

Applications

For the mounting of pressure measuring instruments, stopcocks, shut-off valves, syphons, snubbers and other accessory components

Types of connection adapters

Male-female connection adapters

are used where one of the parts to be connected has a male and the other a female thread.

Female-female connection adapters

are used where both parts to be connected have male threads.

Male-male connection adapters

are used where both parts to be connected have female threads.

Self-sealing connecting nipples (SS)

are used to adapt a smaller size threaded connection to a larger one (e.g. G ¼ to G ½). Due to their design, the connecting nipples are self-sealing (i.e. the taper turned into the nipple presses into the bore of the pressure measuring instrument's connection shank. To protect against inadvertent release of the two threaded parts, they are secured with a special adhesive.

LH-RH unions

per DIN 16283 have a right-hand thread (RH) on one side, and a left-hand thread (LH) on the other, which allow the parts to be sealed and orientated into any direction required.

Union nuts with nipple

per DIN 16284 enable mounting without having to change the orientation of the parts to be connected against each other.

Solderless compression fittings with compression ring

are used to connect pressure measuring instruments or fittings with pipelines from copper, steel and stainless steel. Particularly useful mounting, no solder or weld points. A sealing washer is included in delivery.



Fig. left: Connection adapter, male-female, G ½ / G ¼ B
Fig. right: Compression fitting with compression ring, G ½ 400/6



Fig. left: Connection adapter, LH-RH union, G ½ / G ½ LH
Fig. right: Rotatable connection adapter (swivel adapter)

Threaded flange set with lens-type sealing ring

is used for the mounting of high-pressure measuring instruments (up to 4,000 bar). Through the two threaded flanges, which are clamped by four screws, the pressure measuring instrument can be positioned in any orientation required.

Weld-on connection adapters

with male threads are used with left-hand threads (LH) for connections with LH-RH unions, and with right-hand threads (RH, per EN 837-1) they are mostly used as pressure inlet.

Rotatable connection adapters (swivel adapters)

enable the orientation of pressure measuring instruments through a 360 ° range.

Standard version

Dimensions and connection
see table

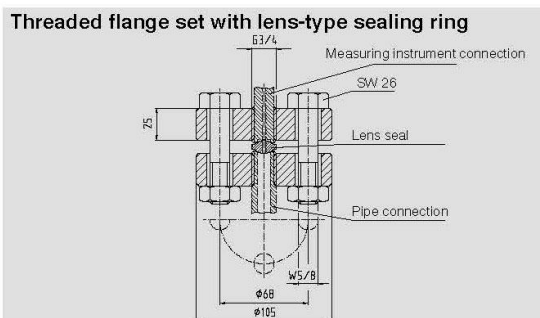
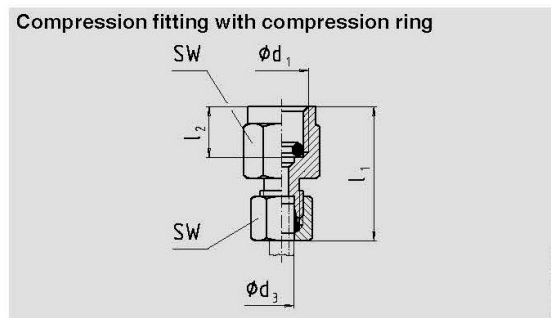
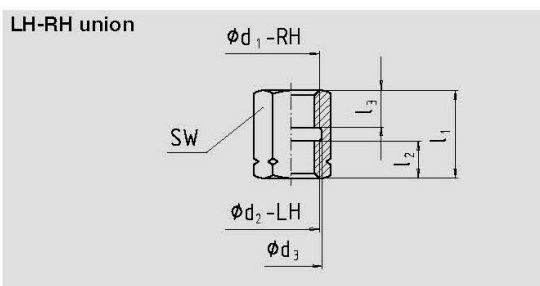
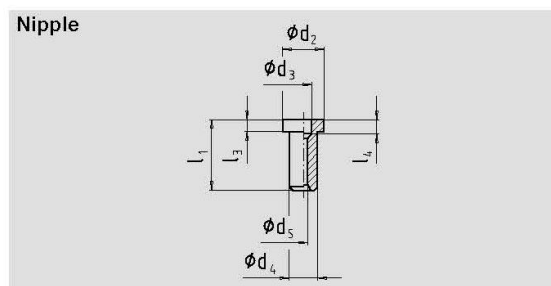
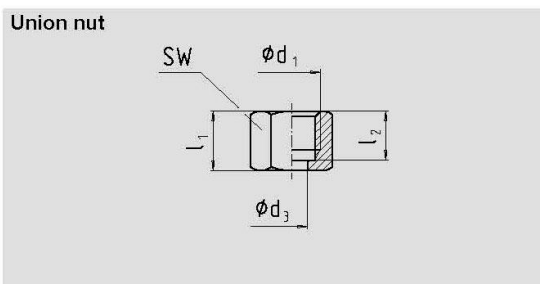
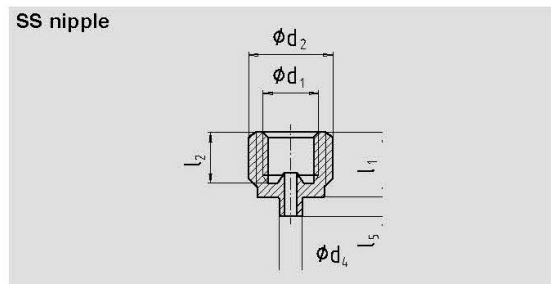
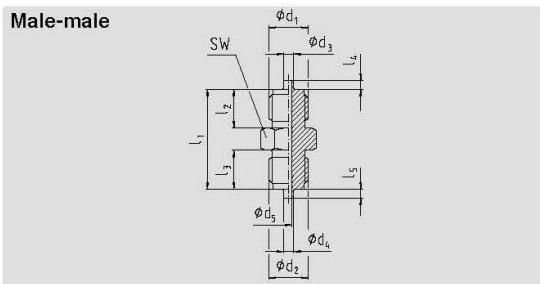
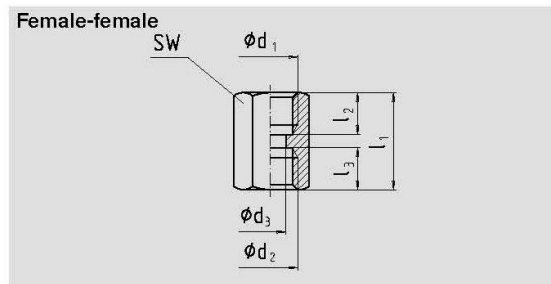
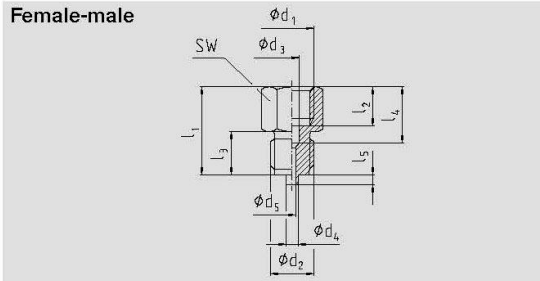
Material

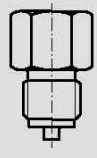

Brass, steel, stainless steel 1.4571

Options

- Brass, chrome-plated
- Special threads

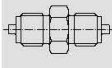






Dimensions



Version	Connection 1)		Dimensions in mm									Material	Order number
	d ₁	d ₂	d ₃	d ₄	d ₅	l ₁ approx.	l ₂ approx.	l ₃ approx.	l ₄ approx.	l ₅ approx.	SW		
Female-male 	G 1/8	G 1/4 B	4.5	5	3	28	10	13	13	2	14	Brass	102625
	G 1/8	G 1/2 B	4.5	6	3	35	10	20	13	3	22	Brass	102626
	G 1/4	G 1/8 B	5.5	-	3	29	13	10	16.5	-	17	Brass	101249
	G 1/4	G 3/8 B	5.5	5.5	3	33	13	16	16.5	3	19	Brass	102627
	G 1/4	G 1/2 B	5.5	6	3	38	13	20	16.5	3	22	Brass	102628
	G 1/4	G 1/2 B	5.5	6	3.5	38	13	20	16.5	3	22	1.4571	122588
	G 1/4	1/4 NPT	5.5	-	3	30	13	13	16.5	-	17	Brass	on request
	G 1/4	1/2 NPT	5.5	-	3.5	34	13	19	16.5	-	22	1.4571	on request
	G 1/4	M10 x 1	5.5	-	3	29	13	10	16.5	-	17	Brass	on request
	G 1/4	M12 x 1.5	5.5	5	3	32	13	13	16.5	2	17	Brass	102629
	G 3/8	G 1/4 B	7	5	3	36	16	13	19.5	2	22	Brass	on request
	G 3/8	G 1/2 B	7	6	3	43	16	20	19.5	3	22	Brass	on request
	G 1/2	G 1/4 B	7	5	3	41	19	13	24.5	2	27	Brass	102630
	G 1/2	G 1/4 B	7	5	3	41	19	13	24.5	2	27	1.4571	123289
	G 1/2	G 1/4 B	7	5	3.5	41	19	13	24.5	2	27	Steel	on request
G 1/2	1/4 NPT	7	-	3	43	19	13	24.5	-	27	Brass	on request	
G 1/2	1/4 NPT	7	-	3.5	43	19	13	24.5	-	27	1.4571	on request	
G 1/2	G 3/8 B	7	5.5	3	45	19	16	24.5	3	27	Brass	102631	
G 1/2	G 3/8 B	7	5.5	3.5	45	19	16	24.5	3	27	1.4571	117285	
G 1/2	G 1/2 B	7	6	3.5	46	19	20	24.5	3	27	1.4571	on request	
G 1/2	1/2 NPT	7	-	3.5	44	19	19	24.5	-	27	1.4571	on request	
G 1/2	1/2 NPT	7	-	3	44	19	19	24.5	-	27	Brass	on request	
G 1/2	G 3/4 B	7	6	3	45	19	20	24.5	5	27	Brass	on request	
G 1/2	M12 x 1.5	7	5	3	41	19	13	24.5	2	27	Brass	on request	
G 1/2	M20 x 1.5	7	6	3.5	46	19	20	24.5	3	27	1.4571	135444	
G 1/2	M20 x 1.5	7	6	3	46	19	20	24.5	3	27	Brass	102632	
M10 x 1.5	G 1/4 B	-	5	3.5	24	9.2	13	-	2	19	1.4571	on request	
M10 x 1.5	1/4 NPT	-	-	3.5	24	9.2	13	-	-	19	1.4571	on request	
M12 x 1.5	G 1/8 B	5.5	-	3	29	13	10	16.5	-	17	Brass	on request	
M12 x 1.5	G 1/4 B	5.5	5	3	32	13	13	16.5	2	17	Brass	on request	
M12 x 1.5	G 3/8 B	5.5	5.5	3	33	13	16	16.5	3	19	Brass	on request	
M20 x 1.5	G 1/2 B	7	6	3	46	19	20	24.5	3	27	Brass	on request	
1/4 NPT	G 1/8 B	-	-	3	27	14	10	-	-	17	Brass	on request	
1/4 NPT	G 1/4 B	-	5	3	33	14	13	-	2	22	1.4571	on request	
1/4 NPT	G 1/2 B	-	6	3.5	37	14	20	-	3	22	Brass	on request	
1/4 NPT	G 1/2 B	-	6	3.5	37	14	20	-	3	22	1.4571	on request	
1/2 NPT	G 1/4 B	-	5	3.5	38	19	13	-	2	27	1.4571	on request	
1/2 NPT	1/4 NPT	-	-	3.5	38	19	13	-	-	27	1.4571	on request	
1/2 NPT	G 1/2 B	-	6	3.5	45	19	20	-	3	27	Brass	on request	
1/2 NPT	G 1/2 B	-	6	3.5	45	19	20	-	3	27	1.4571	on request	
Female-female 	G 1/8	G 1/8	4.5	-	-	22	10	10	-	-	14	Brass	on request
	G 1/4	G 1/8	5.5	-	-	26	13	10	-	-	17	Brass	on request
	G 1/4	G 1/4	5.5	-	-	30	13	13	-	-	17	Brass	on request
	G 1/4	1/8 NPT	5.5	-	-	27	13	12	-	-	17	Brass	on request
	G 1/4	1/4 NPT	5.5	-	-	30	13	14	-	-	17	1.4571	on request
	G 1/2	G 1/4	7	-	-	36	19	13	-	-	27	1.4571	on request
	G 1/2	G 3/8	7	-	-	40	19	16	-	-	27	1.4571	on request
	G 1/2	G 1/2	7	-	-	43	19	19	-	-	27	1.4571	on request
	G 1/2	G 1/2	7	-	-	43	19	19	-	-	27	Brass	on request
	G 1/2	1/2 NPT	-	-	-	43	19	19	-	-	27	Brass	on request
	G 1/2	1/2 NPT	-	-	-	43	19	19	-	-	27	1.4571	on request
	G 1/2	M20 x 1.5	7	-	-	43	19	19	-	-	27	Brass	on request
	G 1/2	M20 x 1.5	7	-	-	43	19	19	-	-	27	Steel	on request
	G 1/2	M20 x 1.5	7	-	-	43	19	19	-	-	27	1.4571	on request

Connection adapters with other thread combinations (minimum quantity: 500 pieces) are possible, but not available from stock.

1) Connections per EN 837-1 (exception: G 3/4 B)

Version	Connection ¹⁾		Dimensions in mm									Material	Order number
	d ₁	d ₂	d ₃	d ₄	d ₅	l ₁ approx.	l ₂ approx.	l ₃ approx.	l ₄ approx.	l ₅ approx.	SW		
Male-male 	G ¼ B	G ¼ B	5	5	3	34	13	13	2	2	14	Brass	on request
	G ½ B	G ½ B	6	6	3	50	20	20	3	3	22	Brass	on request
	G ½ B	G ½ B	6	6	3.5	50	20	20	3	3	22	1.4571	on request
	G ½ B	½ NPT	6	-	3.5	49	20	-	3	-	22	1.4571	on request
SS nipple 	G ¼	G ¼ B	-	5	-	14.5	11	-	-	2	-	Brass	102622
	G ¼	¼ NPT	-	-	-	13.5	11	-	-	-	-	Brass	on request
	G ¼	¾ NPT	-	-	-	19	15.5	-	-	-	-	Brass	on request
	G ¼	¾ NPT	-	-	-	19	15.5	-	-	-	-	1.4571	on request
	G ¼	G ¾ B	-	5.5	-	19	15.5	-	-	3	--	1.4571	on request
	G ¼	G ¾ B	-	5.5	-	19	15.5	-	-	3	-	Brass	102623
	G ¼	G ½ B	-	6	-	19	15.5	-	-	3	-	Brass	102624
	G ¼	G ½ B	-	6	-	19	15.5	-	-	3	-	1.4571	117286
	G ¼	½ NPT	-	-	-	19	15.5	-	-	-	-	Brass	on request
	G ¼	½ NPT	-	-	-	19	15.5	-	-	-	-	1.4571	on request
LH-RH union DIN 16283 	G ½-RH	G ½-LH	21.5	-	-	36	15.5	15.5	-	-	27	Brass	120109
	G ½-RH	G ½-LH	21.5	-	-	36	15.5	15.5	-	-	27	Steel	on request
	G ½-RH	G ½-LH	21.5	-	-	36	15.5	15.5	-	-	27	1.4571	on request
	G ½-RH	M20 x 1.5-LH	21.5	-	-	36	15.5	15.5	-	-	27	Brass	on request
	G ½-RH	M20 x 1.5-LH	21.5	-	-	36	15.5	15.5	-	-	27	Steel	on request
	M20 x 1.5-RH	M20 x 1.5-LH	20.5	-	-	36	15.5	15.5	-	-	27	Brass	on request
Union nut DIN 16284 	G ¼	PN 250	6.5	-	-	22	17	-	-	-	17	Brass	on request
	G ¼	PN 400	6.5	-	-	22	17	-	-	-	17	Steel	on request
	G ½	PN 250	12.5	-	-	30	24	-	-	-	27	Brass	on request
	G ½	PN 400	12.5	-	-	30	24	-	-	-	27	Steel	on request
	G ½	PN 400	12.5	-	-	30	24	-	-	-	27	1.4571	on request
	M12 x 1.5	PN 250	6.5	-	-	22	17	-	-	-	17	Brass	on request
Nipple DIN 16284 	M20 x 1.5	PN 250	12.5	-	-	30	24	-	-	-	27	Brass	on request
	for G ¼ / M12 x 1.5	9.5	5.5	6	2.5	30	-	6	4	-	-	Brass ³⁾	on request
	for G ¼ / M12 x 1.5	9.5	5.5	6	2.5	30	-	6	4	-	-	Steel ³⁾	on request
	for G ½ / M20 x 1.5	17.5	7	12	3.5	30	-	6	6	-	-	Brass ³⁾	on request
	for G ½ / M20 x 1.5	17.5	7	12	3.5	30	-	6	6	-	-	Steel ³⁾	on request
	for G ½ / M20 x 1.5	17.5	7	12	3.5	30	-	6	6	-	-	1.4571	on request
Solderless compression fitting with compression ring ²⁾ 	G ¼	PN 100	4	-	-	33	14.5	-	-	-	19/10	Steel	on request
	G ¼	PN 250	6	-	-	37	14.5	-	-	-	19/14	Steel	on request
	G ½	PN 600	6	-	-	46	20	-	-	-	27/17	Steel	on request
	G ½	PN 600	6	-	-	46	20	-	-	-	27/17	1.4571	on request
	G ½	PN 600	8	-	-	46	20	-	-	-	27/19	Steel	on request
	G ½	PN 600	8	-	-	46	20	-	-	-	27/19	1.4571	on request
	G ½	PN 600	10	-	-	47	20	-	-	-	27/22	Steel	on request
	G ½	PN 600	10	-	-	47	20	-	-	-	27/22	1.4571	on request
	G ½	PN 600	12	-	-	47	20	-	-	-	27/24	Steel	on request
G ½	PN 600	12	-	-	47	20	-	-	-	27/24	1.4571	on request	
Threaded flange set 	G ¾	≤4,000 bar	For dimensions see illustration									Steel	on request

Connection adapters with other thread combinations (minimum quantity: 500 pieces) are possible, but not available from stock.

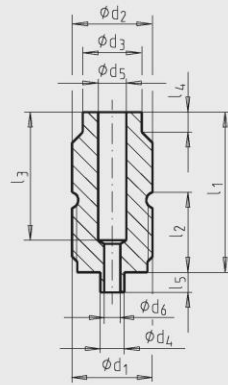
1) Connections per EN 837-1 (exception: G ¾ B)

2) Edge-sealing ring is included in delivery. From PN 250 upwards, the following pressure reductions on the appropriate pressure levels are required for higher temperatures:
at 100 °C = 11 % at 200 °C = 20 % at 300 °C = 29 % at 400 °C = 33 %

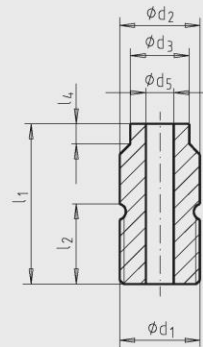
3) Brass = Cu Zn 39 Pb 3 (2.0401); Steel = 9 S Mn Pb 28 (1.0718)

Weld-on connection shanks

With parallel pipe thread per EN 837-1 ¹⁾



Per DIN 16282, Form 6 with left-hand thread LH for LH/RH union



Standard	d ₁	d ₂ SW	d ₃	d ₄	d ₅	d ₆ max.	l ₁	l ₂	l ₃	l ₄	l ₅	Order number	
												1.4571	Steel
EN 837-1	G ½ B	20	14.7	6	7	4	40	20	32	5	5	on request	on request
	M20 x 1.5 ²⁾	20	14.7	6	7	4	40	20	32	5	5	on request	-
	½ NPT	20	14.7	6	7	4	40	20	32	5	5	on request	on request
DIN 16282	G ½ B - LH	20	14.7	-	7	-	40	20	-	5	5	on request	on request
	M20 x 1.5 - LH ²⁾	20	14.7	-	7	-	40	20	-	5	5	on request	-

- 1) Corresponds to the previous form 4 per DIN 16282
2) Metric ISO threads are based upon the withdrawn DIN 16288 : 1987. These threads are no longer standardised in EN 837 and DIN 16282

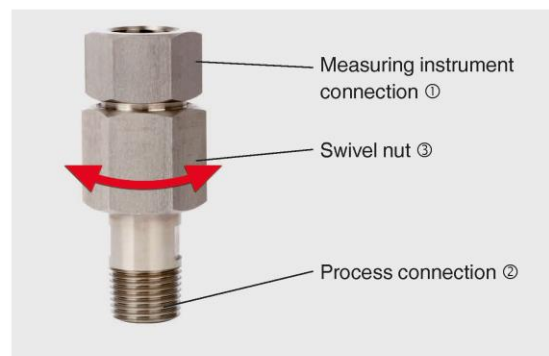
Rotatable connection adapters (swivel adapters)

This 360° swivel connection (swivel adapter) enables the simple orientation of pressure measuring instruments. The measuring instrument can be turned through a 360° range. Also when using an NPT thread, the pressure measuring instrument can be rotated to the position in which the pressure can be read optimally on the dial.



Mounting instructions

- First, mount the connection adapter with the process connection side ② to the piping (take care it is sealed).
- Then fasten the pressure measuring instrument at the measuring instrument connection side ①.
- Turn the pressure measuring instrument so the window is in the desired position, such that the pressure can be read optimally from the dial.
- Finally, tighten the entire system with the swivel nut ③. Fix the pressure measuring instrument in the desired display direction.

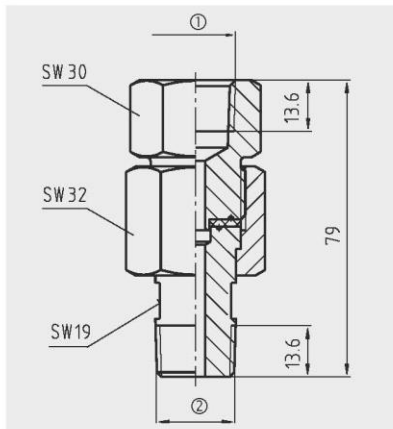


Measuring instrument connection ①	Process connection ②	Material	Sealing	Working pressure	3.1 material test certificate ①)	NACE certificate ②)	Version	Order number
¼ NPT (female)	¼ NPT (male)	316L	PTFE	PN 680	yes	-	1	on request
½ NPT (female)	¼ NPT (male)	316L	PTFE	PN 680	yes	-	1	on request
¼ NPT (female)	½ NPT (male)	316L	PTFE	PN 680	yes	yes	1	on request
½ NPT (female)	½ NPT (male)	2.4819	PTFE	PN 680	yes	yes	1	on request
½ NPT (female)	½ NPT (male)	Inconel 625, 1.4571	PTFE	PN 680	yes	yes	1	on request
½ NPT (female)	½ NPT (male)	Monel 400, 1.4571	PTFE	PN 680	yes	yes	1	on request
½ NPT (female)	½ NPT (male)	316L	PTFE	PN 680	-	-	1	on request
½ NPT (female)	½ NPT (male)	316L	PTFE	PN 680	yes	-	1	on request
½ NPT (female)	½ NPT (male)	316L	PTFE	PN 680	yes	yes	1	on request
½ NPT (female)	½ NPT (male)	Monel 400, 1.4571	PTFE	PN 680	yes	-	1	on request
½ NPT (female)	¾ NPT (male)	316L (1.4404)	PTFE	PN 680	yes	-	1	on request
G ½ (female)	G ½ B (male)	316L	-	PN 420	yes	-	4	on request
G ½ (female)	½ NPT (male)	316L	-	PN 420	yes	-	2	on request
G ½ (female)	½ NPT (male)	316L (1.4404)	-	PN 420	yes	yes	2	on request
G ½ (female)	½ NPT (male)	Monel 400	-	PN 420	yes	yes	2	on request

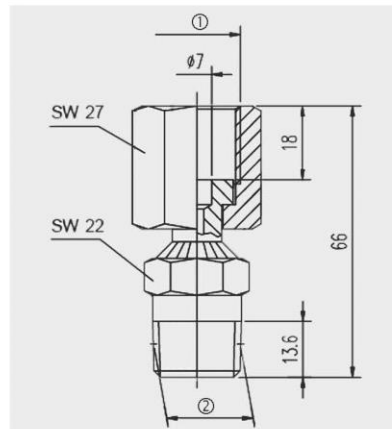
1) 3.1 material test certificate per EN 10204

2) NACE design per ISO 15156-2

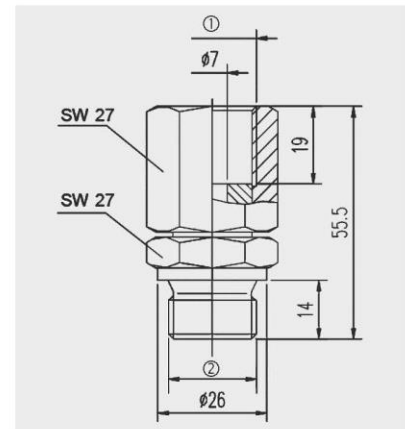
Version 1



Version 2



Version 4



Type No.	Art. No.
257.11	102622
257.12	102623
257.13	102624
257.13-ES	117286
257.20	102625
257.21	102626
257.22	101249
257.23	102627
257.24	102628
257.24-ES	122588
257.25	102629
257.26	102630
257.26-ES	123289
257.27	102631
257.27-ES	117285
257.30	102632
257.30-ES	135444