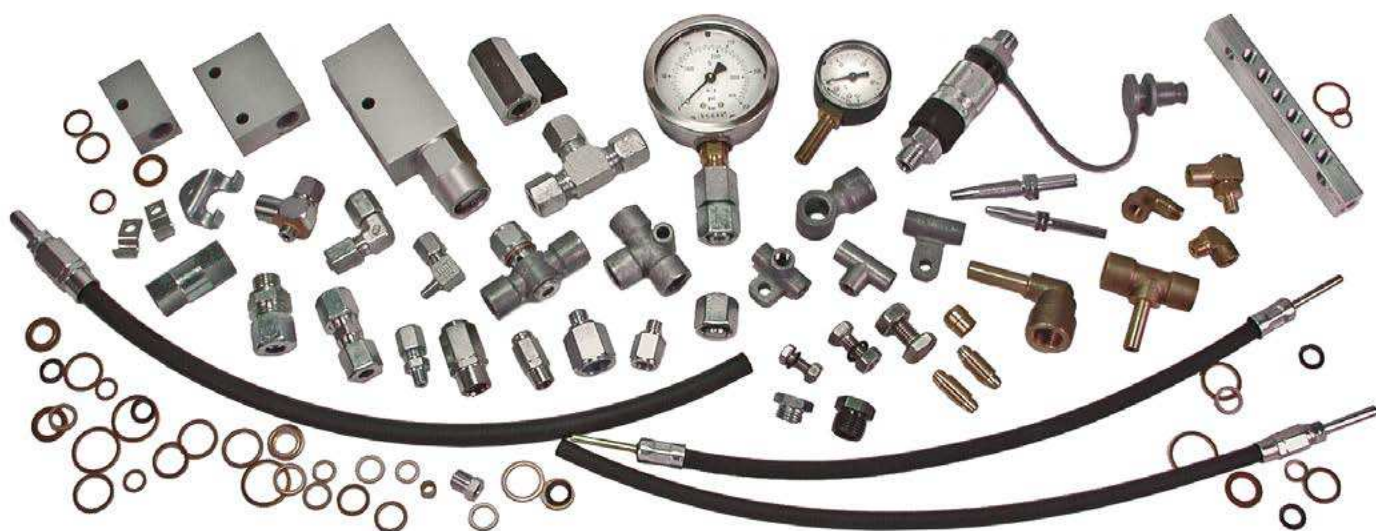


Fittings and Accessories

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 4 – 20 for solderless pipe union with tapered sleeve acc. to DIN 3862

Adaptors	7, 8
Banjo fittings	10, 11
Bracketed connectors	15
Bulkhead connectors	14
Cable strap	19
Connectors	14
Counterbores	4
Cross joints	17
Double tapered sleeves	5
Elbows	9, 14
Elbow bulkhead fittings	14
Fixing bolts	20
Fixing clips	18
Flat washers	12
Form counterbores	4
Hexagon nuts	20
Lock washer	20
Mounting base	19
Pipe bracket	19
Reducing adapters	8
Reinforcing sockets	6
Screw plugs	12
Socket unions	5, 6
Straight bulkhead	14
Tapered sleeves	6
Tee connectors	16
Threaded sockets	13
Tube-to-tube-connector	15
Vent plugs	12

Distributor manifolds. 21 – 24 for solderless pipe union with tapered sleeve acc. to DIN 3862

SKF quick connectors for pressures up to 300 bar . . 25 – 27

Adaptors	25
Banjo fittings	26
Check valves	27
Connectors	27
Elbows	27
Locking pin	27

SKF quick connectors for pressures up to 350 bar . . 28 – 29

Adaptors	28
Banjo fittings	28
Check valves	29
Elbows	28
Straight screw-in connectors	28
Tee screw-in connector	29

Fittings 30 – 36 for solderless pipe union with cutting-sleeve acc. to DIN EN ISO 8434-1 / DIN 2353

Banjo fittings	33
Connectors for pressure gauges	34
Cutting sleeves	30
Elbow bulkhead connectors	32
Elbow connectors	32
Elbow female thread unions	35

Elbow screw-in connectors	33
Four-way connectors	34
L-screw-in connectors	32
Reducing connections	36
Reducing connectors	32
Straight bulkhead connectors	32
Straight connectors	30
Straight screw-in connectors	31
Straight screw-in fitting	35
Straight screw-in glands	30
Tee connectors	34
Tee female thread unions	35
Tee screw-in connectors	34
Union nuts	30

Fittings 37 – 39 for solderless pipe union with cutting-sleeve acc. to DIN EN ISO 9974-1/DIN 2353 and elastomer washer

Connectors for pressure gauges	38
Cone plugs	39
Reducing connectors	37
Screw plugs	39
Straight bulkhead connectors	37
Straight connectors	37
Straight screw-in connectors	37
Tee connectors	38
Vent plugs	39

Tubes and hoses 40 – 47

Hoses	46, 47
High pressure hoses	41 – 43, 45
Plastic tubing	41, 43 – 44
Self-installation of high pressure hoses	45
Steel tubing	40
Tube bending device	40

Accessories 48 – 56

Banjo fittings	51
Check valves	53
Coupling plugs	49
Coupling socket	49
Filler coupling	48
Lever-type grease gun	56
Oil trough	56
Pressure gauges	50
Quick-disconnect couplings	48
Relief valves	52
Rotating joints	51
Topping-up pumps	56
Safety valves	53, 54
Shut-off valves	55

Reservoirs 57, 58

Metal reservoirs	58
Oil level gauge	58
Plastic reservoirs	57

Index 59 – 65

Accessories for tubes and hoses

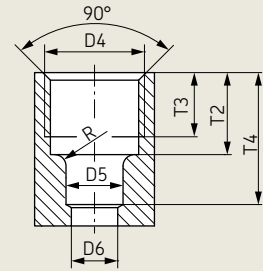
Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

Counterbores DIN 3854/DIN 3862 – for solderless tube connection

Specification of counterbores	Tube $\varnothing$	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 $\varnothing$	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

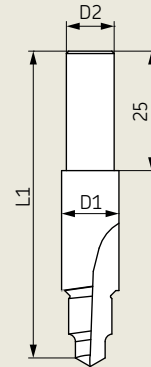
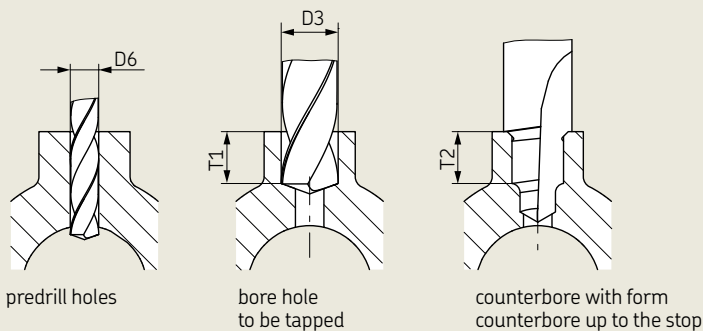


Figure 1

Provision of counterbore



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 $\varnothing$ D

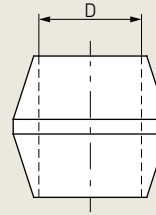
Brass

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 $\varnothing$ D1 L1 L2 $\varnothing$ Series

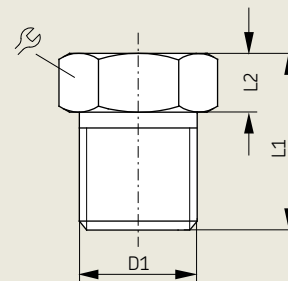
Steel, galvanized surface

402-002 ¹⁾	2,5	M6x0,75	9	3	7	LL
404-002	4	M8x1	12	4	8	
406-002	6	M10x1	13	4	10	
408-002	8	M14x1,5	16	4,5	14	L
410-002	10	M16x1,5	17	5,5	17	
412-002	12	M18x1,5	18	6	19	

Stainless steel

404-002-S3	4	M8x1	12	4	8
406-002-S3	6	M10x1	13	4	10
408-002-S3	8	M14x1,5	16	4,5	14

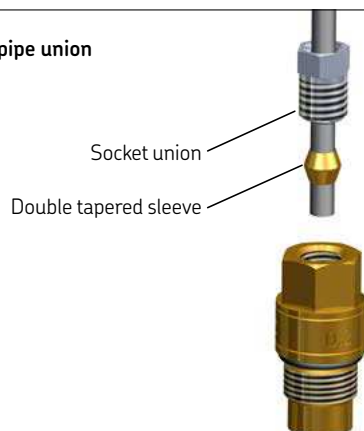
Socket unions



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 tapered port up to the stop.
- 3 First tighten socket union finger-tight by hand. Then turn another 1 1/2 turns.

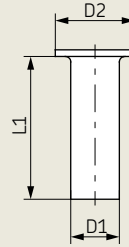
Accessories for tubes and hoses

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

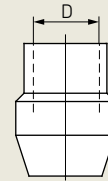
Reinforcing socket



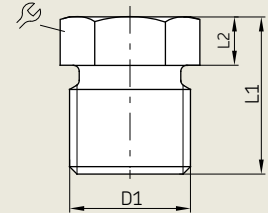
Tapered sleeves – DIN 3862

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



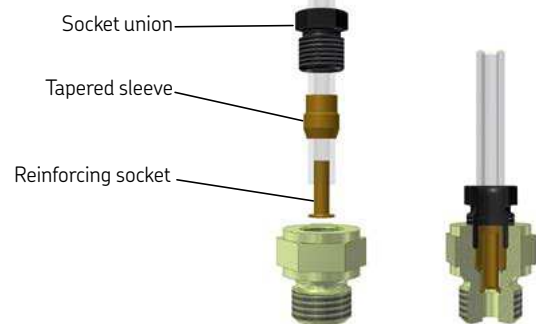
Socket union



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.

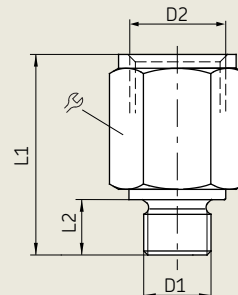
Accessories for tubes and hoses

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	2.5	M6		13	5.5	9
402-003		M6×0.75	M6×0.75	13	5.5	9
402-006		M8×1		15	7.5	11
404-004	4	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		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	6	M10×1		18	7.5	14
406-162		M12×1		19	9	17
406-054		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	8	G 3/8 A		21	10	22
408-004		M10×1		28	7.5	17
408-154		G 1/8 A		29	8	17
408-160		G 1/4 A		30	16	17
408-162		M12×1		29	9	17
301-020		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	10	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		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	12	M12×1		35	9	22
412-163		G 1/4 A		35	10	22
412-164		M14×1.5		33	9	22
412-169		G 1/4 A	M18×1.5	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

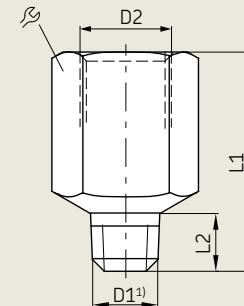
Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

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	6	1/4 BSF	M10×1	20	5	11
401-004-904		116 BSF		18	5	11
406-004K		M10×1 tap.		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	M5	22	10	3 2)	2
843-130-022	M4					
843-130-023	M5					
406-044-S1	M10×1 tap.	G 1/4	22.5	8	17	3
P-78.01	M12×1	G 1/4	27	8.5	19	
401-013-161	G 3/4 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	
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 thread

Figure 2

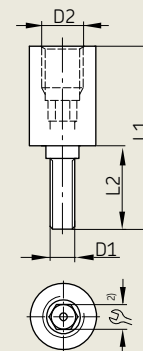
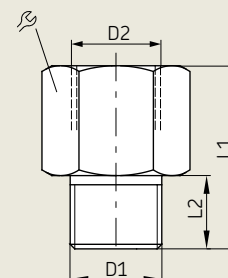


Figure 3



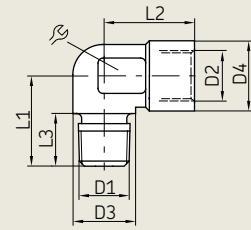
Accessories for tubes and hoses

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	14
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	
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	

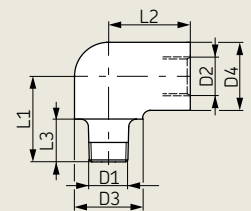
Figure 4



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.	M6x0.75	–	8	10	9.5	6
403-006-651	6	R 1/4 tap.	M10x1	14	14	17	17.5	8.5
Brass								
506-202K	6	M10x1 tap.	M10x1	17	17	22	21	11

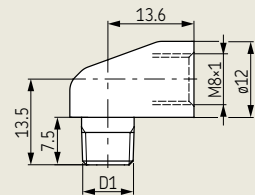
Figure 5



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		M6×0.75 tap.
514-018K-S1		R 1/8 tap.

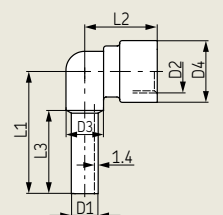
Figure 6



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

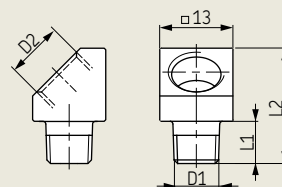


Elbows

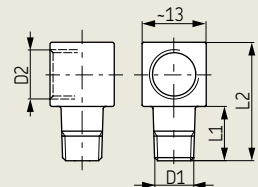
Order No.	D1	D2	L1	L2	Fig.
Steel, galvanized surface					
406-155K	R 1/8 tap.	M10×1	7.5	20.5	a
406-165K	R 1/8 tap.	G 1/8	7.5	20.5	a
406-145K	M8×1 tap.	M10×1	7.5	21	a
406-045K	M10×1 tap.	M10×1	7.5	21	a
406-094K	M8×1.25 tap.	M8×1.25	11	24	b
406-089K	M8×1 tap.	M10×1	11	24	b
406-090K	M10×1 tap.	M10×1	11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

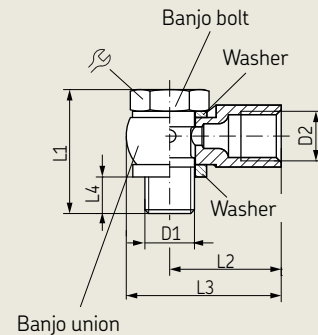
Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

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

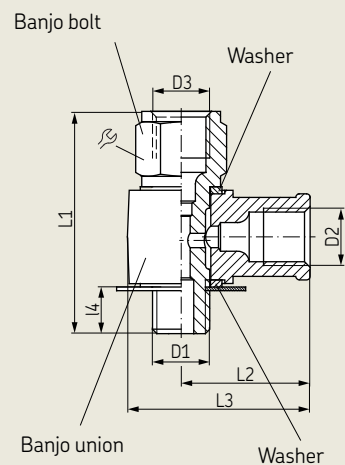
Banjo fitting Form A



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	M8×1	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, galvanized surface

3) Material banjo union: die-cast zinc

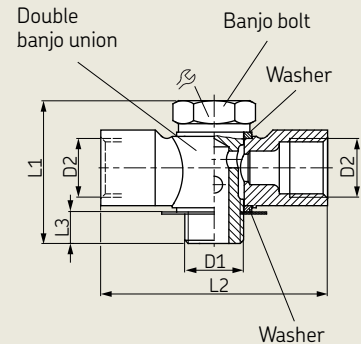
Accessories for tubes and hoses

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

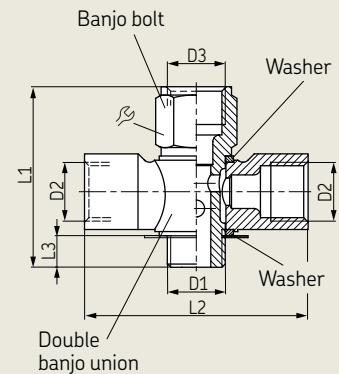
Banjo fitting Form C



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

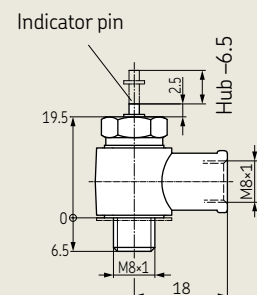


- 1) Material banjo bolt: steel, galvanized surface
2) Material banjo union: die-cast zinc

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

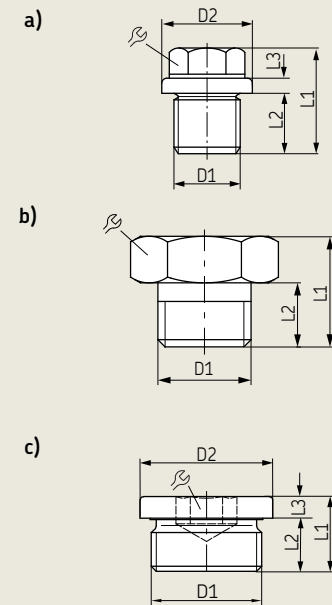
Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

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	a
DIN910-R1-4x8-5.8	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	
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	M6x0.75	–	9	5	–	10	b
404-011	M8x1	–	9.5	5.5	–	11	
406-011	M10x1	–	12	7	–	12	
408-211	M12x1	–	12	7	–	17	
408-011	M14x1.5	–	12	7	–	17	
410-011	M16x1.5	–	14	8	–	19	
412-011	M18x1.5	–	15	10	–	22	c
DIN 908-M10x1-5.8	M10x1	14	11	8	3	5 ¹⁾	
DIN 908-M12x1.5-5.8	M12x1.5	17	15	12	3	6 ¹⁾	
DIN 908-M14x1.5-5.8	M14x1.5	19	15	12	3	6 ¹⁾	
DIN 908-G1-8A-5.8	G 1/8 A	14	11	8	3	5 ¹⁾	c
DIN 908-G1-4A-5.8	G 1/4 A	18	15	12	3	6 ¹⁾	
DIN 908-G3-8A-5.8	G 3/8 A	22	15	12	3	8 ¹⁾	

1) Hexagon socket

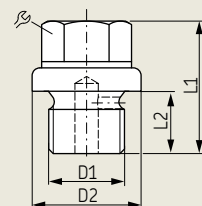
Screw plugs



Vent plugs (sealed by flat washer to DIN 7603)

Order No.	D1	D2	L1	L2	
Steel, galvanized surface					
833-020-022	M8x1	12	13.5	7.5	11
833-330-016	M10x1	14	17	8	11
44-1855-6021	M12x1	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

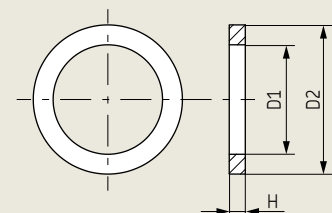
Vent plug



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-A6x10-CU	6.2	9.9	1	M6	–
DIN7603-A8x11.5-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-A12x18-CU	12.2	14.9	1	M12	–
508-108	13.3	17.9	1.5	–	G 1/4
DIN7603-A14x18-CU	14.2	17.9	1.5	M14	–
DIN7603-A16x20-CU	16.2	19.9	1.5	M16	–
DIN7603-A17x21-CU	17.2	20.9	1.5	–	G 3/8
DIN7603-A18x22-CU	18.2	21.9	1.5	M18	–
DIN7603-A20x24-CU	20.2	23.9	1.5	M20	–
DIN7603-A21x26-CU	21.2	25.9	1.5	–	G 1/2
DIN7603-A22x27-CU	22.2	26.9	1.5	M22	–
DIN7603-A27x32-CU	27.3	31.9	2	M27	–
DIN7603-A30x36-CU	30.3	35.9	2	M30	–
DIN7603-A33x39-CU	33.3	38.9	2	M33	–

Flat washer



More screw plugs → page 39

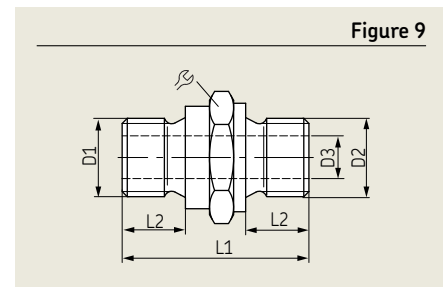
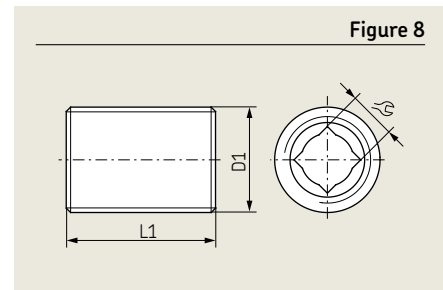
Accessories for tubes and hoses

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

Threaded sockets (→ Figure 8)

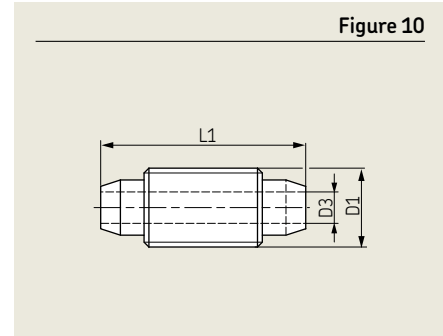
Order No.	D1	L1	⌀
Steel			
404-203	M8×1	13	3.5
406-203	M10×1	15	3.5
406-243-B 1)	M10×1	18	3.5
408-243-B 1)	M12×1	19	5.5
458-012	M12×1	17	5.5
458-012-B 1)	M12×1	17	5.5
408-023	M14×1.5	18	5.5
410-003	M16×1.5	19	7
410-003-B 1)	M16×1.5	19	7
Stainless steel			
408-033-S3	G 1/4 A	15	5.5

1) Coated with microencapsulated adhesive



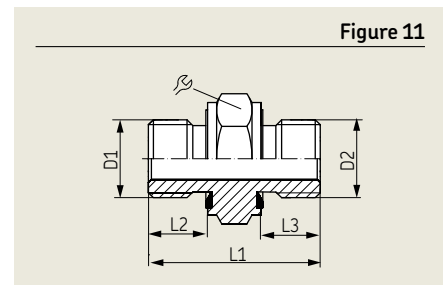
Threaded sockets

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



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

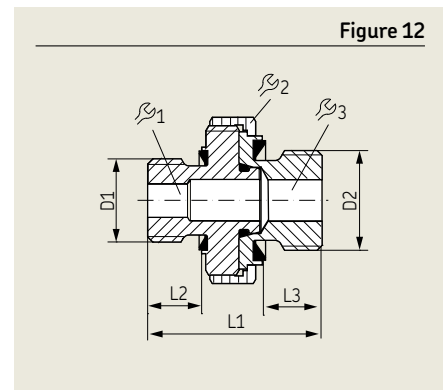
Order No.	D1	D2	L1	L2	L3	⌀	Seal
Steel, galvanized surface							
402-116-161	G 1/4 A	G 1/4 A	29	10	10	19	NBR
402-116-165	G 1/2	G 1/2	37	10	12	32	



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	NBR
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	
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	FKM
995-340-350-S8	M10×1	M12×1	21	6.5	7.2	4	19	5	
995-350-000-S8	M12×1	M12×1	21.5	7	7.2	5	19	5	



Accessories for tubes and hoses

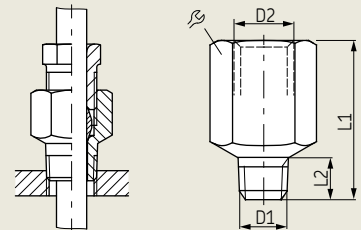
Solderless pipe union with tapered sleeve acc. to DIN 3862. For pressures up to 45 bar

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

Order No.	Tube $\varnothing$	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

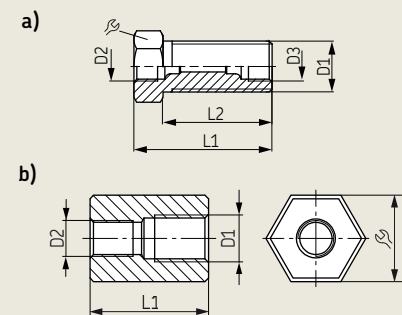
Bulkhead connector



Straight bulkhead fittings according to DIN 71429 Form A

Order No.	Tube $\varnothing$	D1	D2	D3	L1	L2		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

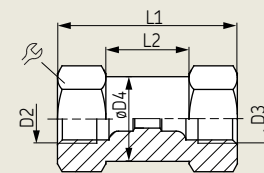
Straight bulkhead fitting



Connectors

Order No.	Tube $\varnothing$	D2	D3	$\varnothing$ 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

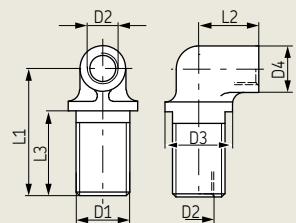
Connector



Elbow bulkhead fittings according to DIN 71429 Form B

Order No.	Tube $\varnothing$	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	M14×1.5	M10×1	16.5	14	27	17.5	15

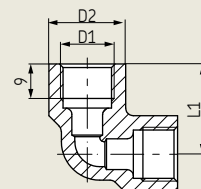
Elbow bulkhead fitting



Elbows to DIN 71433 Form C

Order No.	Tube $\varnothing$	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		

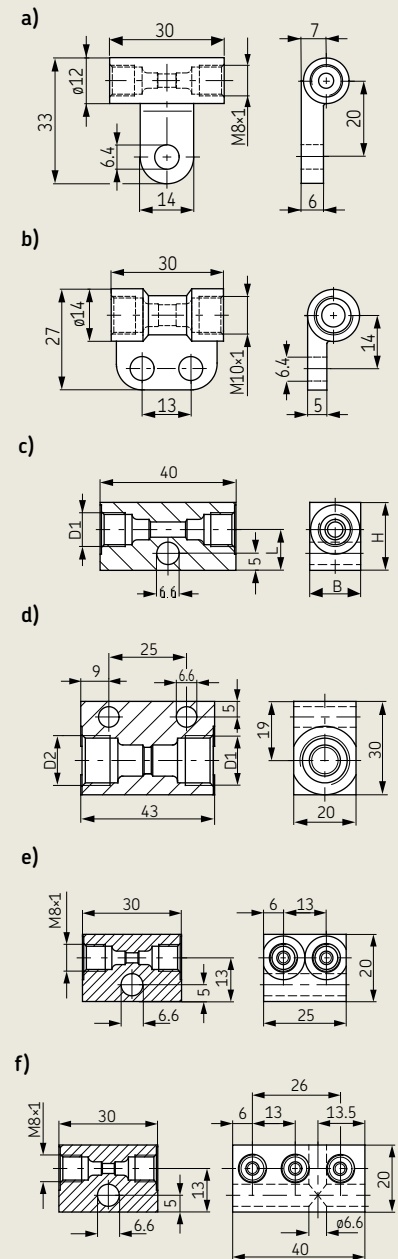
Bracketed connectors

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

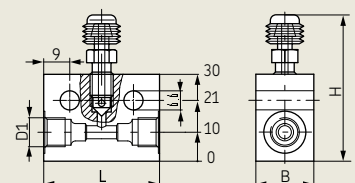
Tube-to-tube-connector with air vent

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



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	a
506-008	6	M10×1	M10×1	14	18	36	
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	b
Form A			
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

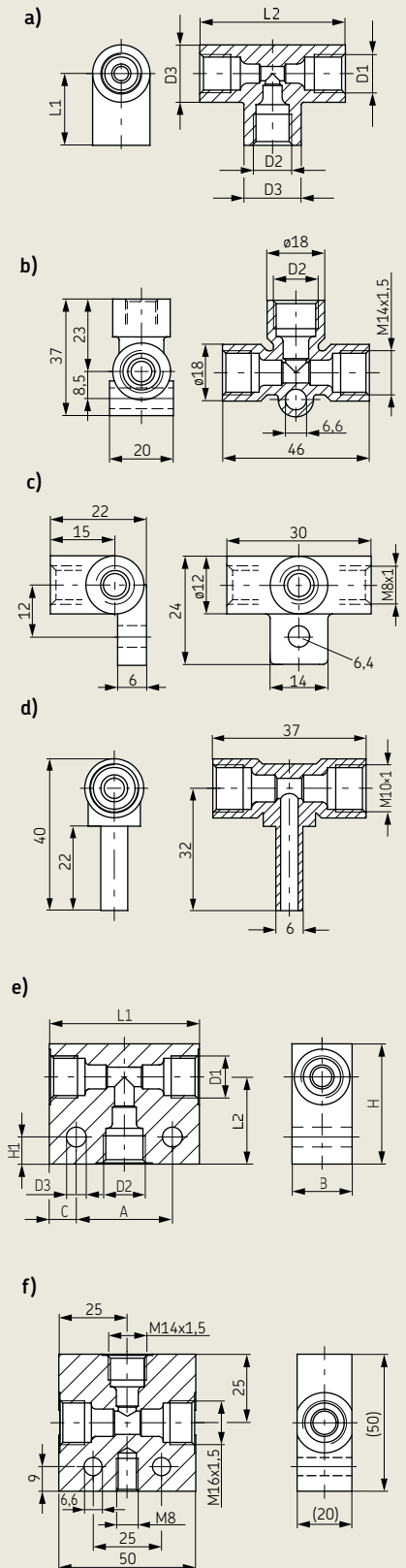
Tee connectors to DIN 71433

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	e
DAT508	8	M14×1.5	M14×1.5	6.6	32	20	9	40	9	50	29	
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



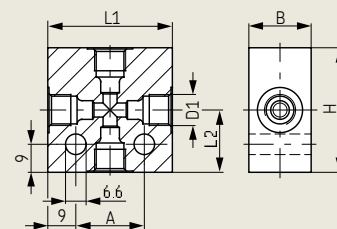
Accessories for tubes and hoses

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

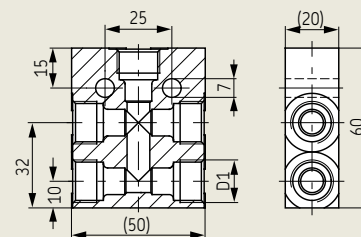
Cross joint



Cross joint

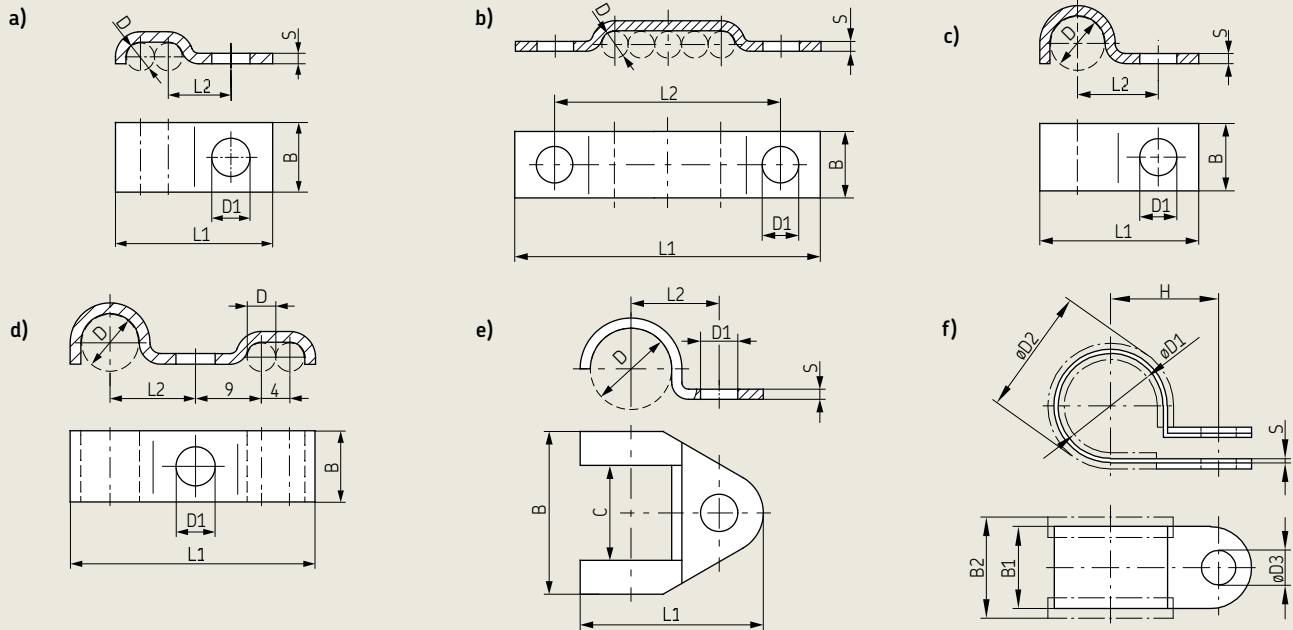
Order No.	Tube ø	D1
Steel, galvanized surface		
DAK510-S1	10	M16×1.5

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			46	34		
604-016	4	6	10	5.5	50	38	1.5	b
604-018	4	8			58	46		
DIN 72573-2x6-ST	6	2			39	27		
DIN 72573-3x6-ST	6	3			45	33		
DIN 72573-4x6-ST	6	4			51	39		
DIN 72573-5x6-ST	6	5			57	45		
DIN 72573-6x6-ST	6	6			64	52		
DIN 72573-2x8-ST	8	2			43	31		
DIN 72573-3x8-ST	8	3	10	4.8	51	39	1	b
DIN 72573-4x8-ST	8	4			59	47		
DIN 72573-5x8-ST	8	5			68	56		
DIN 72573-6x8-ST	8	6			76	64		
DIN 72573-2x10-ST	10	2			45	33		
DIN 72573-3x10-ST	10	3			55	43		
DIN 72573-4x10-ST	10	4			67	55		
DIN 72573-5x10-ST	10	5			77	65		
Stainless steel								
DIN72571-1x6	6	1			20.5	10		
DIN72573-1x6	6	1			32	20		
DIN72573-2x6	6	2			38	26		
DIN72573-3x6	6	3	10	4.8	45	33	1	b
DIN72573-4x6	6	4			51	39		
DIN72573-5x6	6	5			57	45		
DIN72573-6x6	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	

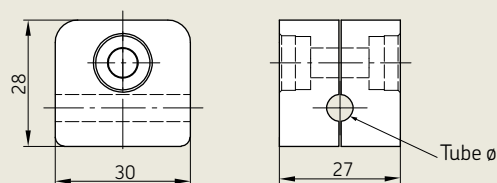
Accessories for tubes and hoses

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

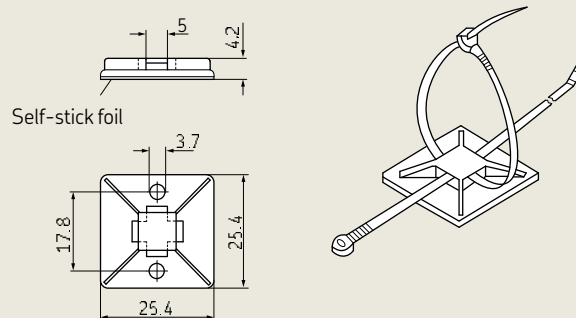


Mounting base

Order No.

179-990-186

Mounting base



Cable strap

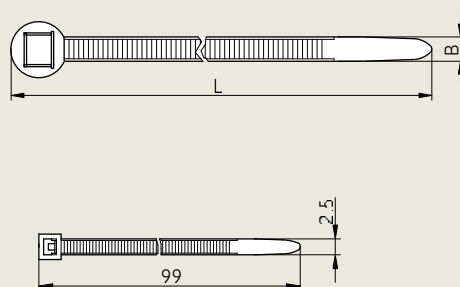
Order No. L B

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



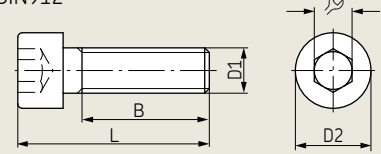
Accessories for tubes and hoses

Fixing bolts

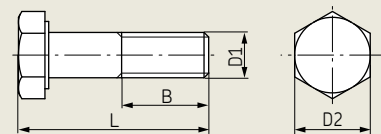
Order No.	D1	L	D2	B	⌀
Steel					
DIN912-M4×20-8.8	M4	20	7	14	3
DIN912-M6×16-8.8	M6	16	10	18	5
DIN912-M6×25-8.8	M6	25	10	18	5
DIN912-M6×60-8.8	M6	60	10	18	5
DIN912-M8×16-8.8	M8	16	13	12	6
DIN931-M6×30-5.8	M6	30	10	18	10
DIN933-M4×10-8.8	M4	10	7	14	—
DIN933-M5×12-8.8	M5	12	8	16	—
DIN933-M6×16-8.8	M6	16	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

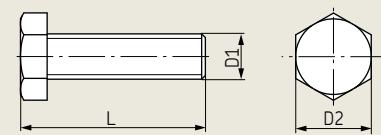
DIN912



DIN931 / DIN933



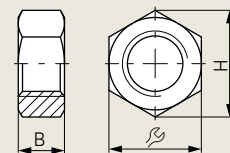
DIN7513



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

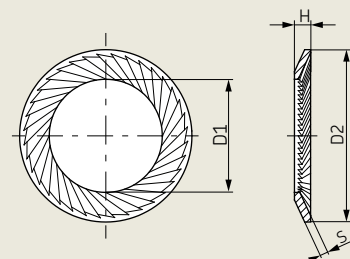
Hexagon nut



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

Product series

Number of ports

Design of outlet thread

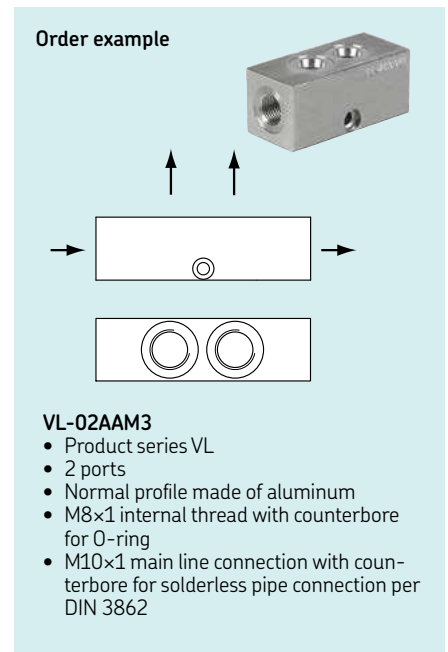
Material

Design of main line connection

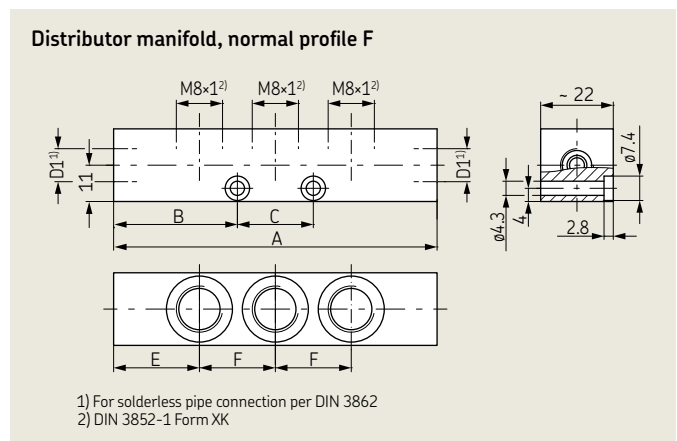
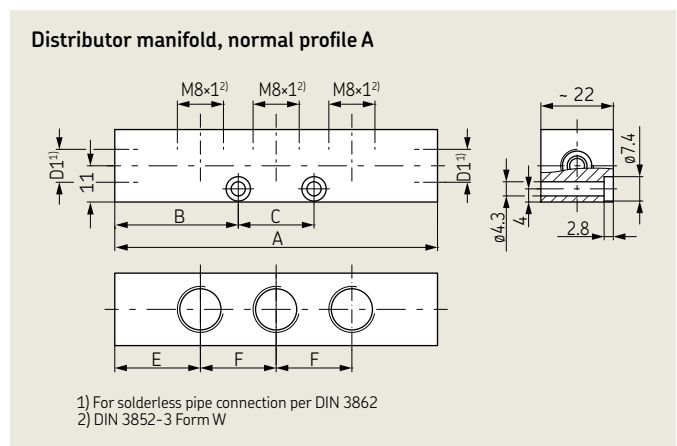
Order example

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



Distributor manifolds

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

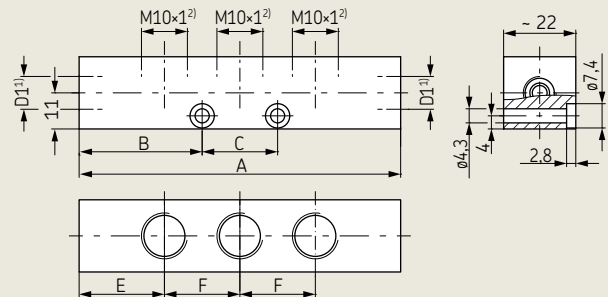
Distributor manifold, normal profile B/G

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

Distributor manifold, normal profile C

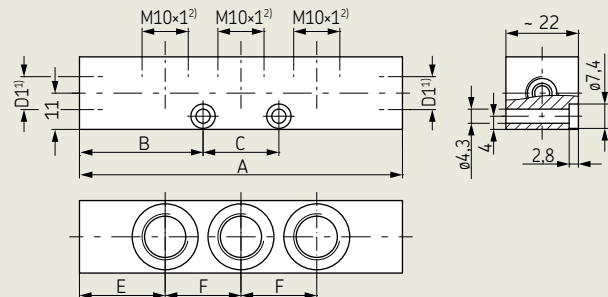
Main line connection D1	Number of ports	Dimensions [mm]			E	F
		A	B	C		
M10×1 (M3)	1	60	18	24	30	–
	2	70	35	–	23	1x 24
	3	94	35	24	23	2x 24
	4	118	35	48	23	3x 24
	5	142	35	72	23	4x 24
	6	166	35	96	23	5x 24
	8	214	35	144	23	7x 24
	10	262	35	192	23	9x 24
M14×1.5 (M4)	1	68	22	24	34	–
	2	78	39	–	27	1x 24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

Distributor manifold, normal profile B



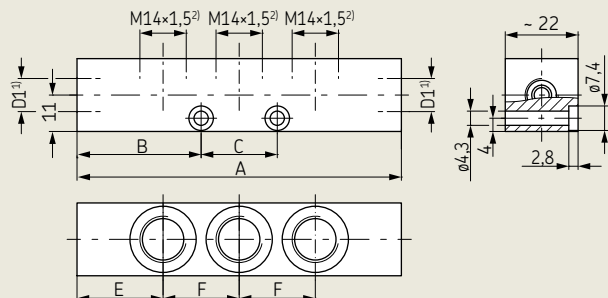
- 1) For solderless pipe connection per DIN 3862
- 2) DIN 3852-3 Form W, small

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



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

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

Main line connection D1	Number of ports	Dimensions [mm]			
		A	B	C	F
M10x1 (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

[illegible]

Main line connection D1	Number of ports	Dimensions [mm]			
		A	B	C	F
M10x1 (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

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

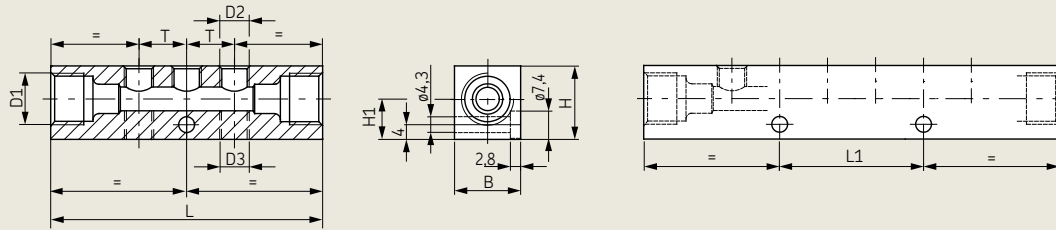
Technical drawing of a mechanical part with dimensions:

- Overall length: L
- Distance from left end to first hole center: l_1
- Distance between hole centers: 15
- Distance from right end to second hole center: 10
- Overall width: 20
- Distance from top surface to hole center: 10
- Distance from bottom surface to hole center: 12.5
- Distance from bottom surface to base: 13
- Hole diameter: $M10 \times 1$

Distributor manifolds

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

Distributor manifold



Distributor manifolds

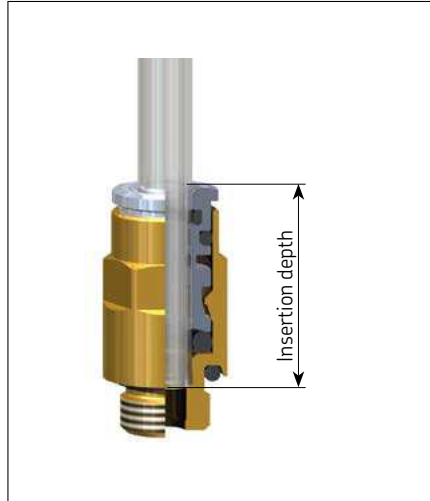
Main tube port tube ø	Order No.	Number- of port	D1	D2	D3	L	L1	H	H1	B	T
Aluminum alloy											
4	VL-322-541	2	M8×1	2x	M8×1	—	49	—	17	10.5	13
	VL-323-541	3	M8×1	3x	M8×1	—	62	—	17	10.5	13
	324-581	4	M8×1	4x	M8×1	—	—	—	—	—	—
6	VL-01EAM3	1	M10×1	—	M10×1	—	41	—	20	11	18
	VL-02EAM3	2	M10×1	2x	M10×1	—	58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

SKF Quick Connectors for oil and grease

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

Insertion depth for plastic and stell tubing

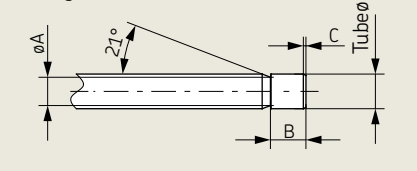
for tube $\varnothing$	Insertion depth [mm]
3-O-ring quick connector (→ page 25–27)	
4	19
6	22
8	24
1-O-ring quick connector (→ page 28–29)	
6	16



Claw grooves

for tube $\varnothing$	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

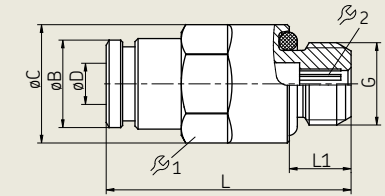
Claw grooves



Adaptors with cylindrical thread (→ Figure 13)

Order No.	Tube $\varnothing$ D	G	L1	$\varnothing$ B	$\varnothing$ C	L	$\varnothing$ 1	$\varnothing$ 2	Seal
451-004-260-VS	4	M6	4.5	8.8	11.5	25	10	2.5	NBR
404-073-VS	4	M6x0.75	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	M8x1	6	8.8	11.5	23.8	10	2.5	NBR
404-003-S8-VS	4	M8x1	6	8.8	11.5	23.8	10	2.5	FPM
404-006-VS	4	M10x1	6	8.8	13.5	23.8	12	2.5	NBR
404-006-S8-VS	4	M10x1	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	M8x1	6	11.7	13.2	30.5	12	3	NBR
406-004-VS	6	M10x1	6	11.7	13.5	27	12	4	NBR
406-004-S8-VS	6	M10x1	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	M12x1	7	11.7	15.4	28	14	4	NBR
406-162-S8-VS	6	M12x1	7	11.7	15.4	28	14	4	FPM
408-004-VS	8	M10x1	6	13.9	15.2	32.3	14	5	NBR
408-004-S8-VS	8	M10x1	6	13.9	15.2	32.3	14	5	FPM
408-162-VS	8	M12x1	7	13.9	15.2	32.8	14	6	NBR
408-162-S8-VS	8	M12x1	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

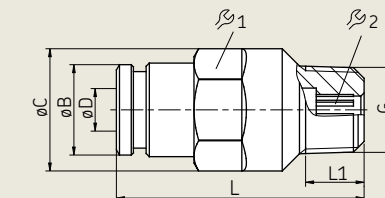
Figure 13



Adaptors with tapered thread (→ Figure 14)

Order No.	Tube $\varnothing$ D	G	L1	$\varnothing$ B	$\varnothing$ C	L	$\varnothing$ 1	$\varnothing$ 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	M6x0.75 tap.	5.5	8.8	11.5	25.8	10	2.5	NBR
451-004-498-VS	4	M8x1 tap.	5.5	8.8	11.5	23.3	10	2.5	NBR
451-004-518-VS	4	M10x1 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	M8x1 tap.	5.5	11.7	13.5	29.5	12	4	NBR
451-006-518-VS	6	M10x1 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



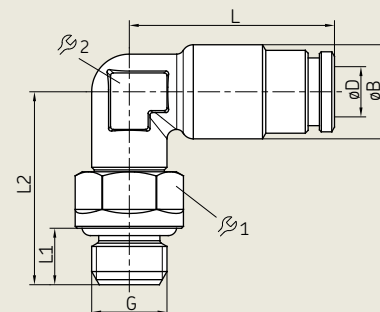
SKF Quick Connectors for oil and grease

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

Banjo fittings with cylindrical thread (→ Figure 15)

Order No.	Tube øD	G	L1	ø B	L	L2	Ø 1	Ø 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

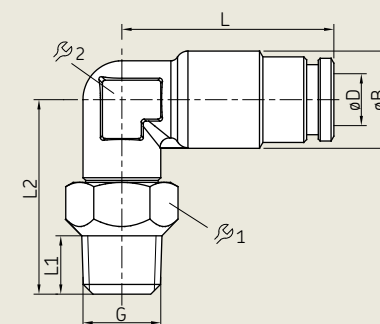
Figure 15



Banjo fittings with tapered thread (→ Figure 16)

Order No.	Tube øD	G	L1	ø B	L	L2	Ø 1	Ø 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

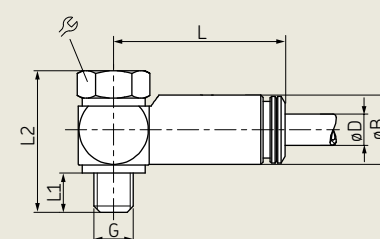
Figure 16



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

Order No.	Tube øD	G	L1	ø B	L	L2	Ø	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



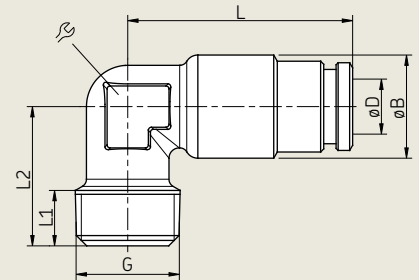
SKF Quick Connectors for oil and grease

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	NBR
453-004-471-S8-VS	4	M6 tap.	6	10	21.8	14	FPM
504-201-VS	4	M8×1 tap.	6	10	21.8	13.5	NBR
504-201-S8-VS	4	M8×1 tap.	6	10	21.8	13.5	FPM
504-202-VS	4	M10×1 tap.	6	10	21.8	13.5	NBR
504-202-S8-VS	4	M10×1 tap.	6	10	21.8	13.5	FPM
514-018-VS	4	R 1/8	7.5	10	21.8	15	NBR
514-018-S8-VS	4	R 1/8	7.5	10	21.8	15	FPM
504-200K-V1-VS	4	1/4-28 SAE LT	5.1	10	21.8	15.5	NBR
514-018K-V1-VS	4	1/8 NPTF	7	10	21.8	15	NBR
453-006-468-VS	6	M6 tap.	6	12.5	26	15	NBR
453-006-468-S8-VS	6	M6 tap.	6	12.5	26	15	FPM
506-508-VS	6	M8×1 tap.	6.5	12.5	26	14	NBR
506-508-S8-VS	6	M8×1 tap.	6.5	12.5	26	14	FPM
506-510-VS	6	M10×1 tap.	6	12.5	26	14	NBR
506-510-S8-VS	6	M10×1 tap.	6	12.5	26	14	FPM
506-511-VS	6	R 1/8	8.5	12.5	26	16.5	NBR
506-511-S8-VS	6	R 1/8	8.5	12.5	26	16.5	FPM
506-511K-V1-VS	6	1/8 NPT	8.5	12.5	26	16.5	NBR
506-512-VS	6	M12×1 tap.	7	12.5	26	15	NBR
453-006-651-VS	6	R 1/4	11.5	12.5	26	19.5	NBR

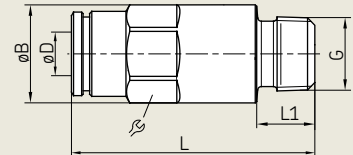
Elbow



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±1	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

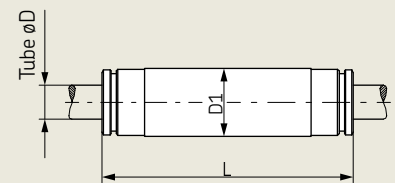
Check valve



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

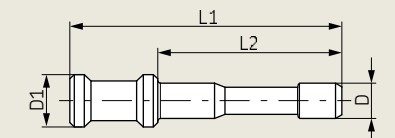
Connector



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



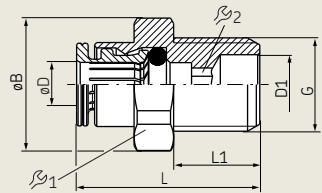
SKF Quick Connectors for grease

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

Straight screw-in connectors (→ Figure 18)

Order No.	Tube $\varnothing$ D	G	L1	$\varnothing$ B	L	$\varnothing$ 1	$\varnothing$ 2	Seal
226-14139-1	6	G 1/4	12	18.5	25.5	17	4	NBR

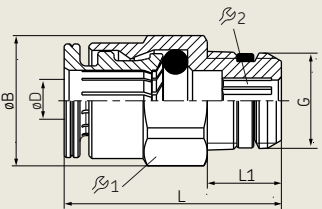
Figure 18



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

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

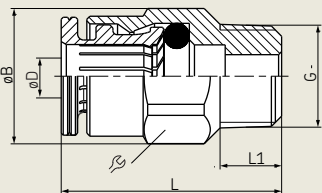
Figure 19



Adaptors with tapered thread (→ Figure 20)

Order No.	Tube $\varnothing$ D	G	L1	$\varnothing$ B	L	$\varnothing$	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

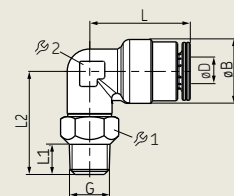
Figure 20



Banjo fittings with tapered thread

Order No.	Tube $\varnothing$ D	G	L1	$\varnothing$ B	L	L2	$\varnothing$ 1	$\varnothing$ 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

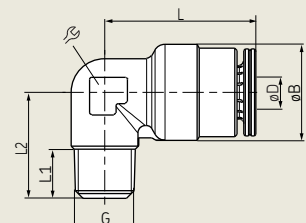


Elbows with tapered thread

Order No.	Tube $\varnothing$ D	G	L1	$\varnothing$ B	L	L2	$\varnothing$	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

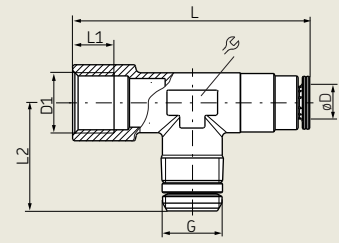
SKF Quick Connectors for grease

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

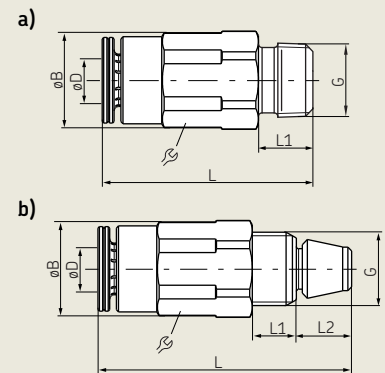
T-Tee screw-in connector



Check valves for progressive 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

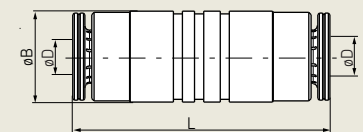
Check valves



Connector

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

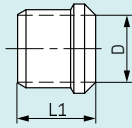
Connector



Fittings

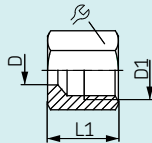
Solderless pipe union with cutting-sleeve acc. to DIN EN ISO 8434-1 and DIN 2353

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	100	LL
406-331	6	7		
96-5708-0058	8	7		
96-5710-0058	10	7	250	AS (L) ¹⁾
406-301	6	9.5		
408-301	8	10		
410-301	10	10	160	L
412-301	12	10.5		
415-301	15	10		
418-301	18	10.5		
Stainless steel				
99-5704-0058	4	6	100	LL
406-301-S3	6	9.5		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		

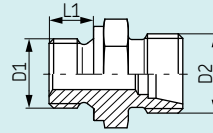
Union nuts to DIN 3861/ISO 8434-1



Order No.	D (Tube ø)	D1	L1		Pressure [bar]	Series
Steel, galvanized surface (Cr-6-free)						
404-302	4	M8×1	11	10	100	LL
406-332	6	M10×1	12	12		
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	250	L
412-302	12	M18×1.5	16	22		
415-302	15	M22×1.5	18	27		
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		

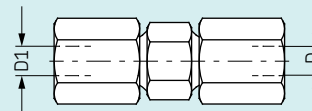
Straight screw-in glands

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	M10x1	M12x1.5	8	L
406-323	6	M10x1 tap.	M10x1	—	
406-333	6	M8x1 tap.	M10x1	—	
408-313	8	M14x1.5	M14x1.5	9	
410-313	10	M16x1.5	M16x1.5	9	
410-323	10	M14x1.5	M16x1.5	9	

Straight connectors (tube to tube)



			Reducing connectors			
Order No.	Tube Ø D, D1	Series	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	L				
408-408-S3	8					
410-410-S3	10					
415-415-S3	15					

LL-series = extra light version

L-series = light version

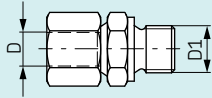
S-series = heavy duty version

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	M10×1.5	L
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	
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	S
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	
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.	LL
406-443	6	M6 tap.	
406-433	6	M8×1 tap.	
406-423	6	M10×1 tap.	
406-446 ¹⁾	6	M6 tap.	
441-008-511	8	M10×1 tap.	L
410-443	10	M10×1 tap.	

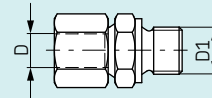
Stainless steel

406-443-S3	6	M6 tap.	LL
406-433-S3	6	M8×1 tap.	
406-403-S3	6	M10×1	
406-423-S3	6	M10×1 tap.	
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

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

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	L
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	
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	S
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	
96-1114-0058	14	G 1/2 A	
96-1117-0058	16	G 3/8 A	
96-1116-0058	16	G 1/2 A	LL
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.	LL
406-423W	6	R 1/8 tap.	
408-423W	8	R 1/8 tap.	
96-5909-0058	8	R 1/4 tap.	
96-5911-0058	10	G 1/4 tap.	
96-5912-0058	11	G 1/8 tap.	
96-5913-0058	12	G 3/8 tap.	LL

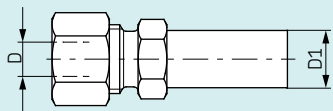
Stainless steel

406-403W-S3	6	G 1/8 A	L
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	
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	

Fittings

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

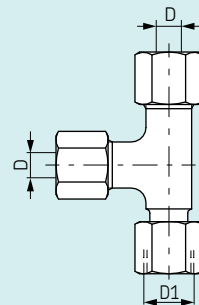
Reducing connectors



Order No.	Tube $\varnothing D$	$\varnothing D1$
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

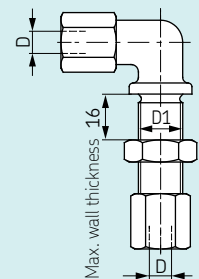
L-screw-in connectors, directionally adjustable

Order No.	Tube $\varnothing D$	$\varnothing D1$	Series
443-406-061	6	M12x1.5	L
443-408-081	8	M14x1.5	
443-410-101	10	M16x1.5	
443-412-121	12	M18x1.5	
443-415-151	15	M22x1.5	
443-418-181	18	M26x1.5	S
443-406-351	6	M14x1.5	
443-408-083	8	M16x1.5	
96-3010-0060	10	M18x1.5	
96-3012-0060	12	M20x1.5	
96-3014-0060	14	M22x1.5	S
96-3016-0060	16	M24x1.5	
443-410-211	10	G 3/8 A	L
443-410-161	10	G 1/4 A	

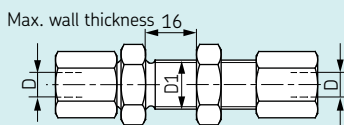


Elbow bulkhead connectors

Order No.	Tube $\varnothing D$	$\varnothing D1$
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



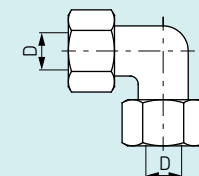
Straight bulkhead connectors



Order No.	Tube $\varnothing D$	$\varnothing D1$
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

Elbow connectors

Order No.	Tube $\varnothing D$
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 $\varnothing$		Series
	D	D1	

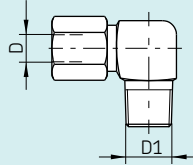
Steel, galvanized surface (Cr-6-free)

Form F

96-6202-0058	4	M6 tap.	LL
404-425	4	M10×1 tap.	
406-445	6	M6 tap.	
406-435	6	M8×1 tap.	
406-425	6	M10×1 tap.	
408-425	8	M10×1 tap.	L
406-405	6	M10×1 tap.	
408-405	8	M12×1.5 tap.	
410-405	10	M14×1.5 tap.	
412-405	12	M16×1.5 tap.	
415-405	15	M18×1.5 tap.	S
410-425	10	M16×1.5 tap.	

Stainless steel

404-405-S3	4	M8×1 tap.	LL
406-435-S3	6	M8×1 tap.	
406-445-S3	6	M6 tap.	

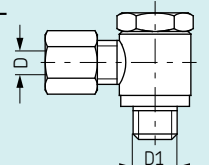


Banjo fittings with metrical thread

Order No.	Tube $\varnothing$		Series
	d	d1	

Steel, galvanized surface (Cr-6-free)

445-529-041	4	M8×1	LL
96-7104-0158	4	M10×1	
445-531-061	6	M10×1	L
96-7808-0058	8	M12×1.5	
445-535-101	10	M14×1.5	
96-7812-0058	12	M16×1.5	
96-7815-0058	15	M18×1.5	
96-7818-0058	18	M22×1.5	S
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	LL
96-7106-0058	6	M10×1	
96-7108-0058	8	M10×1	



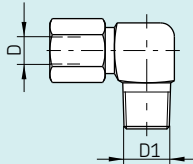
Elbow screw-in connectors with Whitworth pipe thread

Order No.	Tube $\varnothing$		Series
	D	D1	

Steel, galvanized surface (Cr-6-free)

Form G

404-405W	4	R 1/8 tap.	LL
96-6110-0058	10	R 1/4 tap.	
96-6112-0058	12	R 1/4 tap.	
406-405W	6	R 1/8 tap.	L
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.	
412-405W	12	R 3/8 tap.	S
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.	

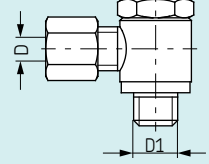


Banjo fittings with Whitworth pipe thread

Order No.	Tube $\varnothing$		Series
	D	D1	

Steel, galvanized surface (Cr-6-free)

96-7004-0058	4	G 1/8 A	LL
445-519-041	4	G 1/8 A	L
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	
445-521-122	12	G 3/8 A	S
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	S
96-7912-0058	12	G 3/8 A	
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

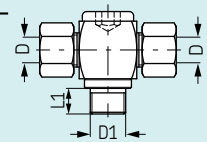
Connectors for pressure gauges

Order No.	Tube D	Series	Order No.	Tube D	Series
Version A			Version B		
406-411	6	L	248-610.01	6	L
408-411	8				
410-411	10				
412-411	12				
Version C			Version D		
96-0406-0060	6	S	96-8804-0058	4	L
441-108-132	8		441-106-162	6	
96-0410-0060	10		96-0308-0060	8	
96-0412-0060	12		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

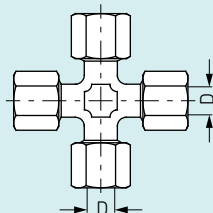
Tee screw-in connectors with metrical thread

Order No.	Tube 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



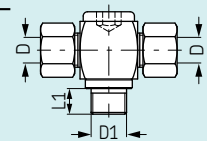
Four-way connectors

Order No.	Tube 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	



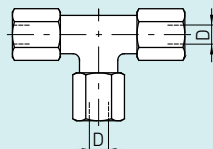
Tee screw-in connectors with Whitworth pipe thread

Order No.	Tube 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.	14 L
96-0818-0058	18	R 1/2 tap.	
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	



Tee connectors

Order No.	Tube 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	

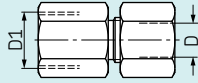


LL-series = extra light version; L-series = light version; S-series = heavy duty version

Fittings

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

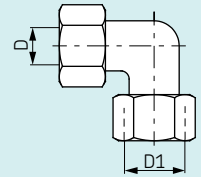
Straight screw-in fitting



Order No.	Tube øD	D1	Series
96-0506-0060	6	M10×1.5	L
96-0508-0060	8	M12×1.5	
96-0510-0060	10	M14×1.5	
96-0512-0060	12	M16×1.5	
96-0515-0060	15	M18×1.5	
96-0518-0060	18	M22×1.5	
96-0522-0060	22	M26×1.5	S
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	
96-0614-0060	14	M20×1.5	
96-0616-0060	16	M22×1.5	L
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	S
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

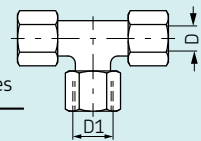
Order No.	Tube øD	D1
443-306-341	6	M12×1.5
443-306-343	6	M14×1.5
443-308-351	8	M14×1.5



Tee female thread unions

directionally adjustable

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

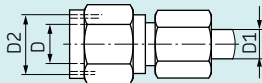


LL-series = extra light version
L-series = light version
S-series = heavy duty version

Fittings

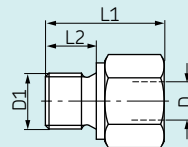
solderless pipe union with cutting-sleeve acc. to DIN EN ISO 8434-1 and DIN 2353

Reducing connections



Order No.	Tube $\varnothing D$	Tube $\varnothing D1$	D2	Series
96-1406-0060	6	4	M10x1	LL
96-1408-0060	8	4	M12x1	
96-1410-0060	8	6	M12x1	
96-1508-0060	8	6	M14x1.5	L
96-1511-0060	10	6	M16x1.5	
96-1523-0060	12	10	M18x1.5	
96-1532-0060	15	8	M22x1.5	
96-1533-0060	15	10	M22x1.5	
96-1541-0060	18	6	M26x1.5	
96-1542-0060	18	8	M26x1.5	
96-1543-0060	18	10	M26x1.5	
96-1545-0060	18	15	M26x1.5	
96-1551-0060	22	6	M30x2	
96-1555-0060	22	15	M30x2	S
96-1556-0060	22	18	M30x2	
96-1610-0060	8	6	M16x1.5	
96-1611-0060	10	6	M18x1.5	
96-1612-0060	10	8	M18x1.5	
96-1621-0060	12	6	M20x1.5	
96-1622-0060	12	8	M20x1.5	
96-1623-0060	12	10	M20x1.5	
96-1631-0060	14	6	M22x1.5	
96-1632-0060	14	8	M22x1.5	
96-1633-0060	14	10	M22x1.5	
96-1634-0060	14	12	M22x1.5	
96-1641-0060	16	6	M24x1.5	
96-1642-0060	16	8	M24x1.5	
96-1643-0060	16	10	M24x1.5	
96-1644-0060	16	12	M24x1.5	
96-1645-0060	16	14	M24x1.5	
96-1651-0060	20	6	M30x2	
96-1652-0060	20	8	M30x2	
96-1653-0060	20	10	M30x2	
96-1654-0060	20	12	M30x2	
96-1655-0060	20	14	M30x2	
96-1656-0060	20	16	M30x2	

Reducing connections, sealing by sealing edge



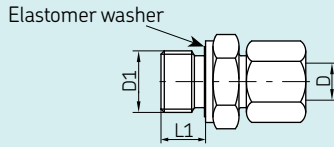
Order No.	D1	Tube $\varnothing D$	L1	L2
401-016-191	G 1/8 A	G 1/4	31	8
96-3116-0058	G 1/4 A	G 1/8	28	12
96-3117-0058	G 1/4 A	G 3/8 A	36	12
96-3118-0058	G 1/4 A	G 1/2	40	12
96-3101-0058	G 3/8 A	G 1/8	22,5	12
96-3120-0058	G 3/8 A	G 1/4	36	12
96-3121-0058	G 3/8 A	G 1/2	41	12
96-3122-0058	G 3/8 A	G 3/4	44	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

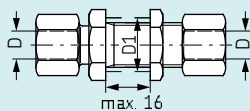
Straight screw-in connectors with elastomer washer and E02 function nut



Order No.	Tube $\varnothing D$	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		G 1/8	8	
471-008-161		G 1/4 A	12	
471-008-131		G 1/2	14	
471-008-211	8	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		G 1/4 A	12	
471-010-211		G 3/8 A	12	
471-010-312	10	M10×1	15	
471-010-351		M14×1.5	12	
471-010-391		M18×1.5	11	
471-012-161		G 1/4 A		
471-012-211	12	G 3/8 A	12	
471-012-391		M18×1.5		
471-015-131	15	G 1/2 A	14	

¹⁾ LL-series (extra light version)

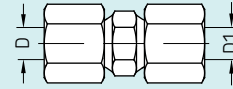
Straight bulkhead connectors with E02 function nut



Order No.	Tube $\varnothing D$	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

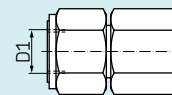
Max. operating pressure 315 bars

Straight connectors (tube to tube) with E02 function nut



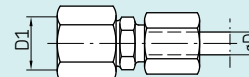
Order No.	Tube $\varnothing D$, D1
474-506-061	6
474-508-081	8
474-510-101	10
474-512-121	12
474-515-151	15
474-518-181	18

Straight connectors using a threaded pin and E02 function nut



Order No.	Tube $\varnothing D$	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 $\varnothing D$	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 $\varnothing D$
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 $\varnothing D$
471-106-163	6
471-108-163	8
471-110-163	10
471-112-163	12

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

Accessories

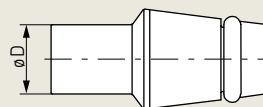
Solderless pipe union with cutting-sleeve according to DIN EN ISO 9974-1 and DIN 2353

Cone plugs

Order No. Tube $\varnothing$ D

460-706-001	6
460-708-001	8
460-710-001	10
460-712-001	12

Cone plug

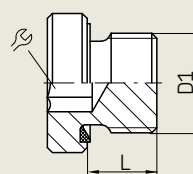


Screw plugs with elastomer seal

Order No. D1 L 

466-411-001	G 1/8 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	M18x1.5	12	8

Screw plug



Screw plugs with profile seal according to DIN 3869

Order No. D1 L 

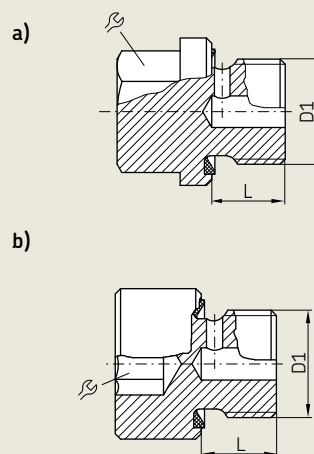
466-419-001	G 1/8 A	8	5
466-429-001	M8x1	8	4
466-431-001	M10x1	8	5

Vent plugs with profile seal according to DIN 3869

Order No. D1 L  Fig.

466-431-006	M10x1	7	10	a
466-431-005	M10x1	7	5	b
466-431-009	G 1/8 A			

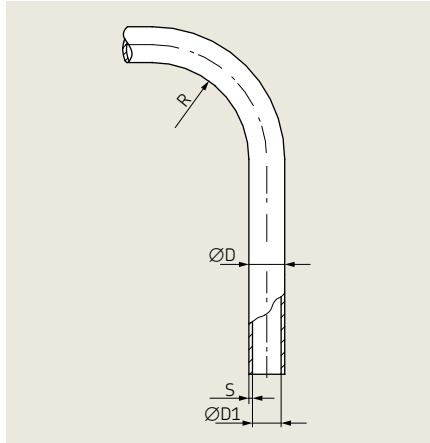
Vent plug



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-R06x0.7 VERZI	6 ±0.05	0.7	4.6 ±0.11	12	320	850
WV-R08x0.7 VERZI	8 ±0.05	0.7	6.6 ±0.11	19	230	675
WV-R010x0.7 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-R04x1+A46	4 ±0.1	1	2 ±0.2	12	466	2080
DIN2462-R06x1+A46	6 ±0.1	1	4 ±0.2	18	347	1473
DIN2462-R08x1+A46	8 ±0.1	1	6 ±0.2	24	269	1105
DIN2462-R010x1+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

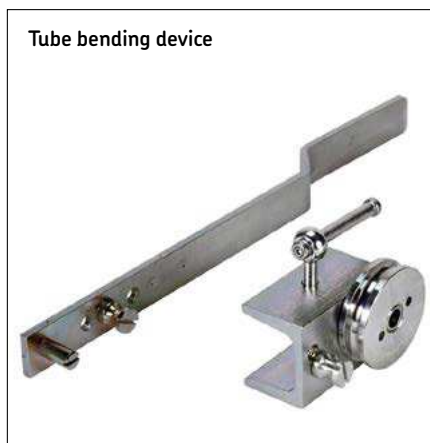
Tube bending device

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 Ø 8,6 mm) NW6 (tube outside Ø 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 Ø 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

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
BEL 90° abgewinkelt	19	21	6	855-380-003	CB
VS straight	39		6	855-380-002-VS	CC
VS 90° abgewinkelt	19	35	6	855-380-003-VS	CD
Zinc-nickel, Cr-6-free					
VS straight	32		6	853-370-002-VS	AA
VS straight	39		6	853-380-002-VS	AB
VS 90° angle	19	35	6	853-380-003-VS	AC
VS 45° angle	40	23	6	853-380-004-VS	AD
VS 45° angle	65	18	6	853-380-007-VS	AE
VS straight	75		6	853-390-002-VS	AF
VS 90° angle	30	50	6	853-390-003-VS	AG
VS 45° angle	65	24	6	853-390-004-VS	AH
VS 30° angle	70	17	6	853-390-005-VS	AJ
VS straight	39		8	406-708-005-VS	DA
BEL straight	26		6	853-370-002	BA
BEL straight	36		6	853-380-002	BB
BEL 90° angle	19	21	6	853-380-003	BC
BEL 45° angle	23	11	6	853-380-004	BD
BEL straight	75		6	853-390-002	BE
BEL 90° angle	30	50	6	853-390-003	BF
BEL 90° angle	30	36	6	853-390-004	BG
BEL straight	26		8	406-708-005	EA
BEL straight	32		8	406-708-006	EB
BEL straight	53		8	406-708-007	EC
BEL 90° angle	25	34	8	406-708-008	ED
BEL 45° angle	43	26	8	406-708-009	EE
BEL straight	35		10	406-710-002	FA
LL straight	26		6	853-370-002	PA
LL straight	36		6	853-380-002	PB
LL 90° angle	19	22	6	853-380-003	PC
LL 45° angle	23	11	6	853-380-004	PD
LL straight	75		6	853-390-002	PE
LL 90° angle	30	50	6	853-390-003	PF
LL 90° angle	30	36	6	853-390-004	PG
LL straight	26		8	406-708-005	PJ
LL straight	32		8	406-708-006	PK
LL straight	53		8	406-708-007	PL
LL 90° angle	25	34	8	406-708-008	PM
LL 45° angle	43	26	8	406-708-009	PN
L straight	26		6	853-370-002	SA
L straight	36		6	853-380-002	SB
L straight	75		6	853-390-002	SE
L 90° angle	30	50	6	853-390-003	SF
L 90° angle	30	36	6	853-390-004	SG
L straight	26		8	406-708-005	SJ
L straight	32		8	406-708-006	SK
L straight	53		8	406-708-007	SL
L 90° angle	25	34	8	406-708-008	SM
L 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)

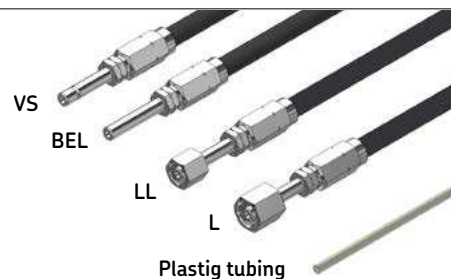
L = light version 2) 3)

1) incl. sleeve → table 4

2) EO, metallic sealing

3) cutting sleeves and union nuts → page 30

Fitting version



Tube protection

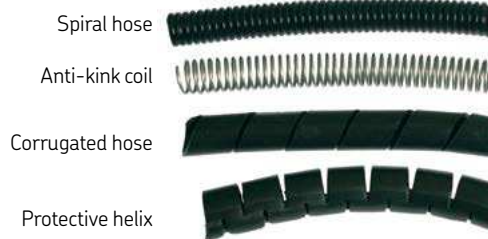


Table 3

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.

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

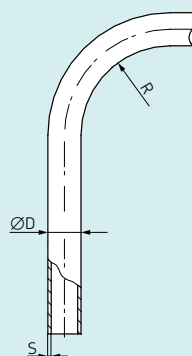
Tube type								
Tube type	Tube Ø	Material	Wall thickness	Tube outside ØD [mm]	Wall thickness S [mm]	Min. bending radius ²⁾ R [mm]	Burst pressure ³⁾ [bar]	Length 50 m Order No.
Code								
Plastic tubing semirigid (without plasticizer)								
T 02 A A T	2,5	0,5	25	198	WVN715-R02.5x0.5			
T 04 A C 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			
T 04 A D T	4	1	30	267	112-35127-7			
T 06 A D T	6	1	63	159	112-35127-5			
T 06 A E T	6	1,25	63	210	WVN715-R06x1			
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 ($\rightarrow$ pressure utilization factor table, page 41).

Order example plastic tubing

Order code: T06CFB02500XXXXFAX



- Plastic tubing
- Tube outside Ø 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

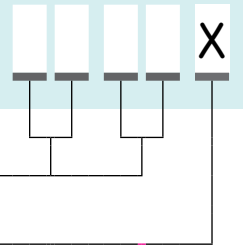
Tubes and hoses

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



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



Example for customized version with marking

Order code: H06DHB02500BCBDZAXAAAX

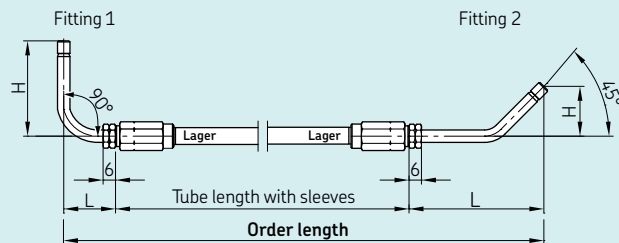
Customized order No. **H06DHB02500-000001**

- High pressure hose
- Tube outside Ø 8,6 mm (NW 4)
- Material PUR
- Wall thickness 2.3 mm
- Black tubing
- Tube length 2500 mm
- Tube stud Ø 6 mm, 90° angle
- Tube stud Ø 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)

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



Self-installation of high pressure hoses

Example for self-installation of high pressure hoses

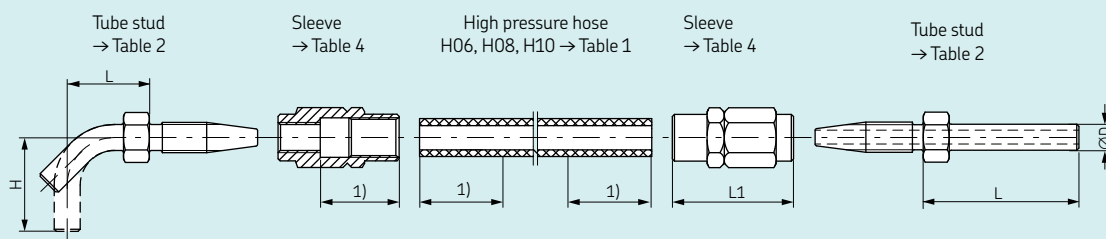
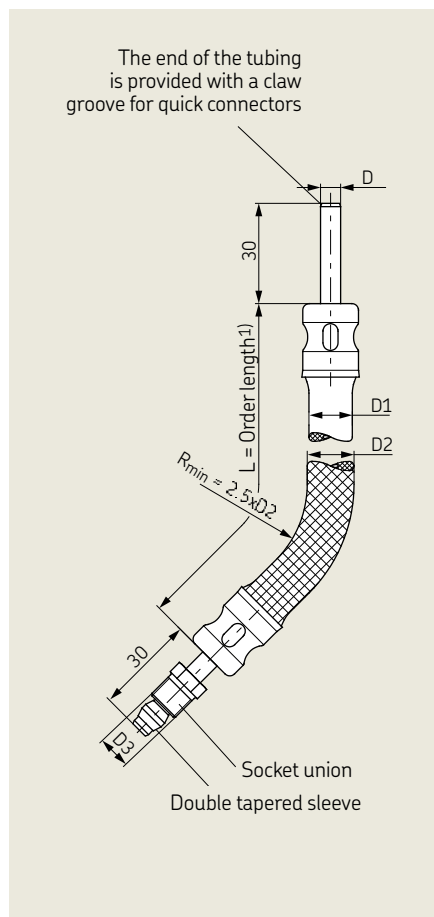


Table 1 → page 42
Table 2, 4 → page 43

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 [cm ³ /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

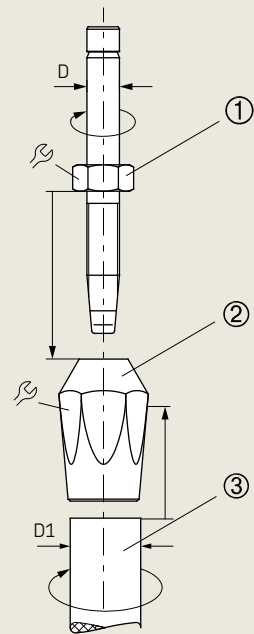
Material: Hose: Perbunan, resistant to mineral oils, with two layers of braided rayon
Male body: steel, galvanized
Shell: brass

Permissible operating pressure: -40 to +100 °C

Installation instructions

- Apply thin film of oil to thread and inside of hose of parts ③ ② ① to be connected.
- Clamp shell ② in vise and screw in hose ③ by turning it to the left up to the stop.
- 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 $\varnothing$	D1 1)	L2	Durchfluss- richtung
207-168-2	6	M10x1	65	beliebig
207-188-2	8	M14x1,5	71,5	

Outer coupling member

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

Inner coupling member

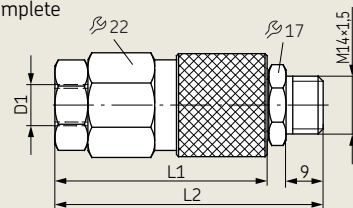
Order No. 207-168.U2

Both coupling members are shut off when disconnected!

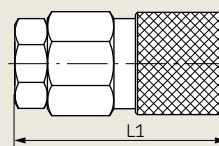
1) Ports tapped for solderless tube connection

Quick-disconnect couplings, operating pressure 45 bars

Coupling, complete



Outer coupling member



Inner coupling member

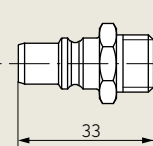
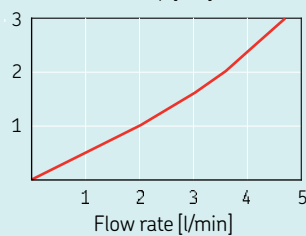


Diagram 1

Pressure loss Δp [bar]

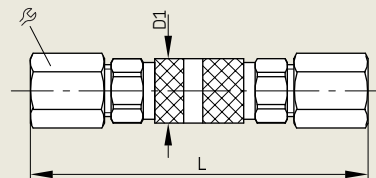


Pressure loss as a function of the flow rate based on an operating oil viscosity of 140 mm²/s

Quick-disconnect couplings, operating pressure 100 bars

Order No.	Tube $\varnothing$	L	D1	$\varnothing$
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

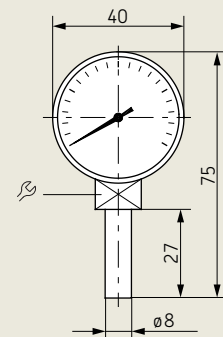
Pressure gauges (→ Figure 21) Damped design with restrictor

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	–
169-104-008 1)	0–40 bars	4kt 14	0.4
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



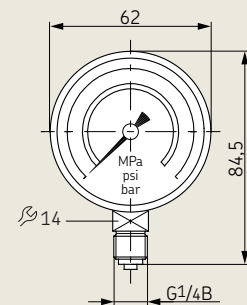
Pressure gauges (→ Figure 22)

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

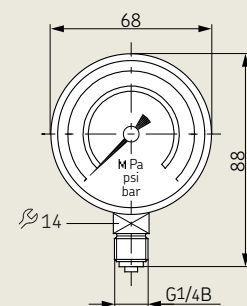


Pressure gauges (→ Figure 23) Damped version with glycerine filling

Order No.	Indication range	Mounting position
Stainless steel housing		
169-102-015	0–25 bars / 0–363 psi / 0–2,5 Mpa	vertically
169-104-015	0–40 bars / 0–580 psi / 0–4 Mpa	
169-106-015	0–60 bars / 0–870 psi / 0–6 Mpa	
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

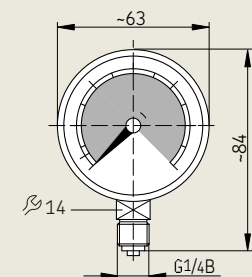


Pressure gauges (→ Figure 24) Damped design with glycerin filling and visualization in red/green

Order No.	Indication range	Mounting position
Stainless steel housing		
169-101-607	0–16 bars / 0–1,6 MPa	vertically
169-104-011	0–40 bars / 0–4 MPa	
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



Rotating joints, Banjo fittings

Rotating joints

Order No.	Tube ø	D1	D2 ¹⁾	Max. speed [min ⁻¹]	Max. pressure oil [bar]	air [bar]
401-504-192	4	G 1/8	M8x1	100	30	8
401-504-292	4	M8x1	M8x1			
401-506-313	6	M10x1	M10x1			

Flow media: mineral oils, oiled compressed air

1) Ports tapped for solderless tube connection

Banjo fitting, rotatable

Order No.	Tube $\varnothing$	D1	Fig.
405-549-049	4	M8x1 tap.	a
405-551-049	4	M10x1tap.	

Banjo fitting, rotatable

Order No.	Tube ø	D1	Max. speed [min ⁻¹]	Max. pressure oil [bar]	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, rotatable

Order No.	Tube Ø	Max. speed [min ⁻¹]	Max. pressure [bar]	Fig.
DLY932	6	1400	5	c

Flow media: mineral oils

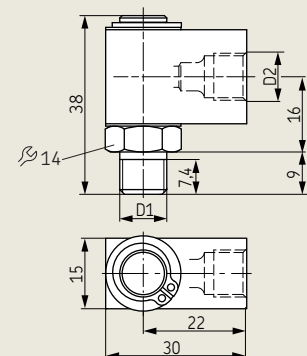
Banjo fitting, rotatable

Order No.	Tube $\varnothing$	Remark	Max. speed [min ⁻¹]	Max. pressure [bar]	Fig.
408-120	8	Part a rotating in part b	20	10	d

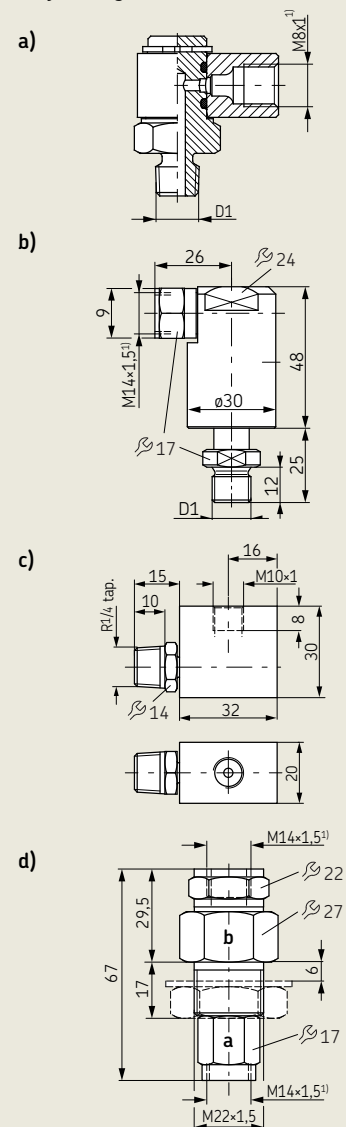
Flow media: mineral oils

The rotating joint is also available with nut DIN936-M22x1.5 and spring washer DIN137-B22.

Rotating joint



Banjo fitting



1) Ports tapped for solderless tube connection

Accessories

Relief valves

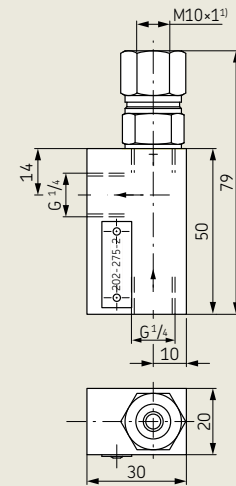
These valves are installed in distributor systems fitted with a pump without pressure relief equipment, mainly in the main line downstream from the pump.

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

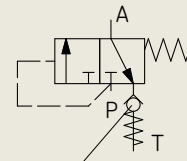
Order No. 202-275-2

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

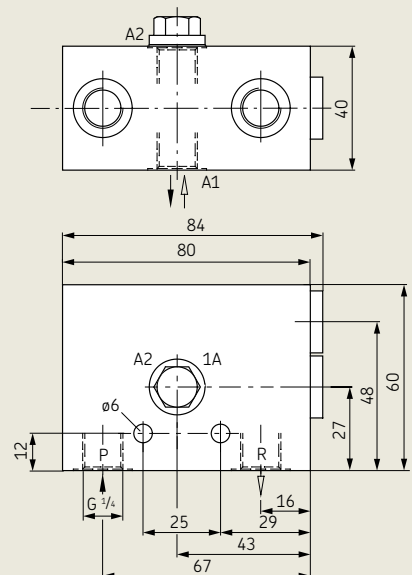
Relief valve with bleed valve and safety valve

Order No. 202-175-30

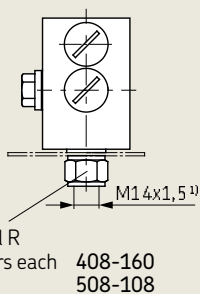
Adaptors ¹⁾ for tube ø6: Order No. 406-054
for tube ø8: Order No. 301-020
for tube ø10: Order No. 410-163

¹⁾ Ports tapped for solderless tube connection

Relief valve 202-175-30

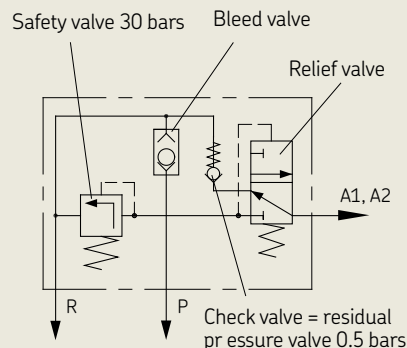


Fitted to reservoir



¹⁾ Ports tapped for solderless tube connection

Relief valve circuit diagram



Accessories

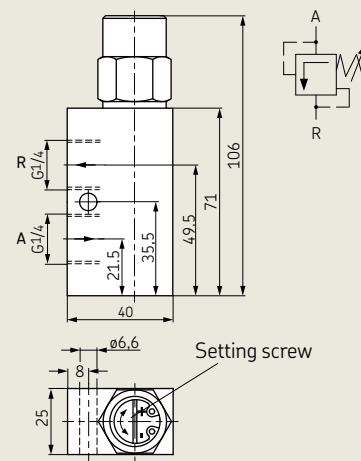
Safety valves, Check valves

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	→ Dia-gram 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 adaptors with long tube ends
408-160

¹⁾ Ports tapped for solderless tube connection

Fitted to reservoir

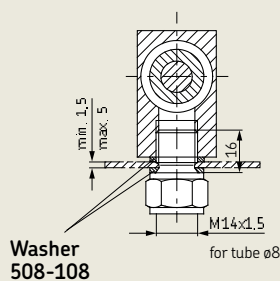
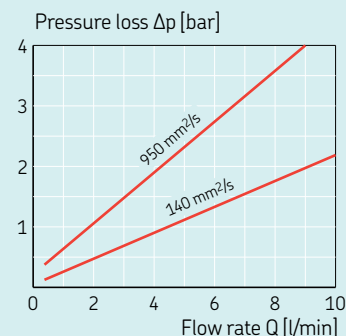


Diagram 2

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	R 1/8 tap.	10	315	L	a
VPM-RV4	4	M10x1 tap.	10	100	LL	a
VPM-RV6	6	M10x1 tap.	10	315	L	a
VPM-RV8	8	M10x1 tap.	10	315	L	a
VPM-RV10	10	M10x1 tap.	10	315	L	a

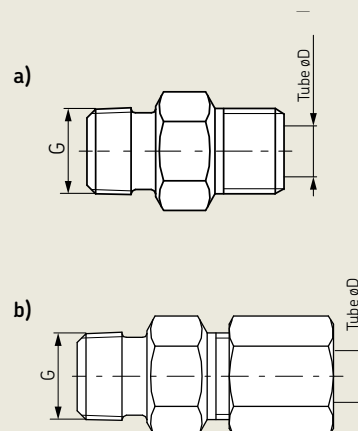
With cutting sleeve and union nut

VPKG-RV	6	R 1/8 tap.	3	100	LL	b
VPKM-RV-S3 ²⁾	6	M10x1 tap.	3	100	LL	b
VPKM-RV-S4	6	M10x1 tap.	2	100	LL	b

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

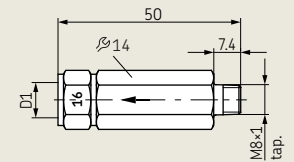


Figure 25

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	2)
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.

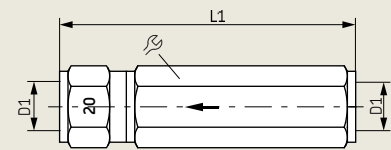


Figure 26

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

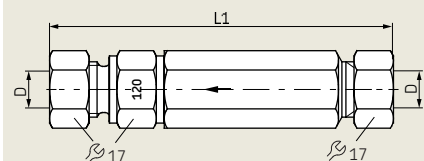


Figure 27

Accessories

Shut-off valves

Shut-off valve

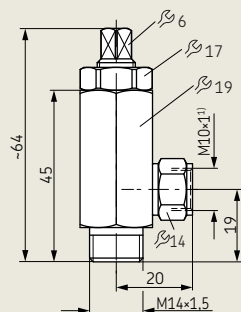
Order No.	p max. [bar]	Max. temperature [°C]	Spindleway
202-085-S	60	80	max. 3 revs.

Direction of flow optional

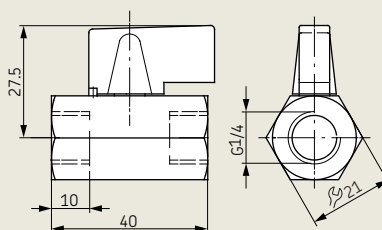
Shut-off valves

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

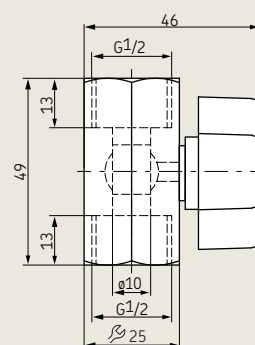
Shut-off valve 202-085-S



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	15			
169-000-012	10			
169-000-016	20	NLGI 1,2	manually operated	no
169-000-056	25			
169-000-082	25 / 50	00/000	manually operated	yes
169-000-084	25			
169-000-042	25	NLGI 1,2	manually operated	yes
169-000-054	50			
169-000-342	25	NLGI 1,2	manually operated	no
169-000-018	25	00 bis 2	pneum. operated	yes

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

Topping-up pump 169-000-042



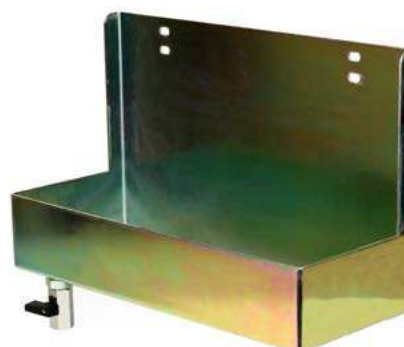
Topping-up pump 169-000-342



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



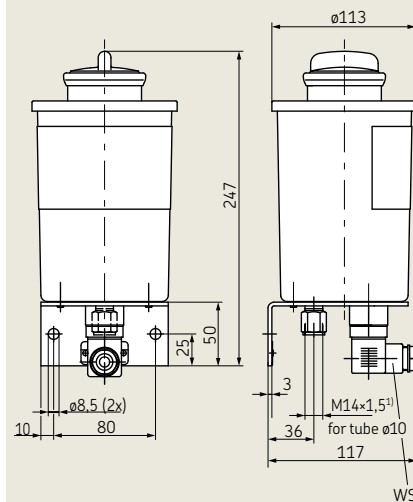
Reservoirs

Oil reservoirs – plastic

Plastic reservoirs

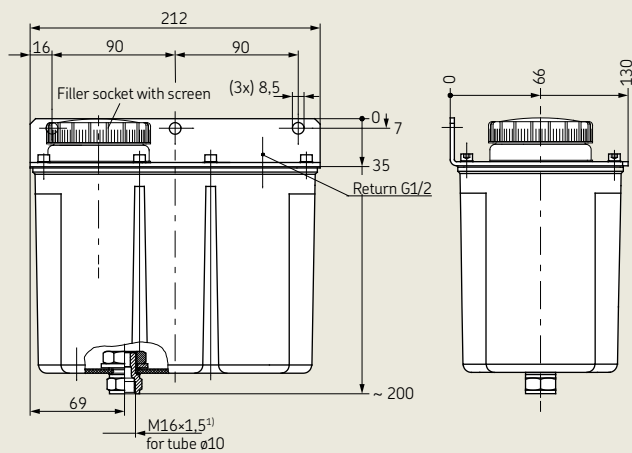
Order No.	Reservoir capacity [liters]	Level indicator WS	Type of contact	Seal material
K1		–	–	
KW1	1	for min. filling level	NC	NBR
KW1-S2		for min. filling level	NC	
K3-S2	3	–	–	NBR
KW3-S1		for min. filling level	changeover	
K6-S5		–	–	NBR
KW6-S1	6	for min. filling level	changeover	NBR
KW6-S2		for min.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



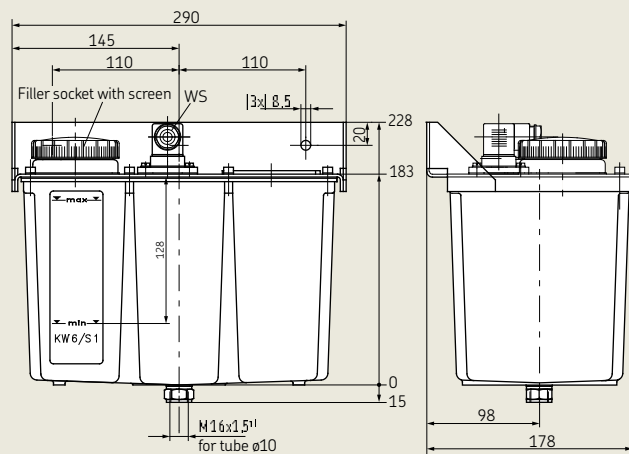
1) Ports tapped for solderless tube connection

Plastic reservoir, 3 liter



1) Ports tapped for solderless tube connection

Plastic reservoir, 6 liter



1) Ports tapped for solderless tube connection

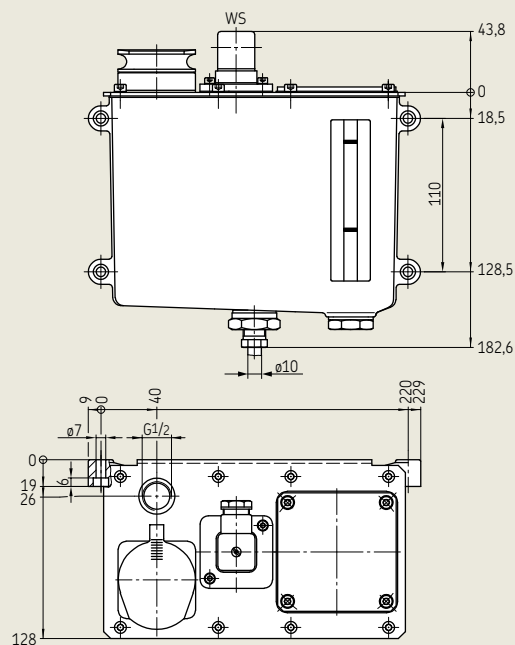
Reservoirs

Oil reservoirs – metal

Metal reservoirs

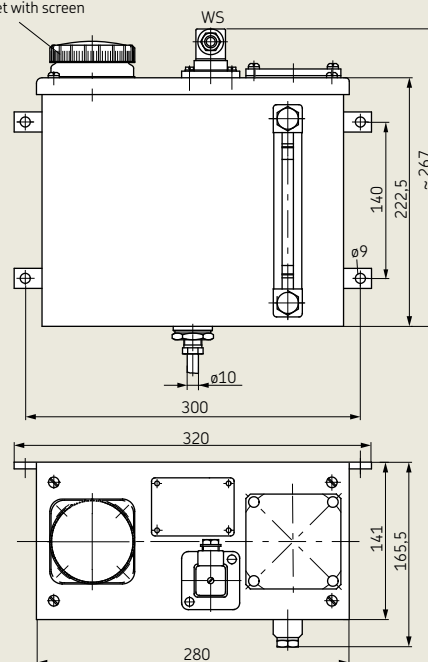
Order No.	Reservoir capacity [liters]	Level indicator WS	Type of contact	Seal material
BW3-2-S1	3	for min. filling level	changeover	NBR
B7		–	–	NBR
BW7-S6		for min. and max. filling level	2 NCs	NBR
BW7-S7		for min. filling level with advance warning	2 NCs	NBR
BW7-S8	6	for min. filling level	changeover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

Filler socket with screen

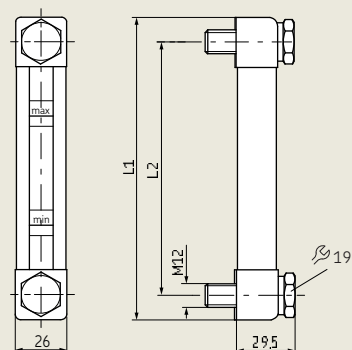


Oil level gauges for metal reservoir

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

1102.....	4	226-14157-2.....	28	402-008K.....	8
1404.....	4	226-14157-3.....	28	402-011.....	12
1406.....	4	243-001.10.....	8	402-116-161.....	13
1408.....	4	243-001.20.....	8	402-116-165.....	13
1410.....	4	248-602.20.....	50	402-603.....	6
1412.....	4	248-602.25.....	50	402-606-191.....	10
111-35114-1.....	42	248-610.01.....	34	402-611.....	6
111-35301-4.....	42	248-803.16.....	40	402-612.....	6
111-35306-5.....	43	248-803.17.....	40	403-006-651.....	9
112-35127-2.....	44	248-803.20.....	40	404-001.....	5
112-35127-5.....	44	267-001.03.....	8	404-002.....	5
112-35127-7.....	44	267-001.13.....	7	404-003.....	7
112-35225-4.....	44	267-001.17.....	7	404-003DK.....	14
113-35075-2.....	43	267-001.19.....	7	404-003K.....	8
113-35075-3.....	43	267-001.36.....	8	404-003-S8-VS.....	25
161-212-054.....	54	267-001.47.....	8	404-003-VS.....	25
161-600-036.....	55	267-001.60.....	8	404-004.....	7
162-310-005.....	58	301-001.....	7	404-005.....	7
169-000-004.....	56	301-001DK.....	14	404-006.....	7
169-000-012.....	56	301-005.....	7	404-006DK.....	14
169-000-016.....	56	301-005-S3.....	7	404-006K.....	8
169-000-018.....	56	301-020.....	7, 53	404-006-S8-VS.....	25
169-000-042.....	56	301-020-S3.....	7	404-006-VS.....	25
169-000-054.....	56	301-034.....	7	404-008.....	14
169-000-056.....	56	301-134.....	7	404-009.....	14
169-000-082.....	56	321-581.....	24	404-010.....	14
169-000-084.....	56	322-581.....	24	404-011.....	12
169-000-143.....	56	322-861.....	24	404-040.....	7
169-000-342.....	56	323-581.....	24	404-040K.....	8
169-101-004.....	50	323-661-S1.....	24	404-040K-US.....	8
169-101-607.....	50	324-581.....	24	404-040K-V1-VS.....	25
169-102-015.....	50	324-861.....	24	404-040-VS.....	25
169-102-020.....	50	325-561.....	24	404-045.....	8
169-102-506.....	50	325-581.....	24	404-047K.....	8
169-104-008.....	50	326-581.....	24	404-054K.....	8
169-104-011.....	50	326-663.....	24	404-061.....	7
169-104-015.....	50	328-581.....	24	404-063.....	7
169-104-020.....	50	328-861.....	24	404-063-VS.....	25
169-106-004.....	50	329-581.....	24	404-072.....	8
169-106-011.....	50	330-581.....	24	404-073-VS.....	25
169-106-015.....	50	330-581-S1.....	24	404-162.....	7
169-106-020.....	50	330-861.....	24	404-164.....	7
169-110-010.....	50	331-581.....	24	404-203.....	13
169-110-015.....	50	331-761.....	24	404-301.....	30
169-110-020.....	50	332-581.....	24	404-302.....	30
169-116-000.....	50	332-761.....	24	404-403.....	31
169-125-015.....	50	332-861.....	24	404-403W.....	31
169-125-020.....	50	334-861.....	24	404-404.....	30
169-140-001.....	50	336-861.....	24	404-405-S3.....	33
169-200-008.....	11	338-861.....	24	404-405W.....	33
179-990-186.....	19	340-861.....	24	404-413.....	31
202-085-5.....	55	401-004-512.....	8	404-425.....	33
202-175-30.....	52	401-004-903.....	8	404-603.....	6
202-275-2.....	52	401-004-904.....	8	404-611.....	6
207-168.U7.....	48	401-011-132.....	8	404-612.....	6
207-168-2.....	48	401-013-111.....	8, 36	404-612-MS.....	6
207-188.U11.....	48	401-013-131.....	8	404-662K.....	8
207-188-2.....	48	401-013-161.....	8	404-663K.....	8
210-042.....	11	401-013-171.....	8	404-673K.....	8
226-10328-4.....	29	401-016-132.....	36	404-673K-V1-VS.....	25
226-10337-3.....	29	401-016-171.....	36	405-549-049.....	51
226-10622-8.....	28	401-016-191.....	36	405-551-049.....	51
226-13753-9.....	28	401-016-312.....	8	405-619-061.....	10
226-13756-9.....	28	401-016-371.....	8	406-001.....	5
226-13773-4.....	29	401-019-132.....	8	406-002.....	5
226-14091-4.....	29	401-019-352.....	8	406-004.....	7
226-14097-5.....	29	401-021-111.....	36	406-004DK.....	14
226-14111-1.....	28	401-504-192.....	51	406-004K.....	8
226-14111-2.....	28	401-504-292.....	51	406-004-S3.....	7
226-14111-3.....	28	401-506-313.....	51	406-004-S8-VS.....	25
226-14111-4.....	28	402-001.....	5	406-004-VS.....	25
226-14123-2.....	28	402-002.....	5	406-005.....	14
226-14123-3.....	28	402-003.....	7	406-008.....	14
226-14123-4.....	28	402-003K.....	8	406-010.....	14
226-14123-5.....	28	402-004.....	7	406-011.....	12
226-14139-1.....	28	402-006.....	7	406-024.....	8
226-14157-1.....	28	402-006K.....	8	406-044-S1.....	8

Index

406-045K	9	406-611	6	410-004	7
406-054	7	406-612	6	410-004DK	14
406-054K	8	406-612-MS	6	410-008	14
406-054-VS	25	406-613	6	410-010	14
406-055	7	406-704-001 (-VS)	47	410-011	12
406-089K	9	406-706-001 (-VS)	47	410-013	14
406-090K	9	406-708-001 (-VS)	47	410-018	7
406-091K	9	406-708-005	43	410-022	7
406-092K	9	406-708-005-VS	43	410-160	7
406-093K	9	406-708-006	43	410-162	7
406-094K	9	406-708-007	43	410-163	7
406-103	13	406-708-008	43	410-163	53
406-145K	9	406-708-009	43	410-164	7
406-155K	9	406-710-002	43	410-169	7
406-158	7	406-804-001	47	410-171	7
406-158-S3	7	406-805	14	410-301	30
406-158-VS	25	406-806-001	47	410-302	30
406-162	7	406-808-001	47	410-313	30
406-162-S8-VS	25	406-808-005	43	410-323	30
406-162-VS	25	406-810-002	43	410-403	31
406-163	7	408-001	5	410-403-S3	31
406-165K	9	408-004	7	410-403W	31, 53
406-166	7	408-004-S8-VS	25	410-403W-S3	31
406-167	7	408-004-VS	25	410-404	32
406-203	13	408-005	7	410-405	33
406-233	13	408-006	7	410-405W	33
406-243-B	13	408-008	14	410-406	32
406-301	30	408-010	14	410-407	34
406-301-S3	30	408-011	12	410-408	32
406-302	30	408-013	14	410-409	32
406-302-S3	30	408-022	7	410-410	30
406-303	30	408-023	13	410-410-S3	30
406-323	30	408-054-VS	25	410-411	34
406-331	30	408-103	13	410-413	31
406-331-S3	30	408-120	51	410-413W	31
406-332	30	408-154	7	410-416	32
406-332-S3	30	408-160	7	410-425	33
406-333	30	408-162	7	410-433W	31
406-351	30	408-162-S8-VS	25	410-443	31
406-352	30	408-162-VS	25	410-443-S3	31
406-361	30	408-202	5	410-463	31
406-362	30	408-211	12	410-603	6
406-403	31	408-243-B	13	410-611	6
406-403-S3	31	408-301	30	410-612	6
406-403W	31	408-302	30	410-612-MS	6
406-403W-S3	31	408-313	30	412-001	5
406-404	32	408-351	30	412-002	5
406-405	33	408-352	30	412-004	7
406-405W	33	408-361	30	412-008	14
406-406	30	408-362	30	412-010	14
406-406-S3	30	408-403	31	412-011	12
406-407	34	408-403W	31	412-014	7
406-409	32	408-403W	53	412-162	7
406-411	34	408-405	33	412-163	7, 53
406-413	31	408-405W	33	412-164	7
406-413W-S3	31	408-406	32	412-169	7
406-416	32	408-407	34	412-301	30
406-423	31	408-408	30	412-302	30
406-423N-VS	25	408-408-S3	30	412-403	31
406-423-S3	31	408-409	32	412-403W	31
406-423W	31	408-411	34	412-404	32
406-423W-S3	31	408-413	31	412-405	33
406-423W-VS	25	408-413W	31	412-405W	33
406-425	33	408-416	32	412-407	34
406-426-VS	27	408-423W	31	412-409	32
406-433	31	408-423W-S3	31	412-410	32
406-433-S3	31	408-425	33	412-411	34
406-435	33	408-425W	33	412-412	30
406-435-S3	33	408-453W	31	412-416	32
406-443	31	408-603	6	412-423	31
406-443-S3	31	408-611	6	412-423W	31
406-445	33	408-612	6	412-433	31
406-445-S3	33	408-612-MS	6	412-453	31
406-446	31	410-001	5	412-453W	31
406-463W	31	410-002	5	412-603	6
406-515W	33	410-003	13	412-611	6
406-603	6	410-003-B	13	412-612	6

Index

415-301.....	30	445-519-041-VS.....	26	471-008-211.....	37
415-302.....	30	445-519-061.....	33	471-008-314.....	37
415-403.....	31	445-521-122.....	33	471-008-345.....	37
415-403W.....	31	445-529-041.....	33	471-008-351.....	37
415-405.....	33	445-531-061.....	33	471-008-391.....	37
415-405W.....	33	445-535-101.....	33	471-010-161.....	37
415-407.....	34	445-713-151.....	34	471-010-211.....	37
415-409.....	32	445-717-221.....	34	471-010-312.....	37
415-410.....	32	445-721-121.....	34	471-010-351.....	37
415-413.....	31	445-735-101.....	34	471-010-391.....	37
415-415.....	30	445-739-151.....	34	471-012-161.....	37
415-415-S3.....	30	445-806-351.....	35	471-012-211.....	37
415-416.....	32	445-808-351.....	35	471-012-391.....	37
415-433W.....	31	445-810-371.....	35	471-015-131.....	37
415-443W.....	31	445-910-551.....	34	471-106-163.....	38
418-301.....	30	446-308-001.....	34	471-106-311.....	37
418-302.....	30	446-310-001.....	34	471-106-331.....	37
418-403.....	31	446-312-001.....	34	471-108-163.....	38
418-403W.....	31	446-315-001.....	34	471-108-311.....	37
418-403W-S3.....	31	450-204-002.....	27	471-108-331.....	37
418-405W.....	33	450-206-002.....	27	471-110-163.....	38
418-407.....	34	451-004-260-VS.....	25	471-110-311.....	37
418-409.....	32	451-004-462-VS.....	25	471-110-331.....	37
418-412.....	32	451-004-471-VS.....	25	471-112-163.....	38
418-413W.....	31	451-004-498-VS.....	25	473-806-351.....	37
418-416.....	32	451-004-518-VS.....	25	473-806-391.....	37
418-418.....	30	451-006-468-VS.....	25	473-808-371.....	37
422-407.....	34	451-006-498-VS.....	25	473-808-392.....	37
422-412.....	32	451-006-518-VS.....	25	473-810-371.....	37
422-416.....	32	453-004-471-S8-VS.....	27	473-810-391.....	37
428-403W.....	31	453-004-471-VS.....	27	474-506-061.....	37
428-413W.....	31	453-006-468-S8-VS.....	27	474-508-081.....	37
432-23676-1.....	43	453-006-468-VS.....	27	474-510-101.....	37
433-890-131.....	8	453-006-651-VS.....	27	474-512-121.....	37
441-008-511.....	31	454-504-041-VS.....	27	474-515-151.....	37
441-008-511-S3.....	31	455-529-048-S8-VS.....	26	474-518-181.....	37
441-106-162.....	34	455-529-048-VS.....	26	474-606-331.....	37
441-108-132.....	34	455-529-068-S8-VS.....	26	474-608-351.....	37
441-110-163.....	34	455-529-068-VS.....	26	474-610-351.....	37
441-112-162.....	34	455-531-048-S8-VS.....	26	474-612-391.....	37
44-1755-2019.....	14	455-531-048-VS.....	26	474-615-431.....	37
44-1755-2029.....	8	455-531-068-S8-VS.....	26	474-618-441.....	37
44-1855-6021.....	12	455-531-068-VS.....	26	476-006-001.....	38
44-2573-6330.....	31	455-546-048-S8-VS.....	26	476-008-001.....	38
443-190-901.....	32	455-546-048-VS.....	26	476-010-001.....	38
443-215-001.....	32	455-546-068-VS.....	26	476-012-001.....	38
443-218-001.....	32	455-565-068-VS.....	26	476-015-001.....	38
443-290-001.....	32	455-569-048-VS.....	26	502-051.....	10
443-306-341.....	35	456-004K.....	8	502-052.....	10
443-306-343.....	35	456-004-VS.....	25	502-053.....	10
443-308-351.....	35	456-004-S8-VS.....	25	502-054.....	10
443-406-061.....	32	458-012.....	13	502-054.....	10
443-406-351.....	32	458-012-B.....	13	502-056.....	10
443-408-081.....	32	460-706-001.....	39	502-101.....	10
443-408-083.....	32	460-708-001.....	39	502-102.....	10
443-410-101.....	32	460-710-001.....	39	502-154.....	10
443-410-161.....	32	460-712-001.....	39	502-161.....	10
443-410-211.....	32	466-411-001.....	39	502-206K.....	9
443-412-121.....	32	466-413-001.....	39	504-003.....	14
443-415-151.....	32	466-416-001.....	39	504-004.....	15
443-418-181.....	32	466-418-001.....	39	504-008.....	16
443-706-121.....	32	466-419-001.....	39	504-019.....	12
443-706-151.....	32	466-429-001.....	39	504-019-AL.....	12
443-706-181.....	32	466-431-001.....	39	504-027.....	10
443-708-121.....	32	466-431-005.....	39	504-045.....	16
443-708-151.....	32	466-431-006.....	39	504-052.....	10
443-708-181.....	32	466-431-009.....	39	504-054.....	10
443-710-061.....	32	466-439-001.....	39	504-056.....	10, 11
443-710-181.....	32	471-004-191.....	37	504-071.....	11
443-712-151.....	32	471-004-311.....	37	504-072.....	10
443-715-181.....	32	471-006-161.....	37	504-073.....	10, 11
445-513-181.....	33	471-006-192.....	37	504-075.....	10
445-516-061.....	33	471-006-311.....	37	504-100-VS.....	26
445-516-081.....	33	471-006-351.....	37	504-101.....	10
445-516-101.....	33	471-008-130.....	37	504-101-S8-VS.....	26
445-517-222.....	33	471-008-131.....	37	504-101-VS.....	26
445-519-041.....	33	471-008-161.....	37	504-102.....	10

Index

504-102-S8-VS	26	506-413	30	515-410	30
504-102-VS	26	506-442	11	558-012	10
504-103	14	506-508K	9	558-612	10
504-103-VS	26	506-508-S8-VS	27	558-812	10
504-105	10	506-508-VS	27	558-912	10
504-106	11	506-510K	9	558-913	10
504-108	10	506-510-S8-VS	27	568-342	10
504-108-S8-VS	26	506-510-VS	27	568-442	11
504-108-VS	26	506-511K-V1-VS	27	586-342	10
504-109	11	506-511-S8-VS	27	586-442	11
504-110	11	506-511-VS	27	602-001	18
504-111	11	506-512K	9	602-002	18
504-112	11	506-512-VS	27	604-001	18
504-114	10	508-002-2	16	604-002	18
504-115	10	508-005	11	604-003	18
504-161	10	508-006	10	604-004	18
504-161-VS	26	508-007	10	604-014	18
504-162	10	508-008	10	604-015	18
504-200K	9	508-012	10	604-016	18
504-200K-V1-VS	27	508-013	11	604-018	18
504-201K	9	508-014	11	606-010	18
504-201-S8-VS	27	508-023	10	606-014	18
504-201-VS	27	508-024	10	608-001	18
504-202K	9	508-025	11	608-003	18
504-202-S8-VS	27	508-030	10	608-004	18
504-202-VS	27	508-032	11	610-001	18
504-203K	9	508-033	10	610-004	18
504-401	10	508-034	10	612-001	18
504-401-S1-VS	26	508-054	10	650-050	20
504-401-VS	26	508-108	12, 53	650-060	20
504-410	30	508-142	10	650-080	20
504-411	10	508-142-S8-VS	26	650-100	20
504-411-VS	26	508-142-VS	26	650-120	20
504-412	30	508-144	10	650-140	20
504-510K	9	508-145	10	650-160	20
504-651	10	508-215-CU	12	650-180	20
504-851	10	508-242	11	650-200	20
506-004	14	508-303	10, 11	714-...(-VS)	46
506-005	10	508-304	10	714-...-K	46
506-006	10, 11	508-305	11	714-...-M(-VS)	46
506-007	11	508-320-CU	12	714-...-MK	46
506-008	16	508-342	10	716-...(-VS)	46
506-010	15	508-345	10	716-...-K	46
506-012	10	508-346	10	716-...-M(-VS)	46
506-013	10	508-410	30	716-...-MK	46
506-014	11	508-412	30	718-...(-VS)	46
506-018	10	508-413	30	718-...-K	46
506-025	11	508-442	11	718-...-M(-VS)	46
506-026	11	508-512K	9	718-...-MK	46
506-030	10	508-602-2	16	734-... 3)	46
506-032	11	510-010	10	734-...-K	46
506-033	10	510-017	10	734-...-VS	46
506-034	10	510-023	10	833-020-022	12
506-101	10	510-024	10	833-330-016	12
506-108	10	510-041	10	833-330-021	12
506-108-S8-VS	26	510-042	11	833-340-034	12
506-108-VS	26	510-044	10	843-130-021	8
506-114	10	510-102	16	843-130-022	8
506-139-S8-VS	26	510-142	10	843-130-023	8
506-139-VS	26	510-145	10	843-130-024	7
506-140	10	510-242	11	843-130-025	7
506-140-S8-VS	26	510-341	10	843-130-026	7
506-140-VS	26	510-342	10	853-370-002	43
506-142	10	510-343	10	853-370-002-VS	43
506-142-S8-VS	26	510-344	10	853-380-002	43
506-142-VS	26	510-346	10	853-380-002-VS	43
506-143-VS	26	510-410	30	853-380-003	43
506-145	10	510-412	30	853-380-003-VS	43
506-202K	9	510-413	30	853-380-004	43
506-214	10	510-442	11	853-380-004-VS	43
506-242	11	512-410	30	853-380-007-VS	43
506-342	10	512-412	30	853-390-002	43
506-345	10	514-018K	9	853-390-002-VS	43
506-346	10	514-018K-S1	9	853-390-003	43
506-408	16	514-018K-V1-VS	27	853-390-003-VS	43
506-410	30	514-018-S8-VS	27	853-390-004	43
506-412	30	514-018-VS	27	853-390-004-VS	43

Index

853-390-005-VS	43	96-0713-0060	35	96-1812-0058	34
853-390-006-VS	43	96-0715-0060	35	96-1814-0058	34
853-540-010	43	96-0718-0060	35	96-1816-0058	34
853-750-024	13	96-0722-0060	35	96-2106-0058	34
855-380-002	43	96-0806-0058	34	96-2118-0058	34
855-380-002-VS	43	96-0808-0058	34	96-2122-0058	34
855-380-003	43	96-0810-0058	34	96-3010-0060	32
855-380-003-VS	43	96-0812-0058	34	96-3012-0060	32
871-340-006	23	96-0815-0058	34	96-3014-0060	32
871-340-008	23	96-0818-0058	34	96-3016-0060	32
871-360-006	23	96-0906-0058	34	96-3101-0058	36
871-360-008	23	96-0908-0058	34	96-3102-0058	36
871-380-006	23	96-0912-0058	34	96-3105-0058	36
871-390-020	23	96-0915-0058	34	96-3106-0058	36
871-390-023	23	96-1108-0058	31	96-3106-0060	35
898-510-000	19	96-1109-0058	31	96-3109-0058	36
898-610-000	19	96-1110-0058	31	96-3110-0058	36
898-710-000	19	96-1111-0058	31	96-3111-0058	36
898-710-001	19	96-1112-0058	31	96-3112-0058	36
902-111	4	96-1113-0058	31	96-3112-0060	35
904-411	4	96-1114-0058	31	96-3113-0058	36
906-411	4	96-1116-0058	31	96-3115-0060	35
908-411	4	96-1117-0058	31	96-3116-0058	36
910-411	4	96-1120-0058	31	96-3117-0058	36
912-411	4	96-1121-0058	31	96-3118-0058	36
941-206-104	18	96-1206-0058	31	96-3118-0060	35
941-206-108	18	96-1212-0058	31	96-3120-0058	36
941-208-108	18	96-1214-0058	31	96-3121-0058	36
941-209-104	18	96-1216-0058	31	96-3122-0058	36
941-209-105	18	96-1220-0058	31	96-3122-0060	35
941-210-104	18	96-1406-0060	36	96-3123-0058	36
941-212-104	18	96-1408-0060	36	96-3124-0058	36
941-213-104	18	96-1410-0060	36	96-3125-0058	36
941-215-104	18	96-1412-0058	33	96-3126-0058	36
941-217-104	18	96-1414-0058	33	96-3127-0058	36
941-217-105	18	96-1508-0060	36	96-3128-0058	36
941-218-101	18	96-1511-0060	36	96-3129-0058	36
941-220-104	18	96-1523-0060	36	96-3131-0058	36
941-222-100	18	96-1532-0060	36	96-3132-0058	36
941-225-104	18	96-1533-0060	36	96-3133-0058	36
941-606-000	19	96-1541-0060	36	96-3134-0058	36
941-608-000	19	96-1542-0060	36	96-3136-0058	36
941-610-000	19	96-1543-0060	36	96-3137-0058	36
96-0203-0058	31	96-1545-0060	36	96-3208-0060	35
96-0204-0058	31	96-1551-0060	36	96-3210-0060	35
96-0222-0058	31	96-1555-0060	36	96-3212-0060	35
96-0223-0058	31	96-1556-0060	36	96-3214-0060	35
96-0308-0060	34	96-1610-0060	36	96-3216-0060	35
96-0319-0058	31	96-1611-0060	36	96-3220-0060	35
96-0322-0058	31	96-1612-0060	36	96-5608-0058	30
96-0328-0058	31	96-1621-0060	36	96-5610-0058	30
96-0335-0058	31	96-1622-0060	36	96-5708-0058	30
96-0342-0058	31	96-1623-0060	36	96-5710-0058	30
96-0406-0060	34	96-1631-0060	36	96-5909-0058	31
96-0408-0058	32	96-1632-0060	36	96-5911-0058	31
96-0410-0060	34	96-1633-0060	36	96-5912-0058	31
96-0412-0060	34	96-1634-0060	36	96-5913-0058	31
96-0506-0060	35	96-1641-0060	36	96-6002-0058	31
96-0508-0060	35	96-1642-0060	36	96-6110-0058	33
96-0510-0060	35	96-1643-0060	36	96-6112-0058	33
96-0512-0060	35	96-1644-0060	36	96-6202-0058	33
96-0515-0060	35	96-1645-0060	36	96-6304-0058	34
96-0518-0060	35	96-1651-0060	36	96-6306-0058	34
96-0522-0060	35	96-1652-0060	36	96-6308-0058	34
96-0606-0060	35	96-1653-0060	36	96-6404-0058	34
96-0608-0060	35	96-1654-0060	36	96-6406-0058	34
96-0610-0060	35	96-1655-0060	36	96-6408-0058	34
96-0612-0060	35	96-1656-0060	36	96-6904-0058	34
96-0614-0060	35	96-1706-0058	34	96-7004-0058	33
96-0616-0060	35	96-1708-0058	34	96-7006-0058	33
96-0620-0060	35	96-1710-0058	34	96-7008-0058	33
96-0706-0060	35	96-1712-0058	34	96-7104-0158	33
96-0708-0060	35	96-1714-0058	34	96-7106-0058	33
96-0709-0060	35	96-1716-0058	34	96-7108-0058	33
96-0710-0060	35	96-1806-0058	34	96-7808-0058	33
96-0711-0060	35	96-1808-0058	34	96-7812-0058	33
96-0712-0060	35	96-1810-0058	34	96-7815-0058	33

Index

96-7818-0058	33	B7	58	DIN7603-A6x10-CU	12
96-7822-0058	33	B7.U271	56	DIN7603-A8x11.5-CU	12
96-7906-0058	33	BW3-2-S1	58	DIN910-R1-2-5.8	12
96-7908-0058	33	BW7-S11	58	DIN910-R1-4x8-5.8	12
96-7910-0058	33	BW7-S6	58	DIN910-R1-5.8	12
96-7912-0058	33	BW7-S7	58	DIN910-R1-8-5.8	12
96-7914-0058	33	BW7-S8	58	DIN910-R3-4-5.8	12
96-7916-0058	33	D1127R02.5x0.5+A46	40	DIN910-R3-8-5.8	12
96-7920-0058	33	D301-001-MS	7	DIN912-M3x8-A4	20
96-8006-0058	33	D301-005-MS	7	DIN912-M4x12-A4	20
96-8008-0058	33	D301-020-MS	7	DIN912-M4x20-8.8	20
96-8010-0058	33	D408-004-MS	7	DIN912-M5x10-A2	20
96-8012-0058	33	DAK504-S1	17	DIN912-M6x16-8.8	20
96-8014-0058	33	DAK506	17	DIN912-M6x25-8.8	20
96-8016-0058	33	DAK508	17	DIN912-M6x60-8.8	20
96-8020-0058	33	DAK510	17	DIN912-M8x16-8.8	20
96-8804-0058	34	DAK510-S1	17	DIN931-M6x30-5.8	20
96-8906-0058	34	DAK512	17	DIN933-M10x40-8.8	20
96-8910-0058	34	DAR506	15	DIN933-M4x10-8.8	20
96-8912-0058	34	DAR508	15	DIN933-M5x12-8.8	20
982-120-040	40	DAR510	15	DIN933-M6x16-8.8	20
982-120-041	40	DAR510-S1	15	DIN933-M6x20-8.8	20
982-120-060	40	DAR524	15	DIN933-M6x25-8.8	20
982-120-080	40	DAR534	15	DIN933-M8x20-8.8	20
982-120-100	40	DAT506	16	DIN933-M8x25-8.8	20
982-120-120	40	DAT508	16	DIN934-M5-8	20
982-120-150	40	DAT510	16	DIN934-M6-8	20
982-120-180	40	DAT510-S1	16	DIN936-M14x1.5-5	20
982-760-102	43	DAT510-S5	16	DIN936-M16x1.5-5	20
982-760-120	43	DAT512	16	DIN936-M20x1.5-5	20
982-760-122	43	DIN 908-G1-4A-5.8	12	DIN985-M12-6	20
982-760-130	43	DIN 908-G1-8A-5.8	12	DIN985-M3-6	20
982-760-132	43	DIN 908-G3-8A-5.8	12	DIN985-M6-6	20
982-760-142	43	DIN 908-M10x1-5.8	12	DIN985-M8-6	20
982-760-160	43	DIN 908-M12x1.5-5.8	12	DLY930-2	51
982-760-172	43	DIN 908-M14x1.5-5.8	12	DLY931	51
99-0204-0058	31	DIN 72573-2x10-ST	18	DLY932	51
99-0215-0058	31	DIN 72573-2x6-ST	18	DY958	9
99-0217-0058	31	DIN 72573-2x8-ST	18	DY960	9
99-0222-0058	31	DIN 72573-3x10-ST	18	DY961	9
99-0228-0058	31	DIN 72573-3x6-ST	18	DY962	9
99-2712-0058	30	DIN 72573-3x8-ST	18	DY964	16
995-000-705	49	DIN 72573-4x10-ST	18	DZ333	8
995-001-096	49	DIN 72573-4x6-ST	18	DZ334	8
995-001-104	15	DIN 72573-4x8-ST	18	H06	41
995-001-106	15	DIN 72573-5x10-ST	18	H08	41
995-001-235	49	DIN 72573-5x6-ST	18	H10	41
995-001-260	49	DIN 72573-5x8-ST	18	K1	57
995-001-500	49	DIN 72573-6x6-ST	18	K3-S2	57
995-001-501	49	DIN 72573-6x8-ST	18	K6-S5	57
995-001-502	49	DIN2462-R010x1+A46	40	KW1	57
995-001-503	49	DIN2462-R04x1+A46	40	KW1-S2	57
995-001-504	49	DIN2462-R06x1+A46	40	KW3-S1	57
995-001-525	48	DIN2462-R08x1+A46	40	KW6-S1	57
995-001-526	48	DIN72571-1x6	18	KW6-S2	57
995-001-620	49	DIN72573-1x6	18	KW6-S81	57
995-001-621	49	DIN72573-2x6	18	KW6-V57	57
995-001-622	49	DIN72573-3x6	18	P-78.01	8
995-001-623	49	DIN72573-4x6	18	T02	41
995-001-950	49	DIN72573-5x6	18	T04	41
995-002-073	49	DIN72573-6x6	18	T06	41
995-003-040	58	DIN7513-BM4x20	20	T08	41
995-003-041	58	DIN7513-BM4x25	20	T10	41
995-003-042	58	DIN7513-BM5x10	20	UFZ.0097	55
995-003-043	58	DIN7513-BM6x16	20	VL-01EAM3	24
995-003-044	58	DIN7513-BM6x25	20	VL-02DAM3	24
995-014-014	13	DIN7603-A12x18-CU	12	VL-02EAM3	24
995-340-000	13	DIN7603-A14x18-CU	12	VL-03DAM3	24
995-340-000-S8	13	DIN7603-A16x20-CU	12	VL-03EAM3	24
995-340-350	13	DIN7603-A17x21-CU	12	VL-04DAM3	24
995-340-350-S8	13	DIN7603-A18x22-CU	12	VL-04EAM3	24
995-350-000	13	DIN7603-A20x24-CU	12	VL-05DAM3	24
995-350-000-S8	13	DIN7603-A21x26-CU	12	VL-05EAM3	24
99-5604-0058	30	DIN7603-A22x27-CU	12	VL-06DAM3	24
99-5612-0058	30	DIN7603-A27x32-CU	12	VL-06EAM3	24
99-5704-0058	30	DIN7603-A30x36-CU	12	VL-07DAM3	24
B3.U21	56	DIN7603-A33x39-CU	12	VL-08DAM3	24

Index

VL-08EAM3	24	WVN716R06x1.25+A89	44
VL-10DAM3	24	WVN716-R08x1.25	44
VL-10EAM3	24	WV-R010x0.7VERZI	40
VL-322-541	24	WV-R06x0.7VERZI	40
VL-323-541	24	WV-R08x0.7VERZI	40
VL-329-761	24		
VPK-RV	53		
VPK-RV6	53		
VPK-RV8	53		
VPKG-RV	53		
VPKG-RV4-VS	27		
VPKG-RV-VS	27		
VPKM-RV-S3	53		
VPKM-RV-S4	53		
VPKM-RV-VS	27		
VPM-RV	53		
VPM-RV10	53		
VPM-RV4	53		
VPM-RV8	53		
WVN200-10B0	54		
WVN200-10B0.5	54		
WVN200-10B1	54		
WVN200-10B32	54		
WVN200-10D120-S1	54		
WVN200-10D160-S1	54		
WVN200-10D220-S1	54		
WVN200-10E12	53		
WVN200-10E12-S8	53		
WVN200-10E25	53		
WVN200-10E25-S8	53		
WVN200-10E35	53		
WVN200-10E6	53		
WVN200-10E60	53		
WVN200-10E60-S8	53		
WVN200-4A0.4	54		
WVN200-4A0.4-S1	54		
WVN200-4A12	54		
WVN200-4A16	54		
WVN200-4A25	54		
WVN200-4A5	54		
WVN200-4A8	54		
WVN200-6B0.5	54		
WVN200-6B12	54		
WVN200-6B16	54		
WVN200-6B20	54		
WVN200-6B3	54		
WVN200-6B40	54		
WVN200-6B8	54		
WVN200-8B0	54		
WVN200-8B12	54		
WVN200-8B16	54		
WVN200-8B20	54		
WVN200-8B3	54		
WVN200-8B32	54		
WVN200-8B5	54		
WVN200-8D120	54		
WVN200-8D220	54		
WVN200-8D50	54		
WVN200-8D75	54		
WVN701-4	47		
WVN701-6	47		
WVN701-8	47		
WVN711-10	42		
WVN715-R010x1.5	44		
WVN715R010x1.5+A89	44		
WVN715-R02.5x0.5	44		
WVN715-R04x0.85	44		
WVN715R04x0.85+A89	44		
WVN715-R04x1+A89	44		
WVN715-R06x1	44		
WVN715-R06x1.25	44		
WVN715R06x1.25+A89	44		
WVN715-R06x1.5+A89	44		
WVN715-R08x1.25	44		
WVN716-R04x0.85	44		
WVN716R04x0.85+A89	44		
WVN716-R06x1.25	44		

Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

**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

© SKF is a registered trademark of the SKF Group.

© SKF Group 2018

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless prior written permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication but no liability can be accepted for any loss or damage whether direct, indirect or consequential arising out of the use of the information contained herein.

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