406	6		**506-410**	8	6	
408-408	8		**506-412**	10	6	
410-410	10	L	**508-410**	10	8	
412-412	12		**506-413**	12	6	
415-415	15		**508-412**	12	8	
418-418	18		**510-410**	12	10	L
			508-413	15	8	
			510-412	15	10	
			512-410	15	12	
			510-413	18	10	
			512-412	18	12	
			515-410	18	15	
Stainless steel						
406-406-S3	6					
408-408-S3	8	L				
410-410-S3	10					
415-415-S3	15					

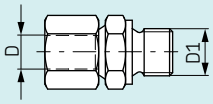
LL-series = extra light version
L-series = light version
S-series = heavy duty version

1) Construction identical to heavy series S.

Fittings

solderless pipe union with cutting-sleeve acc. to DIN EN ISO 8434-1 and DIN 2353

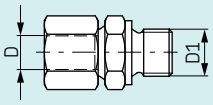
Straight screw-in connectors to DIN 2353 with metrical thread



Order No.	Tube øD	D1	Series
Steel, galvanized surface (Cr-6-free)			
Form C			
406-403	6	M10×1	
406-413	6	M14×1.5	
408-403	8	M12×1.5	
410-403	10	M14×1.5	
410-463	10	M18×1.5	
412-423	12	M14×1.5	
412-403	12	M16×1.5	
412-433	12	M18×1.5	
415-403	15	M18×1.5	L
415-413	15	M22×1.5	
418-403	18	M22×1.5	
96-0319-0058	18	M18×1.5	
96-0322-0058	22	M26×1.5	
96-0328-0058	28	M33×2	
96-0335-0058	35	M42×2	
96-0342-0058	42	M48×2	
Form A			
96-1206-0058	6	M12×1.5	
408-413	8	M14×1.5	
410-413	10	M16×1.5	
412-453	12	M18×1.5	
96-1212-0058	12	M18×1.5	S
96-1214-0058	14	M20×1.5	
96-1216-0058	16	M22×1.5	
96-1220-0058	20	M27×1.5	
96-6002-0058	4	M6×1 tap.	
404-413	4	M8×1 tap.	
404-403	4	M10×1 tap.	
406-443	6	M6 tap.	
406-433	6	M8×1 tap.	LL
406-423	6	M10×1 tap.	
406-446 [1]	6	M6 tap.	
441-008-511	8	M10×1 tap.	
410-443	10	M10×1 tap.	L
Stainless steel			
406-443-S3	6	M6 tap.	
406-433-S3	6	M8×1 tap.	
406-403-S3	6	M10×1	
406-423-S3	6	M10×1 tap.	LL
410-443-S3	6	M10×1 tap.	
441-008-511-S3	8	M10×1 tap.	
410-403-S3	10	M14×1.5	L

1) kurzes Zapfengewinde

Straight screw-in connectors to DIN 2353 with Whitworth pipe thread



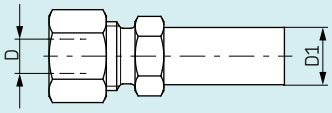
Order No.	Tube øD	D1	Series
Steel, galvanized surface (Cr-6-free)			
Form D			
44-2573-6330	4	G 1/4 A	
406-403W	6	G 1/8 A	
96-0204-0058	6	G 1/4 A	
406-463W	6	G 3/8 A	
96-0203-0058	8	G 1/8 A	
408-403W	8	R 1/4	
408-413W	8	G 3/8 A	
408-453W	8	G 1/2 A	
410-403W	10	G 1/4 A	
410-413W	10	G 3/8 A	
410-433W	10	G 1/2 A	
412-423W	12	G 1/4 A	L
412-403W	12	G 3/8 A	
412-453W	12	G 1/2 A	
415-443W	15	G 3/4 A	
415-403W	15	G 1/2 A	
415-433W	15	G 3/8 A	
418-403W	18	G 1/2 A	
418-413W	18	G 3/4 A	
96-0223-0058	22	G 1/2 A	
96-0222-0058	22	G 3/4 A	
428-413W	28	G 3/4 A	
428-403W	28	G 1 A	
96-1108-0058	8	G 1/4 A	
96-1109-0058	8	G 3/8 A	
96-1111-0058	10	G 1/4 A	
96-1110-0058	10	G 3/8 A	
96-1112-0058	12	G 3/8 A	
96-1113-0058	12	G 1/2 A	S
96-1114-0058	14	G 1/2 A	
96-1117-0058	16	G 3/8 A	
96-1116-0058	16	G 1/2 A	
96-1121-0058	20	G 1/2 A	
96-1120-0058	20	G 3/4 A	
Form B			
404-403W	4	R 1/8 tap.	
406-423W	6	R 1/8 tap.	
408-423W	8	R 1/8 tap.	
96-5909-0058	8	R 1/4 tap.	LL
96-5911-0058	10	G 1/4 tap.	
96-5912-0058	11	G 1/8 tap.	
96-5913-0058	12	G 3/8 tap.	
Stainless steel			
406-403W-S3	6	G 1/8 A	
406-413W-S3	6	G 1/4 A	
99-0204-0058	6	G 1/4 A	
410-403W-S3	10	G 1/4 A	
99-0215-0058	15	G 1/2 A	L
99-0217-0058	15	G 3/8 A	
418-403W-S3	18	G 1/2 A	
99-0222-0058	22	G 3/4 A	
99-0228-0058	28	G 1 A	
406-423W-S3	6	G 1/8 A	LL
408-423W-S3	8	R 1/8 K	

LL-series = extra light version
L-series = light version
S-series = heavy duty version

Fittings

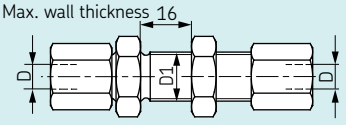
solderless pipe union with cutting-sleeve acc. to DIN EN ISO 8434-1 and DIN 2353

Reducing connectors



Order No.	Tube øD	ø D1
408-406	6	8
410-406	6	10
443-706-121	6	12
443-706-151	6	15
443-706-181	6	18
410-408	8	10
443-708-121	8	12
443-708-151	8	15
443-708-181	8	18
443-710-061	10	8
412-410	10	12
415-410	10	15
443-710-181	10	18
443-712-151	12	15
418-412	12	18
422-412	12	22
443-715-181	15	18

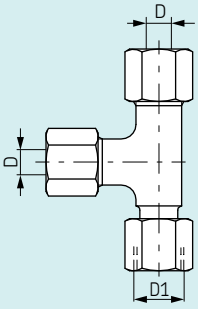
Straight bulkhead connectors



Order No.	Tube øD	ø D1
406-416	6	12.5
408-416	8	14.5
410-416	10	16.5
412-416	12	18.5
415-416	15	22.5
418-416	18	26.5
422-416	22	30.5

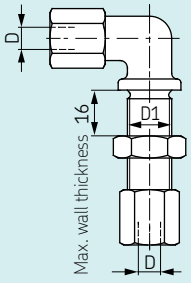
L-screw-in connectors, directionally adjustable

Order No.	Tube ø D	D1	Series
443-406-061	6	M12×1.5	L
443-408-081	8	M14×1.5	
443-410-101	10	M16×1.5	
443-412-121	12	M18×1.5	
443-415-151	15	M22×1.5	
443-418-181	18	M26×1.5	
443-406-351	6	M14×1.5	S
443-408-083	8	M16×1.5	
96-3010-0060	10	M18×1.5	
96-3012-0060	12	M20×1.5	
96-3014-0060	14	M22×1.5	
96-3016-0060	16	M24×1.5	
443-410-211	10	G 3/8 A	S
443-410-161	10	G 1/4 A	L



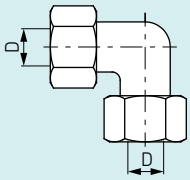
Elbow bulkhead connectors

Order No.	Tube ø D	ø D1
406-409	6	12.5
408-409	8	14.5
410-409	10	16.5
412-409	12	18.5
415-409	15	22.5
418-409	18	26.5
443-190-901	22	30.5



Elbow connectors

Order No.	Tube øD
406-404	6
96-0408-0058	8
410-404	10
412-404	12
443-215-001	15
443-218-001	18
443-290-001	22



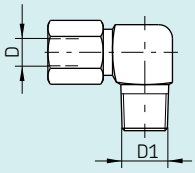
L-series = light version
S-series = heavy duty version

Fittings

solderless pipe union with cutting-sleeve acc. to DIN EN ISO 8434-1 and DIN 2353

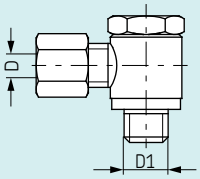
Elbow screw-in connectors with metrical thread

Order No.	Tube ø D	D1	Series
Steel, galvanized surface (Cr-6-free)			
Form F			
96-6202-0058	4	M6 tap.	
404-425	4	M10×1 tap.	
406-445	6	M6 tap.	
406-435	6	M8×1 tap.	LL
406-425	6	M10×1 tap.	
408-425	8	M10×1 tap.	
406-405	6	M10×1 tap.	
408-405	8	M12×1.5 tap.	
410-405	10	M14×1.5 tap.	L
412-405	12	M16×1.5 tap.	
415-405	15	M18×1.5 tap.	
410-425	10	M16×1.5 tap.	S
Stainless steel			
404-405-S3	4	M8×1 tap.	
406-435-S3	6	M8×1 tap.	LL
406-445-S3	6	M6 tap.	



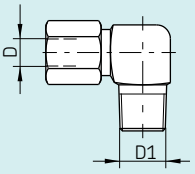
Banjo fittings with metrical thread

Order No.	Tube ø d	d1	Series
Steel, galvanized surface (Cr-6-free)			
445-529-041	4	M8×1	
96-7104-0158	4	M10×1	LL
445-531-061	6	M10×1	
96-7808-0058	8	M12×1.5	
445-535-101	10	M14×1.5	
96-7812-0058	12	M16×1.5	L
96-7815-0058	15	M18×1.5	
96-7818-0058	18	M22×1.5	
96-7822-0058	22	M26×1.5	
96-8006-0058	6	M12×1.5	
96-8008-0058	8	M14×1.5	
96-8010-0058	10	M16×1.5	
96-8012-0058	12	M18×1.5	S
96-8014-0058	14	M20×1.5	
96-8016-0058	16	M22×1.5	
96-8020-0058	20	M27×1.5	
96-7106-0058	6	M10×1	
96-7108-0058	8	M10×1	LL



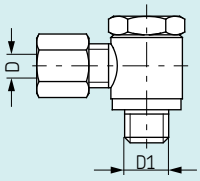
Elbow screw-in connectors with Whitworth pipe thread

Order No.	Tube ø D	D1	Series
Steel, galvanized surface (Cr-6-free)			
Form G			
404-405W	4	R 1/8 tap.	
96-6110-0058	10	R 1/4 tap.	LL
96-6112-0058	12	R 1/4 tap.	
406-405W	6	R 1/8 tap.	
406-515W	6	R 1/4 tap.	
408-425W	8	R 1/8 tap.	
408-405W	8	R 1/4 tap.	
410-405W	10	R 1/4 tap.	L
412-405W	12	R 3/8 tap.	
415-405W	15	R 1/2 tap.	
418-405W	18	R 1/2 tap.	
96-1412-0058	12	R 3/8 tap.	S
96-1414-0058	14	R 1/2 tap.	



Banjo fittings with Whitworth pipe thread

Order No.	Tube ø D	D1	Series
Steel, galvanized surface (Cr-6-free)			
96-7004-0058	4	G 1/8 A	LL
445-519-041	4	G 1/8 A	
445-519-061	6	G 1/8 A	
445-516-061	6	G 1/4 A	
445-516-081	8	G 1/4 A	
445-516-101	10	G 1/4 A	L
445-521-122	12	G 3/8 A	
445-513-181	18	G 1/2 A	
445-517-222	22	G 3/4 A	
96-7906-0058	6	G 1/4 A	
96-7908-0058	8	G 1/4 A	
96-7910-0058	10	G 3/8 A	
96-7912-0058	12	G 3/8 A	S
96-7914-0058	14	G 1/2 A	
96-7916-0058	16	G 1/2 A	
96-7920-0058	20	G 3/4 A	
96-7006-0058	6	G 1/8 A	LL
96-7008-0058	8	G 1/8 A	



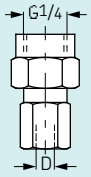
LL-series = extra light version; L-series = light version; S-series = heavy duty version

Fittings

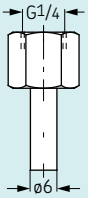
solderless pipe union with cutting-sleeve acc. to DIN EN ISO 8434-1 and DIN 2353

Connectors for pressure gauges

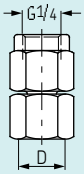
A



B



C



Conus for tube

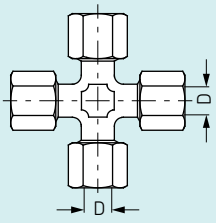
Order No.	Tube ø D	Series
Version A		
406-411	6	L
408-411	8	
410-411	10	
412-411	12	
96-0406-0060	6	S
441-108-132	8	
96-0410-0060	10	
96-0412-0060	12	

Order No.	Tube ø D	Series
Version B		
248-610.01	6	L
Version C		
96-8804-0058	4	S
441-106-162	6	
96-0308-0060	8	L
441-110-163	10	
441-112-162	12	
96-8906-0058	6	S
96-8910-0058	10	
96-8912-0058	12	

Pressure gauge → page 47

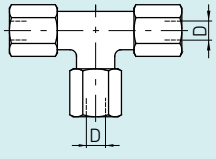
Four-way connectors

Order No.	Tube ø D	Series
96-2106-0058	6	LL
446-308-001	8	
446-310-001	10	
446-312-001	12	
446-315-001	15	
96-2118-0058	18	
96-2122-0058	22	



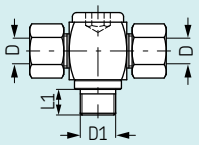
Tee connectors

Order No.	Tube ø D	Series
96-6904-0058	4	LL
406-407	6	L
408-407	8	
410-407	10	
412-407	12	
415-407	15	
418-407	18	
422-407	22	



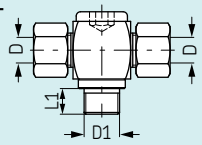
Tee screw-in connectors with metrical thread

Order No.	Tube ø D	D1	L1	Series
96-6404-0058	4	M8×1 tap.	8	LL
96-6406-0058	6	M10×1 tap.		
96-6408-0058	8	M10×1 tap.		
96-0906-0058	6	M10×1 tap.	8	L
96-0908-0058	8	M12×1.5 tap.	12	L
445-910-551	10	M14×1.5 tap.		
96-0912-0058	12	M16×1.5 tap.		
96-0915-0058	15	M18×1.5 tap.		
96-1806-0058	6	M12×1.5 tap.	12	S
96-1808-0058	8	M14×1.5 tap.		
96-1810-0058	10	M16×1.5 tap.		
96-1812-0058	12	M18×1.5 tap.		
96-1814-0058	14	M20×1.5 tap.	11	S
96-1816-0058	16	M22×1.5 tap.		
445-735-101	10	M14×1.5	12	L
445-739-151	15	M18×1.5	14	



Tee screw-in connectors with Whitworth pipe thread

Order No.	Tube ø D	D1	L1	Series
96-6304-0058	4	R 1/8 tap.	8	LL
96-6306-0058	6	R 1/8 tap.		
96-6308-0058	8	R 1/8 tap.		
96-0806-0058	6	R 1/8 tap.	8	L
96-0808-0058	8	R 1/4 tap.	12	L
96-0810-0058	10	R 1/4 tap.		
96-0812-0058	12	R 3/8 tap.		
96-0815-0058	15	R 1/2 tap.		
96-0818-0058	18	R 1/2 tap.	14	L
96-1706-0058	6	R 1/4 tap.	12	S
96-1708-0058	8	R 1/4 tap.		
96-1710-0058	10	R 3/8 tap.		
96-1712-0058	12	R 3/8 tap.		
96-1714-0058	14	R 1/2 tap.	14	S
96-1716-0058	16	R 1/2 tap.		
445-721-121	12	G 3/8 A	12	L
445-713-151	15	G 1/2 A	14	L
445-717-221	22	G 3/4 A		

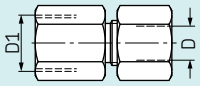


LL-series = extra light version; L-series = light version; S-series = heavy duty version

Fittings

solderless pipe union with cutting-sleeve acc. to DIN EN ISO 8434-1 and DIN 2353

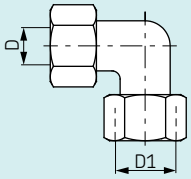
Straight screw-in fitting



Order No.	Tube øD	D1	Series
96-0506-0060	6	M10×1	
96-0508-0060	8	M12×1.5	
96-0510-0060	10	M14×1.5	
96-0512-0060	12	M16×1.5	L
96-0515-0060	15	M18×1.5	
96-0518-0060	18	M22×1.5	
96-0522-0060	22	M26×1.5	
96-0606-0060	6	M12×1.5	
96-0608-0060	8	M14×1.5	
96-0610-0060	10	M16×1.5	
96-0612-0060	12	M18×1.5	S
96-0614-0060	14	M20×1.5	
96-0616-0060	16	M22×1.5	
96-0620-0060	20	M27×2	
96-0706-0060	6	G 1/8 A	
96-0708-0060	8	G 1/4 A	
96-0709-0060	8	G 3/8 A	
96-0710-0060	10	G 1/4 A	
96-0711-0060	10	G 3/8 A	L
96-0712-0060	12	G 3/8 A	
96-0713-0060	12	G 1/2 A	
96-0715-0060	15	G 1/2 A	
96-0718-0060	18	G 1/2 A	
96-0722-0060	22	G 3/4 A	

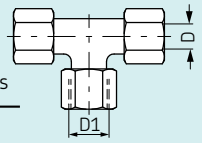
Elbow female thread unions

Order No.	Tube øD	D1
443-306-341	6	M12×1.5
443-306-343	6	M14×1.5
443-308-351	8	M14×1.5



Tee female thread unions

directionally adjustable



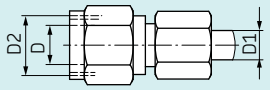
Order No.	Tube øD	D1	Series
96-3106-0060	6	M12×1.5	
445-808-351	8	M14×1.5	
445-810-371	10	M16×1.5	
96-3112-0060	12	M18×1.5	L
96-3115-0060	15	M22×1.5	
96-3118-0060	18	M26×1.5	
96-3122-0060	22	M30×1.5	
445-806-351	6	M14×1.5	
96-3208-0060	8	M16×1.5	
96-3210-0060	10	M18×1.5	
96-3212-0060	12	M20×1.5	S
96-3214-0060	14	M22×1.5	
96-3216-0060	16	M24×1.5	
96-3220-0060	20	M30×1.5	

LL-series = extra light version
L-series = light version
S-series = heavy duty version

Fittings

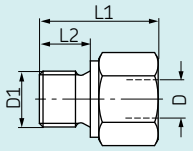
solderless pipe union with cutting-sleeve acc. to DIN EN ISO 8434-1 and DIN 2353

Reducing connections



Order No.	Tube øD	Tube øD1	D2	Series
96-1406-0060	6	4	M10×1	
96-1408-0060	8	4	M12×1	LL
96-1410-0060	8	6	M12×1	
96-1508-0060	8	6	M14×1.5	
96-1511-0060	10	6	M16×1.5	
96-1523-0060	12	10	M18×1.5	
96-1532-0060	15	8	M22×1.5	
96-1533-0060	15	10	M22×1.5	
96-1541-0060	18	6	M26×1.5	
96-1542-0060	18	8	M26×1.5	L
96-1543-0060	18	10	M26×1.5	
96-1545-0060	18	15	M26×1.5	
96-1551-0060	22	6	M30×2	
96-1555-0060	22	15	M30×2	
96-1556-0060	22	18	M30×2	
96-1610-0060	8	6	M16×1.5	
96-1611-0060	10	6	M18×1.5	
96-1612-0060	10	8	M18×1.5	
96-1621-0060	12	6	M20×1.5	
96-1622-0060	12	8	M20×1.5	
96-1623-0060	12	10	M20×1.5	
96-1631-0060	14	6	M22×1.5	
96-1632-0060	14	8	M22×1.5	
96-1633-0060	14	10	M22×1.5	
96-1634-0060	14	12	M22×1.5	
96-1641-0060	16	6	M24×1.5	S
96-1642-0060	16	8	M24×1.5	
96-1643-0060	16	10	M24×1.5	
96-1644-0060	16	12	M24×1.5	
96-1645-0060	16	14	M24×1.5	
96-1651-0060	20	6	M30×2	
96-1652-0060	20	8	M30×2	
96-1653-0060	20	10	M30×2	
96-1654-0060	20	12	M30×2	
96-1655-0060	20	14	M30×2	
96-1656-0060	20	16	M30×2	

Reducing connections, sealing by sealing edge



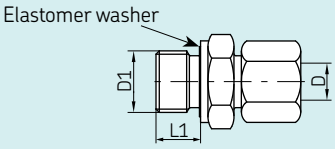
Order No.	D1	Tube øD	L1	L2
401-016-191	G 1/8 A	G 1/4	31	8
96-3116-0058	G 1/4 A	G 1/8	28	12
96-3117-0058	G 1/4 A	G 3/8 A	36	12
96-3118-0058	G 1/4 A	G 1/2	40	12
96-3101-0058	G 3/8 A	G 1/8	22,5	12
96-3120-0058	G 3/8 A	G 1/4	36	12
96-3121-0058	G 3/8 A	G 1/2	41	12
96-3122-0058	G 3/8 A	G 3/4	44	12
401-016-132	G 1/2 A	G 1/4	24	14
96-3102-0058	G 1/2 A	G 1/8	24	14
96-3123-0058	G 1/2 A	G 3/8	36	14
96-3124-0058	G 1/2 A	G 3/4	46	14
96-3125-0058	G 1/2 A	G 1	49	14
96-3126-0058	G 1/2 A	G 1 1/4	53	14
401-016-171	G 3/4 A	G 1/4	26	16
96-3105-0058	G 3/4 A	G 3/8	26	16
96-3127-0058	G 3/4 A	G 1/2	41	16
96-3128-0058	G 3/4 A	G 1	51	16
96-3129-0058	G 3/4 A	G 1 1/4	55	16
401-013-111	R 1 A	R 1/2	29	18
401-021-111	G 1 A	G 3/8	29	18
96-3106-0058	G 1 A	G 1/4	29	18
96-3131-0058	G 1 A	G 3/4	47	18
96-3132-0058	G 1 A	G 1 1/4	57	18
96-3133-0058	G 1 A	G 1 1/2	59	18
96-3109-0058	G 1 1/4 A	G 1/2	32	20
96-3110-0058	G 1 1/4 A	G 3/4	32	20
96-3134-0058	G 1 1/4 A	G 1	52	20
96-3111-0058	G 1 1/2 A	G 1/2	36	22
96-3112-0058	G 1 1/2 A	G 3/4	36	22
96-3113-0058	G 1 1/2 A	G 1	36	22
96-3136-0058	G 1 1/2 A	G 1 1/4	58	22
96-3137-0058	G 2 A	G 1 1/2	62	24

LL-series = extra light version
L-series = light version
S-series = heavy duty version

Fittings

solderless pipe union with cutting-sleeve acc. to DIN EN ISO 9974-1/DIN 2353 and elastomer washer

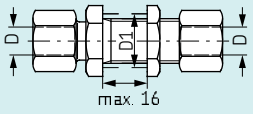
Straight screw-in connectors with elastomer washer and E02 function nut



Order No.	Tube øD	D1	L1	3
471-004-191 [1]	4	G 1/8 A	16	
471-004-311 [1]		M10×1		
471-006-192	6	G 1/8 A	8	
471-006-161		G 1/4 A	12	
471-006-311		M10×1	8	
471-006-351		M14×1.5	8	
471-008-130	8	G 1/8	8	
471-008-161		G 1/4 A	12	
471-008-131		G 1/2	14	
471-008-211		G 3/8 A	12	
471-008-314		M10×1	14	
471-008-345		M12×1.5	12	
471-008-351		M14×1.5	12	
471-008-391		M18×1.5	11	
471-010-161	10	G 1/4 A	12	
471-010-211		G 3/8 A	12	
471-010-312		M10×1	15	
471-010-351		M14×1.5	12	
471-010-391		M18×1.5	11	
471-012-161	12	G 1/4 A	12	
471-012-211		G 3/8 A		
471-012-391		M18×1.5		
471-015-131	15	G 1/2 A	14	

[1] LL-series (extra light version)

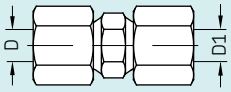
Straight bulkhead connectors with E02 function nut



Order No.	Tube øD	D1
474-606-331	6	12.5
474-608-351	8	14.5
474-610-351	10	16.5
474-612-391	12	18.5
474-615-431	15	22.5
474-618-441	18	26.5

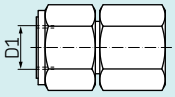
Max. operating pressure 315 bars

Straight connectors (tube to tube) with E02 function nut



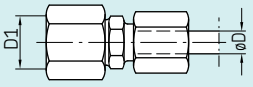
Order No.	Tube øD, D1
474-506-061	6
474-508-081	8
474-510-101	10
474-512-121	12
474-515-151	15
474-518-181	18

Straight connectors using a threaded pin and E02 function nut



Order No.	Tube øD	D1	Threaded pin
471-106-311	6		
471-108-311	8	M10×1	**406-243-B**
471-110-311	10		
471-106-331	6		
471-108-331	8	M12×1	**408-243-B**
471-110-331	10		

Reducing connectors with E02 function nut



Order No.	Tube øD	D1
473-806-351	6	M14×1.5
473-806-391	6	M20×1.5
473-808-371	8	M16×1.5
473-808-392	8	
473-810-391	10	M18×1.5
473-810-371 [1]	10	

[1] S-series (heavy duty version)

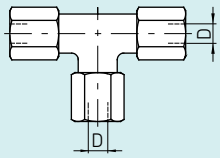
The cutting sleeve screw unions shown correspond to the L-series (light version).

Fittings

solderless pipe union with cutting-sleeve acc. to DIN EN ISO 9974-1/DIN 2353 and elastomer washer

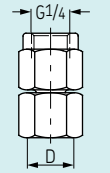
Tee connectors
with E02 function nut

Order No.	Tube øD
476-006-001	6
476-008-001	8
476-010-001	10
476-012-001	12
476-015-001	15



Connectors for pressure gauges
with E02 function nut

Order No.	Tube øD
471-106-163	6
471-108-163	8
471-110-163	10
471-112-163	12



for tube ø10

The cutting sleeve screw unions shown correspond to the L-series (light version).

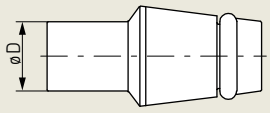
Accessories

Solderless pipe union with cutting-sleeve according to DIN EN ISO 9974-1 and DIN 2353

Cone plugs

Order No.	Tube ø D
460-706-001	6
460-708-001	8
460-710-001	10
460-712-001	12

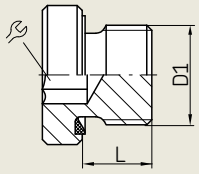
Cone plug



Screw plugs with elastomer seal

Order No.	D1	L	
466-411-001	G 1 A	16	17
466-413-001	G 1/2 A	14	10
466-416-001	G 1/4 A	12	6
466-418-001	G 3/4 A	16	12
466-439-001	M18×1.5	12	8

Screw plug



Screw plugs with profile seal according to DIN 3869

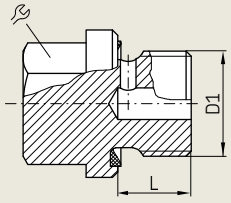
Order No.	D1	L	
466-419-001	G 1/8 A	8	5
466-429-001	M8×1	8	4
466-431-001	M10×1	8	5

Vent plugs with profile seal according to DIN 3869

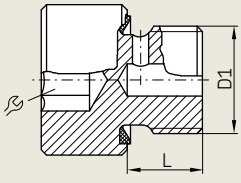
Order No.	D1	L		Fig.
466-431-006	M10×1	7	10	a
466-431-005 **466-431-009**	M10×1 G 1/8 A	7	5	b

Vent plug

a)



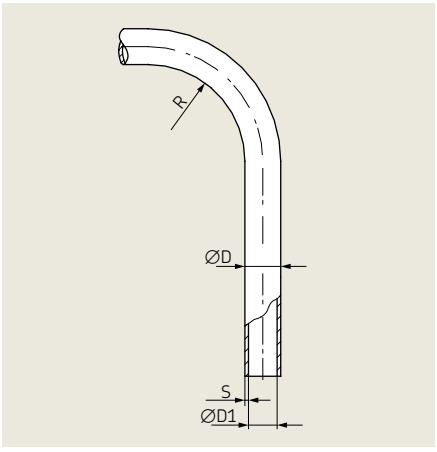
b)



More screw plugs → page 12

Tubes and hoses

Steel tubing



Steel tubing

Order No.	ø D [mm]	S [mm]	ø D1 [mm]	Minimum bending radius R [1] [mm]	Permissible operating pressure [2] [bar]	Burst pressure [bar]
Steel tubing, galvanized surface (Cr-6 free)						
WV-R06×0.7 VERZI	6 ±0.05	0.7	4.6 ±0.11	12	320	850
WV-R08×0.7 VERZI	8 ±0.05	0.7	6.6 ±0.11	19	230	675
WV-R010×0.7 VERZI	10 ±0.05	0.7	8.6 ±0.13	27	180	550
Steel tubing nach EN10305-4, verzinkt, Cr-6-frei						
982-120-041	4 ±0.05	0.7	2.6 ±0.10	12	368	952
982-120-040	4 ±0.08	1.0	2 ±0.15	12	500	1360
982-120-060	6 ±0.08	1.0	4 ±0.12	18	372	963
982-120-080	8 ±0.08	1.0	6 ±0.10	24	288	723
982-120-100	10 ±0.08	1.0	8 ±0.08	30	248	612
982-120-120	12 ±0.08	1.5	9 ±0.10	36	303	765
982-120-150	15 ±0.08	1.5	12 ±0.08	45	248	612
982-120-180	18 ±0.08	1.5	15 ±0.08	54	209	510
Stainless steel (material 1.4571)						
D1127R02.5x0.5+A46	2,5 ±0.03	0.5	1.5 +0.05	7,5	386	1664
DIN2462-R04×1+A46	4 ±0.1	1	2 ±0.2	12	466	2080
DIN2462-R06×1+A46	6 ±0.1	1	4 ±0.2	18	347	1473
DIN2462-R08×1+A46	8 ±0.1	1	6 ±0.2	24	269	1105
DIN2462-R010×1+A46	10 ±0.1	1	8 ±0.2	30	231	936

Temperature range –25 to +80 °C

1) For cold bending with bending device or by hand with grooved disk.
2) Dynamic load according to DIN 2413

Tube bending device

ø steel pipeline [mm]	Order No.
4, 6, 8, 10	**248-803.20**
12 (special grooved disk) [3]	**248-803.17**
4 (retro fitting set) [4]	**248-803.16**

3) To bend pipes with 12 mm diameter, the special grooved disk **248-803.17** must be ordered in addition to pipe bending device **248-803.20**.

4) Retro fitting set with grooved disk for older pipe bending devices **248-803.20**.

Tube bending device

Tubes and hoses

Technical data

How to use the configurator

Please be aware of the following:
- Both accessories should have the same coating.
- The minimum order length is 230 mm.
- For customer-specific versions, the labels must be specified manually.
- Customer-specific markings can be made by labels, imprint or with clips (→ example page 45).
- 3-D models and order code are online configurable on **skf-lubrication.partcommunity.com**

Technical data

Plastic tubing

semirigid (without plasticizer)	**PA12H (natural)** **polyamide 12, semirigid, unplasticized as per DIN 73378, stabilized against heat and ageing**	**PA12HL (black tubing)** **polyamide 12, semirigid, unplasticized as per DIN 73378, stabilized against light, heat and ageing,** lowest moisture absorption	**PA6.12 (black tubing)** [1] **polyamide**, semi-rigid, high impact resistance, low moisture absorption, heat stabilized
Material code	A	A	C
Temperature range	–60 to +80 °C	–60 to +80 °C	–60 to +110 °C
flexible (containing plasticizer)	**PA12PH (natural)** **polyamide 12, flexible, containing plasticizer as per DIN 73378, stabilized against heat and ageing**	**PA12PHL (black tubing)** **polyamide 12, flexible, containing plasticizer as per DIN 73378, stabilized against light, heat, and ageing**	
Material code	B	B	
Temperature range	–60 to +80 °C	–60 to +80 °C	

High pressure hose

NW4 (tube outside ∅ 8,6 mm) **NW6** (tube outside ∅ 11,3 mm)	**PUR** (black tubing)	Inner hose Pressure reinforcement Sheathing	polyamide, soft polyester high strength polyurethane
Material code	D		
Temperature range	–40 to + 70 °C		
NW8 (tube outside ∅ 16,5 mm)	**BUNA (black)**	Inner hose and sheathing	synthetic rubber
Material code	E		
Temperature range	–40 to + 100 °C		

1) alternative PA6.10 or PA12HL possible

Pressure utilization factor

Temperature up to [°C]	23	30	40	50	60	70	80
Pressure efficiency [%]	100	83	72	64	57	52	47

The pressure utilization factor indicates the percentage utilization of effective stress available in the specified temperature ranges, based on 23 °C.

Tubes and hoses

Configurator high pressure hose

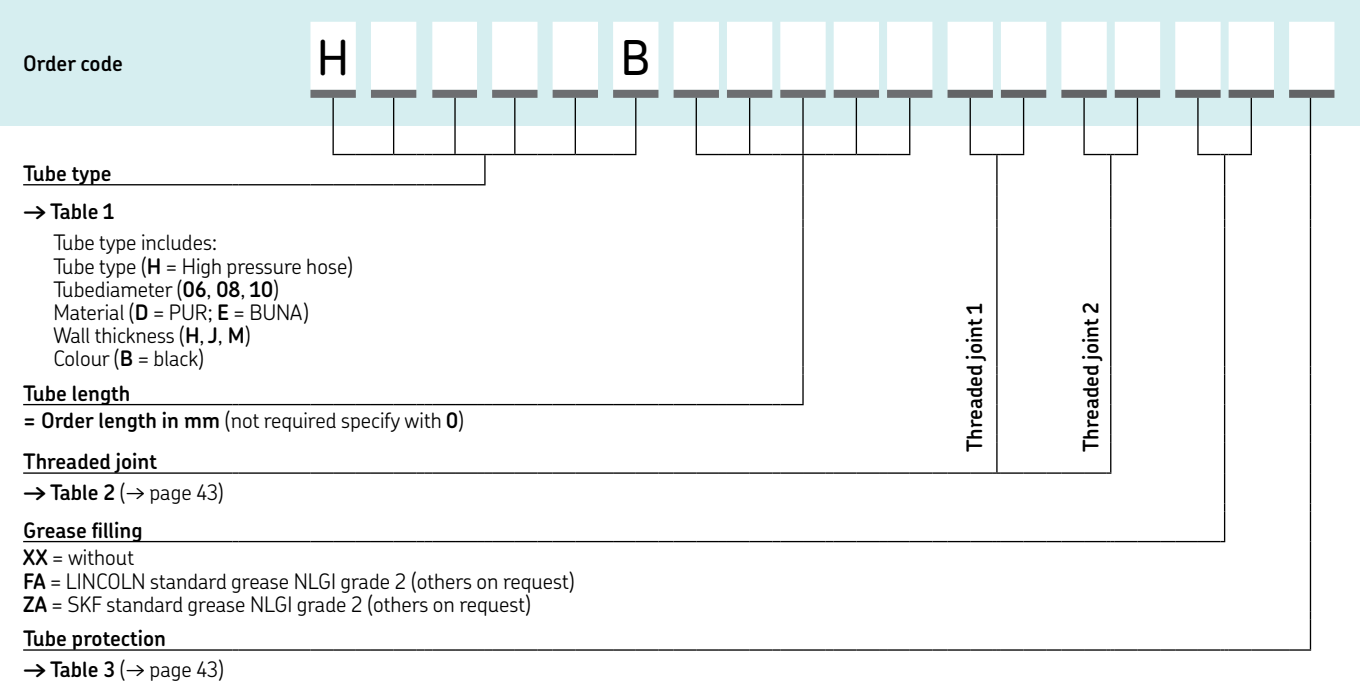


Tabelle 1

Tube type

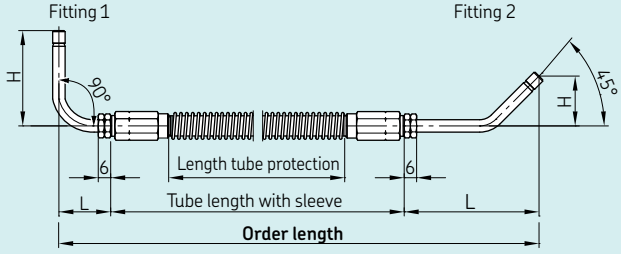
Tube type Tube∅ Material Wall thickness Colour	Tube outside ∅ [mm]	Wall thick-ness [mm]	Min. bending radius [1] [mm]	Burst pres-sure [2] [bar]	Length 50 m Order No.
Code					
H 06 D H B	8,6	2,3	35	840	982-750-091 111-35114-1
H 08 D J B	11	2,5	45	840	982-750-111 111-35301-4
H 10 E M B	16,5	4,5	55	520	WVN711-10

[1] without bending device

[2] The permissible burst pressure is lower at higher temperatures (→ pressure utilization factor table, page 41).

Order example high pressure hose

Order code: **H06DHB02500BCBDZADXXXXX**



- High pressure hose
- Tube outside ∅ 8,6 mm (NW 4)
- Material PUR
- Wall thickness 2.3 mm
- Black tubing
- Tube length 2500 mm
- Tube stud ∅6 mm, 90° angle
- Tube stud ∅6 mm, 45° angle
- SKF standard grease
- Corrugated hose NW10

→ Online configurable on **skf-lubrication.partcommunity.com**

Tubes and hoses

Threated joint, tube protection

Table 2

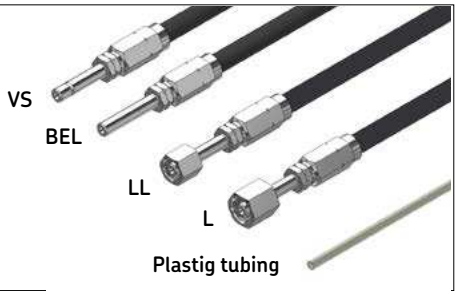
Threated joint for high pressure hoses H06, H08, H10

	Tube stud	L [mm]	H [mm]	Tube ØD [mm]	Order No. [1]	Code
Stainless steel						
BEL	straight	36		6	855-380-002	**CA**
	90° abgewinkelt	19	21	6	855-380-003	**CB**
VS	straight	39		6	855-380-002-VS	**CC**
	90° abgewinkelt	19	35	6	855-380-003-VS	**CD**
Zinc-nickel, Cr-6-free						
VS	straight	32		6	853-370-002-VS	**AA**
	straight	39		6	853-380-002-VS	**AB**
	90° angle	19	35	6	853-380-003-VS	**AC**
	45° angle	40	23	6	853-380-004-VS	**AD**
	45° angle	65	18	6	853-380-007-VS	**AE**
	straight	75		6	853-390-002-VS	**AF**
	90° angle	30	50	6	853-390-003-VS	**AG**
	45° angle	65	24	6	853-390-004-VS	**AH**
	30° angle	70	17	6	853-390-005-VS	**AJ**
	straight	39		8	406-708-005-VS	**DA**
BEL	straight	26		6	853-370-002	**BA**
	straight	36		6	853-380-002	**BB**
	90° angle	19	21	6	853-380-003	**BC**
	45 angle	23	11	6	853-380-004	**BD**
	straight	75		6	853-390-002	**BE**
	90° angle	30	50	6	853-390-003	**BF**
	90° angle	30	36	6	853-390-004	**BG**
	straight	26		8	406-708-005	**EA**
	straight	32		8	406-708-006	**EB**
	straight	53		8	406-708-007	**EC**
	90° angle	25	34	8	406-708-008	**ED**
	45° angle	43	26	8	406-708-009	**EE**
	straight	35		10	406-710-002	**FA**
LL	straight	26		6	853-370-002	**PA**
	straight	36		6	853-380-002	**PB**
	90° angle	19	22	6	853-380-003	**PC**
	45° angle	23	11	6	853-380-004	**PD**
	straight	75		6	853-390-002	**PE**
	90° angle	30	50	6	853-390-003	**PF**
	90° angle	30	36	6	853-390-004	**PG**
	straight	26		8	406-708-005	**PJ**
	straight	32		8	406-708-006	**PK**
	straight	53		8	406-708-007	**PL**
	90° angle	25	34	8	406-708-008	**PM**
	45° angle	43	26	8	406-708-009	**PN**
L	straight	26		6	853-370-002	**SA**
	straight	36		6	853-380-002	**SB**
	straight	75		6	853-390-002	**SE**
	90° angle	30	50	6	853-390-003	**SF**
	90° angle	30	36	6	853-390-004	**SG**
	straight	26		8	406-708-005	**SJ**
	straight	32		8	406-708-006	**SK**
	straight	53		8	406-708-007	**SL**
	90° angle	25	34	8	406-708-008	**SM**
	45° angle	43	26	8	406-708-009	**SN**

VS = quick connector
BEL = for solderless pipe union with cutting-sleeve
LL = extra light version [2] [3]
L = light version [2] [3]

[1] incl. sleeve → table 4
[2] EO, metallic sealing
[3] utting sleeves and union nuts → page 30

Fitting version



Tube protection

Table 3

Tube protection

Designation	Ø [mm]	Tube type	order No.	Code
without				**X**
Polypropylene				
Spiral hose	6–9	T06, T08, H06	982-760-102	**A**
Spiral hose	10–16	T10, H08, H10	982-760-172	**A**
Polyethylene, black colour				
Protective helix	5–20	T06, T08	113-35075-2	**B**
Protective helix	9–30	T10, H08, H06, H10	113-35075-3	**B**
Stainless steel				
Anti-kink coil	6.1	T06	982-760-122	**C**
Anti-kink coil	10.6	T08, T10, H06	982-760-132	**C**
Anti-kink coil	12.5	H08	982-760-142	**C**
Anti-kink coil	17	H10	111-35306-5	**C**
Polyamide 6, black colour				
Corrugated hose NW8	8.4	T06, T08	982-760-120	**D**
Corrugated hose NW10	10	T10, H06	982-760-130	**D**
Corrugated hose NW12	12.3	H08	982-760-160	**D**

Table 4

Sleeve for high pressure hoses H06, H08, H10

Bestell-Nr.	Tube Ø [mm]	L1 [mm]	Length of engaged thread [1] [mm]
Stainless steel			
432-23676-1	6	28	17
Zinc-nickel, Cr-6-free			
853-540-010	6	28	17
406-808-005	8	35	23
406-810-002	10	41	32

[1] Take length of engaged thread and double it when determining the length of the hose.

Tubes and hoses

Configurator plastic tubing

Bestellcode

T | | | | | | | | | | | X X X X | | |

Tube type

→ **Table 5**

Tube type includes:
Tube type (**T** = Plastic tubing)
Tubediameter (**02**, **04**, **06**, **08**, **10**)
Material (**A** = PA12H(L), **B** = PA12PH(L), **C** = PA6.12 [1])
Wall thickness (**A**, **C**, **D**, **E**, **F**)
Colour (**B** = black, **T** = nature)

Tube length

= Order length in mm (not required specify with **0**)

Grease filling

XX = without
FA = LINCOLN standard grease NLGI grade 2 (others on request)
ZA = SKF standard grease NLGI grade 2 (others on request)

Tube protection (fixed on pipe)

→ **Table 3** (→ page 43)

[1] alternative PA6.10 or PA12HL possible

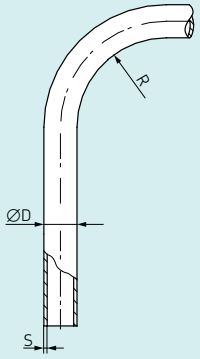
Tabelle 1

Tube type Tube type	Tube∅	Material	Wall thickness	Colour	Tube outside ØD [mm]	Wall thickness S [mm]	Min. bending radius [2] R [mm]	Burst pressure [3] [bar]	Length 50 m Order No.
Code									
Plastic tubing semirigid (without plasticizer)									
T	**02**	**A**	**A**	**T**	2,5	0,5	25	198	WVN715-R02.5x0.5
T	**04**	**A**	**C**	**T**	4	0,85	38	216	WVN715-R04x0.85
T	**04**	**A**	**C**	**B**	4	0,85	38	216	WVN715R04x0.85+A89
T	**04**	**A**	**D**	**B**	4	1	30	267	WVN715-R04x1+A89 112-35127-7
T	**04**	**A**	**D**	**T**	4	1	30	267	112-35127-5
T	**06**	**A**	**D**	**T**	6	1	63	159	WVN715-R06x1
T	**06**	**A**	**E**	**T**	6	1,25	63	210	WVN715-R06x1.25
T	**06**	**A**	**E**	**B**	6	1,25	63	210	WVN715R06x1.25+A89
T	**06**	**A**	**F**	**B**	6	1,5	40	267	WVN715-R06x1.5+A89
T	**06**	**C**	**F**	**B**	6	1,5	40	267	112-35127-2
T	**08**	**A**	**E**	**T**	8	1,25	76	147	WVN715-R08x1.25
T	**10**	**A**	**F**	**T**	10	1,5	89	141	WVN715-R010x1.5
T	**10**	**A**	**F**	**B**	10	1,5	89	141	WVN715R010x1.5+A89
Plastic tubing flexible (containing plasticizer)									
T	**04**	**B**	**C**	**T**	4	0,85	38	108	WVN716-R04x0.85
T	**04**	**B**	**C**	**B**	4	0,85	38	108	WVN716R04x0.85+A89
T	**04**	**B**	**D**	**B**	4	1	27	132	112-35225-4
T	**06**	**B**	**E**	**T**	6	1,25	63	105	WVN716-R06x1.25
T	**06**	**B**	**E**	**B**	6	1,25	63	105	WVN716R06x1.25+A89
T	**08**	**B**	**E**	**T**	8	1,25	80	75	WVN716-R08x1.25

[2] without bending device
[3] The permissible burst pressure is lower at higher temperatures (→ pressure utilization factor table, page 41).

Order example plastic tubing

Order code: **T06CFB02500XXXXFAX**



- Plastic tubing
- Tube outside ∅ 6 mm
- Material PA6.12
- Wall thickness 1.5 mm
- Black tubing
- Tube length 2500 mm
- Lincoln standard grease
- without tube protection

→ Online configurable on **skf-lubrication.partcommunity.com**

Tubes and hoses

Threated joint, tube protection

Customer-specific markings can be made by labels, imprint or with clips. They are part of the customer-specific order number, which consists of the first 11 digits of the order code (→ page 42), a hyphen, and a 6-digit counting number

Order code [1] H06DHB02500BCBDZAX _ _ _ _ X

Marking
→ **Table 6**

Torsion angle (on request)

[1] The customer-specific design has a 23-digit order code; the customer-specific order number has 18 digits.

Marking

Table 6

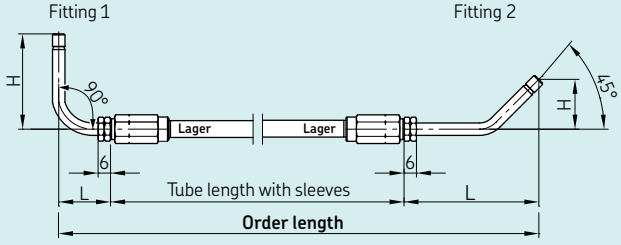
Marking

Display	Code
without	**XX**
Imprint	**AA**
Label 1-line	**L1**
Label 2-line	**L2**
Label 3-line	**L3**
CLIP 1-digit	**C1**
CLIP 2-digit	**C2**
CLIP 3-digit	**C3**
CLIP 4-digit	**C4**
CLIP 5-digit	**C5**

Example for customized version with marking

Order code: H06DHB02500BCBDZAXAAAAX
Customized order No. **H06DHB02500-000001**

- High pressure hose
- Tube outside ∅ 8,6 mm (NW 4)
- Material PUR
- Wall thickness 2.3 mm
- Black tubing
- Tube length 2500 mm
- Tube stud ∅ 6 mm, 90° angle
- Tube stud ∅ 6 mm, 45° angle
- SKF standard grease
- without tube protection
- with imprint
- without torsion angle (only for use on pressed tube sleeves, only on request)



Self-installation of high pressure hoses

Example for self-installation of high pressure hoses

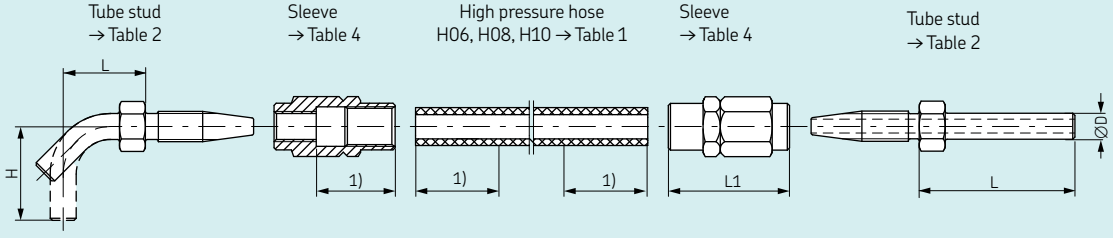
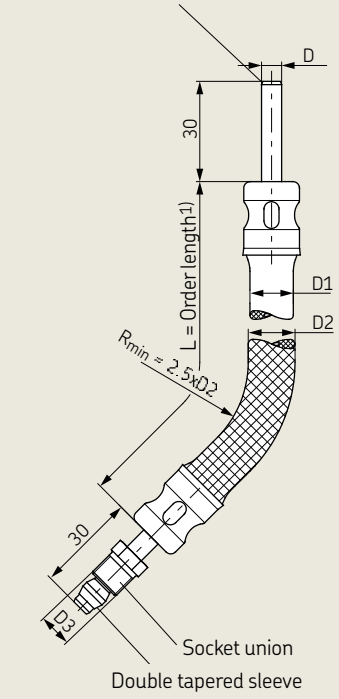


Table 1 → page 42
Table 2, 4 → page 43

1) Take length of engaged thread and double it when determining the length of the hose.

Tubes and hoses

Hoses



Hoses for main lines, operating pressure 45 bar (for short time only)

Order No. 1) 2)	With tapered sleeve and socket union on both ends Order No. 1)	Tube ø D	Thread D3	Rubber ø D1	Metal-braided D2	Max. increase in volume at ~ 80 bar [cm³/m]
Standard						
714-...(-VS)	**714-...-K**	4	M8×1	11	12 ±0.5	2.5
716-...(-VS)	**716-...-K**	6	M10×1	13	14 ±0.8	3.6
718-...(-VS)	**718-...-K**	8	M14×1.5	15	16 ±0.8	4.4
Metal-braided						
714-...-M(-VS)	**714-...-MK**	4	M8×1	11	12 ±0.5	2.5
716-...-M(-VS)	**716-...-MK**	6	M10×1	13	14 ±0.8	3.6
718-...-M(-VS)	**718-...-MK**	8	M14×1.5	15	16 ±0.8	4.4

Material: Hose: mineraloilresistant CR rubber inside; 2 layers of braided rayon; outside rubber conditionally oilresistant, resistant to light cracks and ozone. Metal braid: galvanized steel wire; tube ends: galvanized steel tubing.

Hoses for secondary lines, operating pressure 15 bars (for short time only)

Order No. 1)	With claw groove for quick connectors Order No. 1) 2)	With tapered sleeve and socket union on both ends Order No. 1)	Tube ø D	Thread D3	Rubber D1
734-... 3)	**734-...-VS 3)**	**734-...-K 3)**	4	M8×1	8.8

Material: Hose: oilproof rubber inside and outside with a layer of braided rayon
Tube ends: steel tubing
The ends of the tubing are bonded to the hose and cannot be detached.

1) Order length in mm; other lengths available. Standardized lengths ±5 mm with ø 4 tubing: 180, 220, 260, 300, 380, 420, 450, 500, 580
with ø 6 tubing: 220, 300, 340, 380, 420, 500, 580
with ø 8 tubing: 340, 450, 580

2) For Version with claw groove on ends of tubing for quick connectors, Order No.: ...-VS → page 25.

3) **Important note:** To avoid damages do not use these hoses as main lines but only to connect distributors to lube points.

Permissible operating temperature: –30 °C to +70 °C

Order examples:
Standard with socket unions and tapered sleeves, ø4 tubing, 300 mm long, order No.: **714-300-K**
Standard, ø4 tubing with claw groove for quick connectors, 300 mm long, order No.: **714-300-VS**
Metal-braided, ø6 tubing, 420 mm long, order No.: **716-420-M**
Metal-braided, ø8 tubing with claw groove for quick connectors 450 mm long, order No.: **718-450-M-VS**

Tubes and hoses

Hoses

Hoses suitable for self-installation, operating pressure 45 bars

Tube ø D	① Male body Order No.		② Shell Order No.		③ Hose Order No. [1]	Hose D1	Increase in volume at ~40 bars [cm³/m]
4	**406-704-001 (-VS) [2]**	8	**406-804-001**	14	**WVN701-4**	11	1
6	**406-706-001 (-VS) [2]**	10	**406-806-001**	17	**WVN701-6**	13	1.4
8	**406-708-001 (-VS) [2]**	13	**406-808-001**	19	**WVN701-8**	15	1.4

1) Please quote length when ordering. Max. length available 20 m.
2) For version with claw groove on ends of tubing for quick connectors, order No.: ...-VS

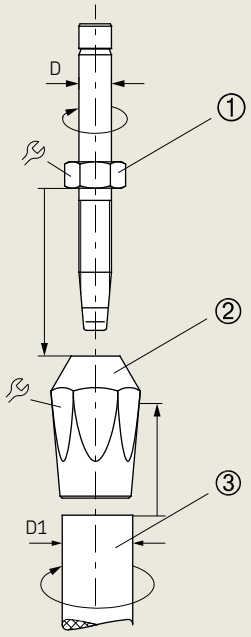
Material: Hose: Perbunan, resistant to mineral oils, with two layers of braided rayon
Male body: steel, galvanized
Shell: brass

Permissible operating pressure: –40 to +100 °C

Installation instructions

a) Apply thin film of oil to thread and inside of hose of parts ③ ② ① to be connected.
b) Clamp shell ② in vise and screw in hose ③ by turning it to the left up to the stop.
c) **Important note**: To avoid damages screw in male body ① with a wrench up to the stop. **Do not tighten!**

Hose



Accessories

Quick-disconnect couplings

Quick-disconnect couplings, operating pressure 45 bars

Coupling, complete

Order No.	Tube ø	D1 [1)]	L2	Durchfluss-richtung
207-168-2	6	M10×1	65	beliebig
207-188-2	8	M14×1,5	71,5	

Outer coupling member

Order No.	Tube ø	L1
207-168.U7	6	51,5
207-188.U11	8	58

Inner coupling member

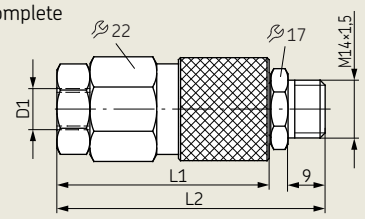
Order No. 207-168.U2

Both coupling members are shut off when disconnected!

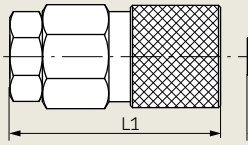
1) Ports tapped for solderless tube connection

Quick-disconnect couplings, operating pressure 45 bars

Coupling, complete



Outer coupling member



Inner coupling member

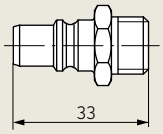
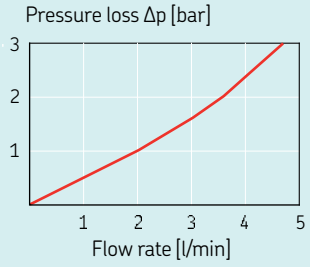


Diagram 1

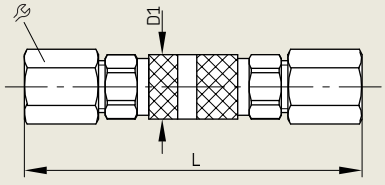


Pressure loss as a function of the flow rate based on an operating oil viscosity of 140 mm²/s

Quick-disconnect couplings, operating pressure 100 bars

Order No.	Tube ø	L	D1	
995-001-525	4	68	10	10
995-001-526	6	80	15	12

Quick-disconnect couplings, operating pressure 100 bars



Accessories

Filler coupling for oil and fluid grease

Coupling plugs

Order No.	øA	L	Respective dust cover Order No.	Respective coupling socket Order No.
995-001-096	G1/4	39	**995-001-235**	**–**
995-001-501	G1/4	57.5	**995-001-503**	**995-002-073**
995-001-502	G1/2	82	**995-001-504**	**995-001-950**
995-000-705	G1/4	–	**–**	**995-001-500**
995-001-260	G1/2	83	**–**	**–**

Coupling plug 995-001-096

Coupling plug 995-001-501

Coupling plug 995-000-705

Coupling plug 995-001-260

Coupling socket 995-001-950
incl. coupling plug and dust cover

Coupling socket 995-001-500

Coupling socket with return flow port

Order No.	Respective coupling plug Order No.	Respective stub Order No.	Respective dust cover Order No.
995-001-620	**995-001-621**	**995-001-622**	**995-001-623**

Coupling socket 995-001-620

Coupling plug 995-001-621

Accessories

Pressure gauges

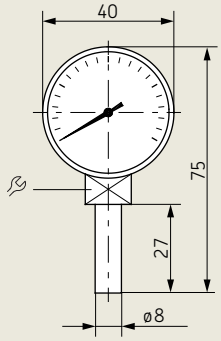
Pressure gauges (→ Figure 21)
Damped design with restrictor

Order No.	Indication range		Restrictor	
Steel housing, black				
248-602.25	0–10 bars	4kt 12	–	
169-102-506 1)	0–25 bars / 0–360 psi	12	0.4	
248-602.20	0–40 bars	12	–	for grease
169-104-008 1)	0–40 bars	4kt 14	0.4	for oil
ABS housing				
169-106-004	0–60 bars	4kt 14	–	

Fixed by means of a double tapered sleeve and socket union (solderless tube connection) in counterbore acc. to DIN 3854/DIN 3862.

1) damped design

Figure 21



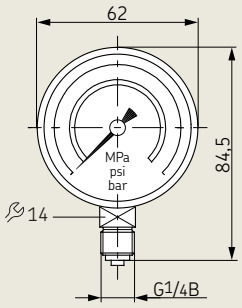
Pressure gauges (→ Figure 22)

Order No.	Indication range
ABS housing	
169-101-004	0–10 bars
169-102-020 2)	0–25 bars / 0–363 psi / 0-2,5 Mpa
169-104-020 2)	0–40 bars / 0–580 psi / 0-4 Mpa
169-106-020 2)	0–60 bars / 0–870 psi / 0-6 Mpa
169-110-020 2)	0–100 bars / 0–1450 psi / 0-10 Mpa
169-116-000	0–160 bars
169-125-020 2)	0–250 bars / 0–3625 psi / 0-25 Mpa

Washer, order No. **248-610.02**, must be ordered separately for every pressure gauge.

2) Associated connecting pieces → page 7

Figure 22

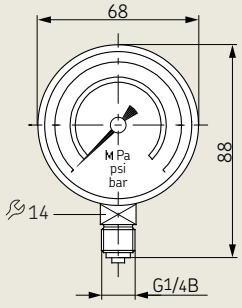


Pressure gauges (→ Figure 23)
Damped version with glycerine filling

Order No.	Indication range	Mounting position
Stainless steel housing		
169-102-015	0–25 bars / 0–363 psi / 0-2,5 Mpa	
169-104-015	0–40 bars / 0–580 psi / 0-4 Mpa	
169-106-015	0–60 bars / 0–870 psi / 0-6 Mpa	vertically
169-110-015	0–100 bars / 0–1450 psi / 0-10 Mpa	
169-125-015	0–250 bars / 0–3625 psi / 0-25 Mpa	
169-140-001	0–400 bars	

Washer, order No. 248-610.02, must be ordered separately for every pressure gauge.

Figure 23

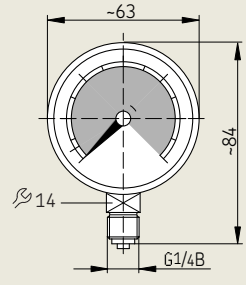


Pressure gauges (→ Figure 24)
Damped design with glycerin filling and visualization in red/green

Order No.	Indication range	Mounting position
Stainless steel housing		
169-101-607	0–16 bars / 0–1.6 MPa	
169-104-011	0–40 bars / 0–4 MPa	vertically
169-106-011	0–60 bars / 0–6 MPa	
169-110-010	0–100 bars / 0–10 MPa	

Washer, order No. **248-610.02**, must be ordered separately for every pressure gauge.

Figure 24



Accessories

Rotating joints, Banjo fittings

Rotating joints

Order No.	Tube ø	D1	D2 [1]	Max. speed [min^{-1}]	Max. pressure oil [bar]	Max. pressure air [bar]
401-504-192	4	G 1/8	M8×1			
401-504-292	4	M8×1	M8×1	100	30	8
401-506-313	6	M10×1	M10×1			

Flow media: mineral oils, oiled compressed air

1) Ports tapped for solderless tube connection

Banjo fitting, rotable

Order No.	Tube ø	D1	Fig.
405-549-049	4	M8×1 tap.	a
405-551-049	4	M10×1tap.	

Banjo fitting, rotable

Order No.	Tube ø	D1	Max. speed [min^{-1}]	Max. pressure oil [bar]	Max. pressure air [bar]	Fig.
DLY930-2 **DLY931**	8	G 1/4 A R 1/8 tap.	1400	20 [2]	8	b

Flow media: mineral oils, oiled compressed air

2) 30 bars in single-line centralized lubrication systems for a short time.

Banjo fitting, rotable

Order No.	Tube ø	Max. speed [min^{-1}]	Max. pressure [bar]	Fig.
DLY932	6	1400	5	c

Flow media: mineral oils

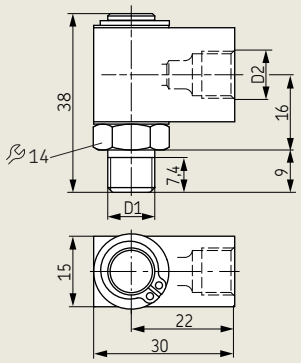
Banjo fitting, rotable

Order No.	Tube ø	Remark	Max. speed [min^{-1}]	Max. pressure [bar]	Fig.
408-120	8	Part **a** rotating in part **b**	20	10	d

Flow media: mineral oils

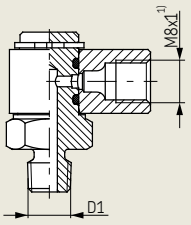
The rotating joint is also available with nut DIN936-M22×1.5 and spring washer DIN137-B22.

Rotating joint

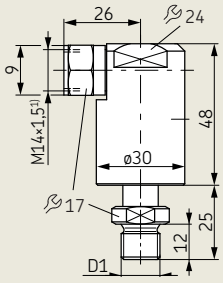


Banjo fitting

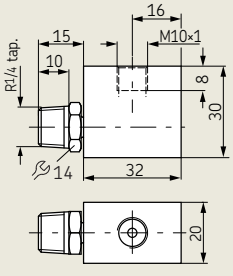
a)



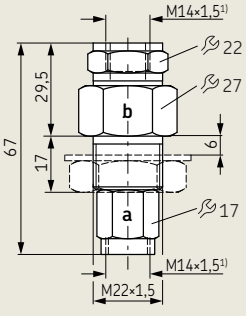
b)



c)



d)



1) Ports tapped for solderless tube connection

Accessories

Relief valves

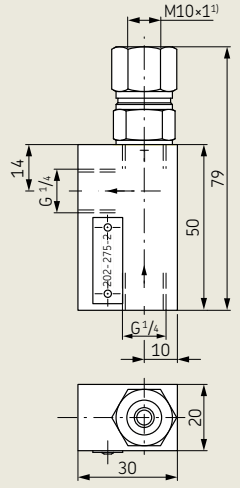
These valves are installed in distributor systems fitted with a pump without pressure relief equipment, mainly in the main line downstream from the pump.

With longer main lines and high viscosity oils, the pressure relief time, which influences the reversing of the distributors, can become too long. The installation of the second relief valve at a suitable position in the main line, e.g. at half the main line length, may remedy this problem.

Relief valve

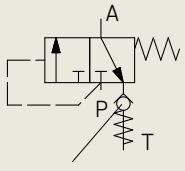
Order No. 202-275-2

Relief valve 202-275-2



1) Ports tapped for solderless tube connection

Connection diagram



Check valve = residual pressure valve 0.5 bar

A = Outlet
P = Inlet
T (R) = Return

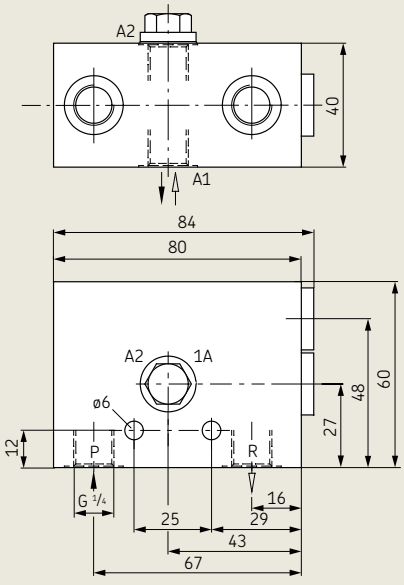
Relief valve with bleed valve and safety valve

Order No. 202-175-30

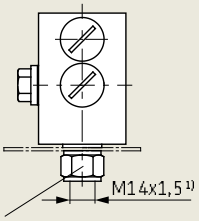
Adaptors 1) for tube ø6: Order No. 406-054
for tube ø8: Order No. 301-020
for tube ø10: Order No. 410-163

1) Ports tapped for solderless tube connection

Relief valve 202-175-30



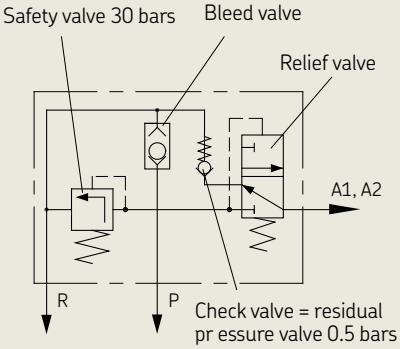
Fitted to reservoir



For P and R
2 adapters each 408-160
washers 508-108

1) Ports tapped for solderless tube connection

Relief valve circuit diagram



Check valve = residual pr essure valve 0.5 bars

Accessories

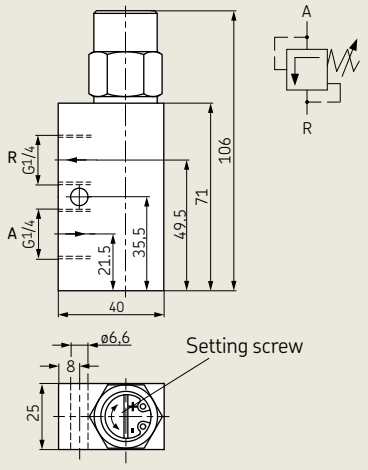
Safety valves, Check valves

Safety valves, adjustable (poppet valve)

Order No.	Rated flow rate [l/min]	Adjustable pres. range [bar]	Operating pres. max. [bar]	Oil temperature max. [°C]	Viscosity range [mm²/s]	Seal
WVN200-10E6	→ Diagram 2	1 to 6	40	80	20 to 1000	NBR
WVN200-10E12		3 to 12	40			NBR
WVN200-10E12-S8		3 to 12	40			FPM
WVN200-10E25		4 to 25	40			NBR
WVN200-10E25-S8		4 to 25	40			FPM
WVN200-10E35		4 to 35	40			NBR
WVN200-10E60		12 to 60	70			NBR
WVN200-10E60-S8		12 to 60	70			FPM

General characteristics
Design: poppet valve with hydraulic cushioning directly controlled
Lubricant: oil
Connecting thread: G 1/4
Mounting position: optional

Safety valve



Adaptors for valves [1)]

	Order No.
Valves WVN200-10E6 to WVN200-10E35	
for tube ø8	**301-020**
for tube ø10	**410-163**
for tube ø12	**412-163**
Washer	**508-108**
Valves WVN200-10E60	
for tube ø8	**408-403W**
for tube ø10	**410-403W**
Washer	**508-108**
If installed on a reservoir Two special adapters with long tube ends	**408-160**

1) Ports tapped for solderless tube connection

Fitted to reservoir

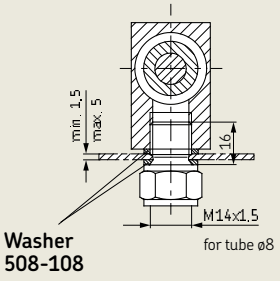
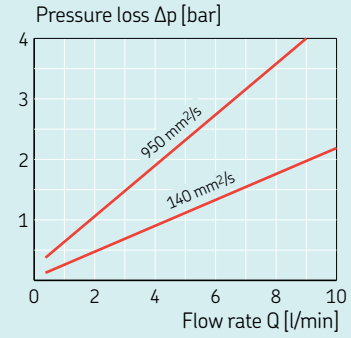


Diagram 2

Pressure loss parameter



With increasing flow rate, the pressure upstream from the valve will also rise in accordance with the curves.

Check valves (ball valves)

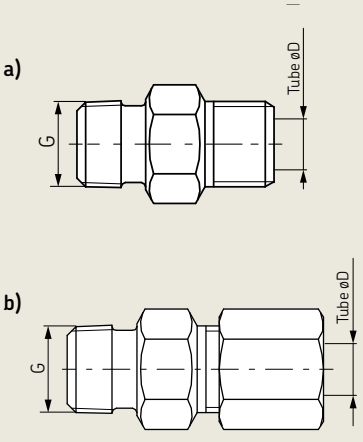
Order No.	Tube ø D	G	Opening pressure [bar]	Max. pressure [bar]	Series	Fig.
VPG-RV	4	R 1/8 tap.	10	100	LL	a
VPG-RV6	6	R 1/8 tap.	10	315	L	a
VPG-RV8	8					
VPM-RV4	4	M10×1 tap.	10	100	LL	a
VPM-RV	6					
VPM-RV8	8	M10×1 tap.	10	315	L	a
VPM-RV10	10					
With cutting sleeve and union nut						
VPKG-RV	6	R 1/8 tap.	3	100	LL	b
VPKM-RV-S3 [2)]	6	M10×1 tap.	3	100	LL	b
VPKM-RV-S4	6	M10×1 tap.	2			

2) stainless steel

Check valves for quick connectors → pages 27, 29.

LL series = extra light version, L-series = light version

Check valve



Accessories

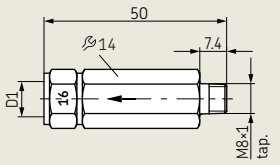
Safety valves

Safety valves (ball valves), for flow rates from 0.5–2 l/min (→ Figure 25)

Order No.	Tube ø	Opening pressure [bar]	Marking	D1 [1]
WVN200-4A0.4	4	0.4	04	M8×1
WVN200-4A5		5	5	
WVN200-4A8		8	8	
WVN200-4A12		12	12	
WVN200-4A16		16	16	
WVN200-4A25		25	25	
WVN200-4A0.4-S1	6	0.4	04	M10×1

1) Ports tapped for solderless tube connection

Figure 25

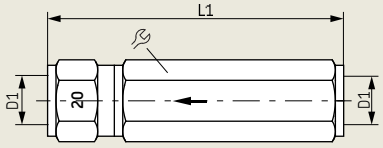


Safety valves (ball valves), for flow rates from 0.5–2 l/min (→ Figure 26)

Order No.	Tube ø	Opening pressure [bar]	Marking	D1 [1]	L1	
WVN200-6B0.5	6	0.5	05	M10×1	61	14
WVN200-6B3		3	3			
WVN200-6B8		8	8			
WVN200-6B12		12	12			
WVN200-6B16		16	16			
WVN200-6B20		20	20			
WVN200-6B40		40	40			
WVN200-8B0	8	0.04	0	M14×1.5	71	17
WVN200-8B3		3	3			
WVN200-8B5		5	5			
WVN200-8B12		12	12			
WVN200-8B16		16	16			
WVN200-8B20		20	20			
WVN200-8B32		32	32			
WVN200-10B0	10	0.04	0	M16×1.5	80	19
WVN200-10B0.5		0.5	05			
WVN200-10B1		1.2	12			
WVN200-10B32		32	32			
161-212-054 [2]	8	20	20	M14×1.5	84.5	17

1) Ports tapped for solderless tube connection
2) This valve is designed as a plunger valve. Because of this design it can also be used for regulating tasks. whereas the ball valves should be used as safety valves.

Figure 26

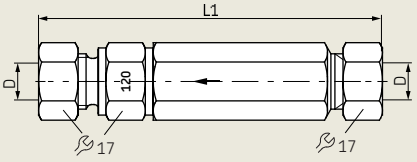


Safety valves (ball valves), for flow rates from 0.5–2 l/min (→ Figure 27)

Order No.	Tube ø	Opening pressure [bar]	Marking	L1
WVN200-8D50	8	50	50	84
WVN200-8D75		75	75	
WVN200-8D120		120	120	
WVN200-8D220		220	220	
WVN200-10D120-S1	10	120	120	87
WVN200-10D160-S1		60	160	
WVN200-10D220-S1		220	220	

Cutting sleeve screw unions according to DIN 2353

Figure 27



Accessories

Shut-off valves

Shut-off valve

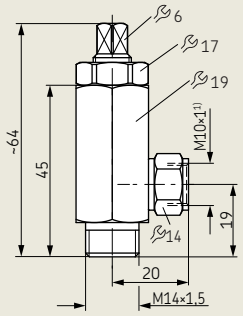
Order No.	p max. [bar]	Max. temperature [°C]	Spindleway
202-085-S	60	80	max. 3 revs.

Direction of flow optional

Shut-off valves

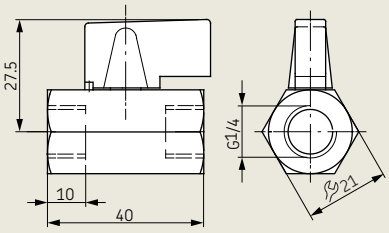
Order No.	p max. [bar]	Max. temperature [°C]
161-600-036	16	90
UFZ.0097	10	90

Shut-off valve 202-085-S

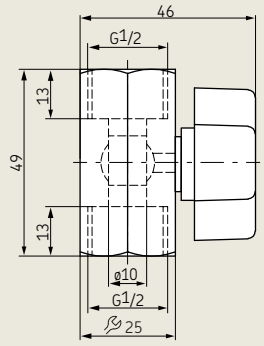


1) Ports tapped for solderless tube connection

Shut-off valve 161-600-036



Shut-off valve UFZ.0097



Accessories

Topping-up pumps, oil trough

Topping-up pumps

Order No.	Drum [kg]	Medium	Operation	Trolley
169-000-004 **169-000-012** **169-000-016** **169-000-056**	15 10 20 25	NLGI 1,2	manually operated	no
169-000-082 **169-000-084**	25 / 50 25	00/000	manually operated	yes
169-000-042 **169-000-054**	25 50	NLGI 1,2	manually operated	yes
169-000-342 **169-000-018**	25 25	NLGI 1,2 00 bis 2	manually operated pneum. operated	no yes

For drums with a maximum inner diameter of 350 mm and maximum height of 450 mm

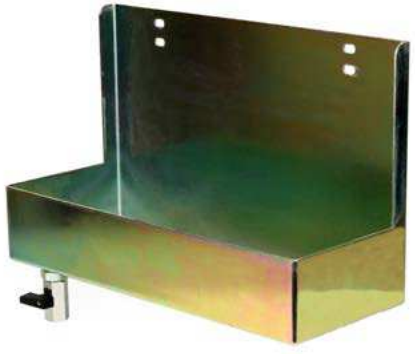
Topping-up pump 169-000-042

Topping-up pump 169-000-342

Oil trough with shut-off valve

Order No.	Reservoir capacity [l]	B	H	T
B3.U21	3	350	280	140
B7.U271	6	400	380	190

Oil trough



Lever-type grease gun
for checking of feeders in the installed system

Order No.	Tube ø	Connection thread
169-000-143	6	M12×1.5

Lever-type grease gun

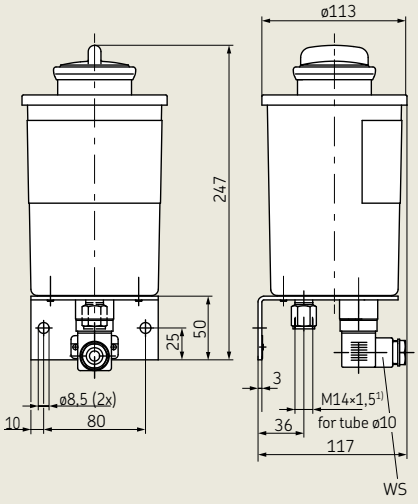
Reservoirs

Oil reservoirs – plastic

Plastic reservoirs

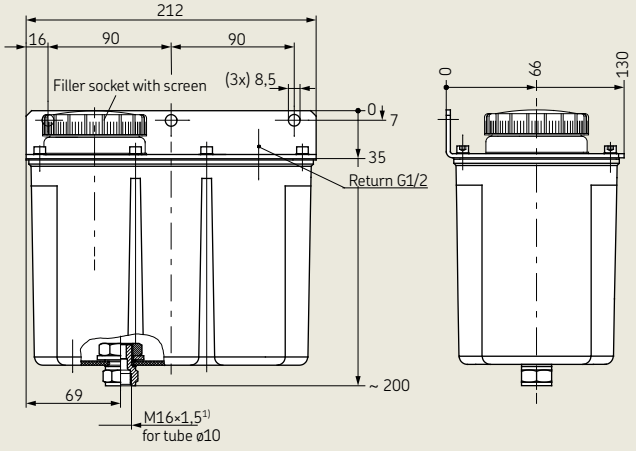
Order No.	Reservoir capacity [liters]	Level indicator WS	Type of contact	Seal material
K1		–	–	
KW1	1	for min. filling level	NC	NBR
KW1-S2		for min. filling level	NC	
K3-S2	3	–	–	NBR
KW3-S1		for min. filling level	changeover	
K6-S5		–	–	NBR
KW6-S1		for min. filling level	changeover	NBR
KW6-S2	6	for min. level with advance warning	2 NCs	NBR
KW6-S81		for min. filling level	changeover	FPM
KW6-V57		for min. level with advance warning	2 NCs	NBR

Plastic reservoir, 1 liter



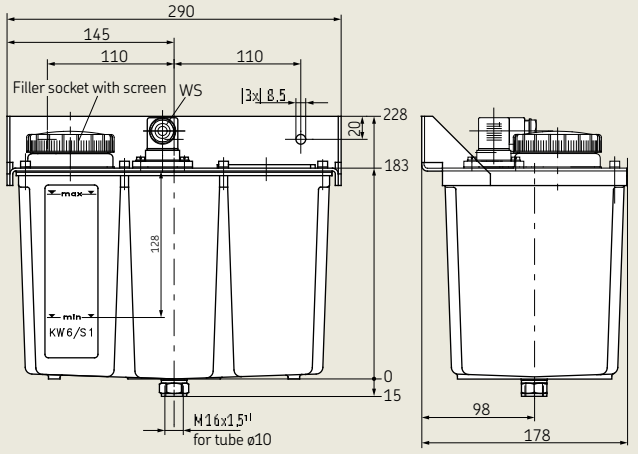
1) Ports tapped for solderless tube connection

Plastic reservoir, 3 liter



1) Ports tapped for solderless tube connection

Plastic reservoir, 6 liter



1) Ports tapped for solderless tube connection

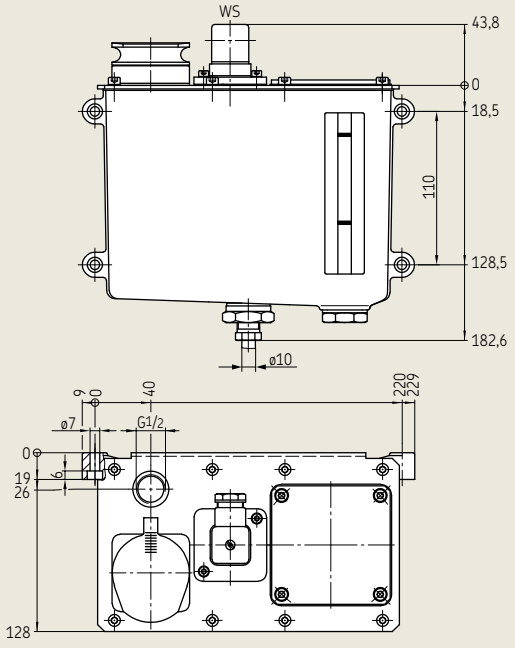
Reservoirs

Oil reservoirs – metal

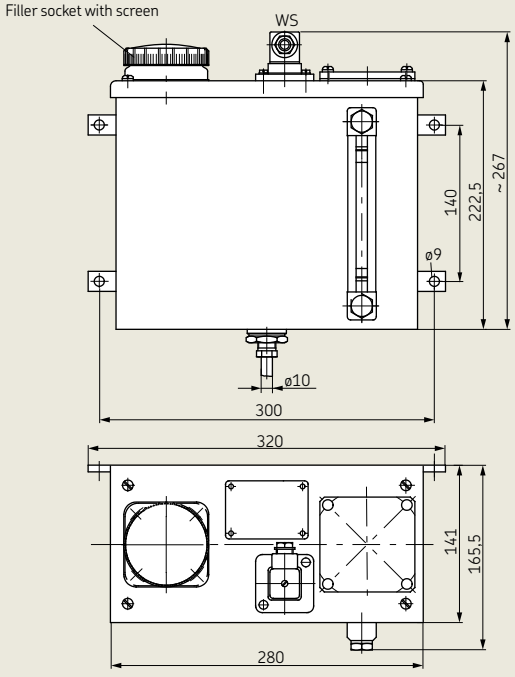
Metal reservoirs

Order No.	Reservoir capacity [liters]	Level indicator WS	Type of contact	Seal material
BW3-2-S1	3	for min. filling level	changeover	NBR
B7		–	–	NBR
BW7-S6		for min. and max. filling level	2 NCs	NBR
BW7-S7		for min. filling level with advance warning	2 NCs	NBR
BW7-S8	6	for min. filling level	changeover	FPM
BW7-S11		for min. filling level with advance warning	1 NO, 1 NC	NBR
BW7-S12		for min. filling level with advance warning	1 NO, 1 NC	NBR
162-310-005		for min. filling level	changeover	NBR

Metal reservoir, 3 liter



Metal reservoir, 6 liter

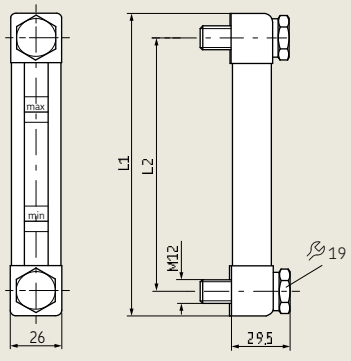


Oil level gauges for metal reservoir

Order No.	Reservoir capacity [Liter]	L1	L2
995-003-044	6	152	127
995-003-040	6	190	165
995-003-041	15 und 30	215	190
995-003-042	50	279	254
995-003-043	100	305	280

Type: NBR, FKM (FPM) on request

Oil level gauge



Index

Index

Index

Index

Index

Index

Index

Notes

Important information on product usage
SKF and Lincoln lubrication systems or their components are not approved for use with gases, liquefied gases, pressurized gases in solution and fluids with a vapor pressure exceeding normal atmospheric pressure (1 013 mbar) by more than 0,5 bar at their maximum permissible temperature.

skf.com | skf.com/lubrication

PUB LS/P2 15859 EN · **1-0103-EN** · May 2018