



Main Features

- Directly integrated in the pipe
- Excellent cleaning behaviour
- Pressure ranges up to 250 bar
- Wetted parts 1.4435 / 1.4404 (316L) or 1.4571 (316Ti)
- Easy and fast installation

Applications

- Oil & Gas
- Chemical industry
- Water & Waste water
- Energy

Description

This in-line diaphragm seals are used to protect pressure gauges from high temperature, aggressive or corrosive fluids. Due to the integration as part of the pipe line these seals are especially suitable for fluids with high viscosity or a tendency to crystallize.

Diaphragm seals can be mounted to mechanical pressure gauges, switches or transmitters directly or with a flexible capillary. The filling fluid of the measuring system has to be chosen compatible to the application.

Process connection	Threaded connection for compression fittings according DIN 2353, type L
Pressure ranges	0 ... 1 bar to 0 ... 250 bar (see table below)
Body material	Stainless Steel 1.4571 (316Ti)
Diaphragm	Stainless Steel 1.4435 or 1.4404 (AISI 316L) or 1.4571 (316Ti)
Working temperature	-20 ... 225 °C (depending on the filling fluid)
Filling fluids	LRS1: Vaseline (-15 ... +150 °C) Other filling fluids on request

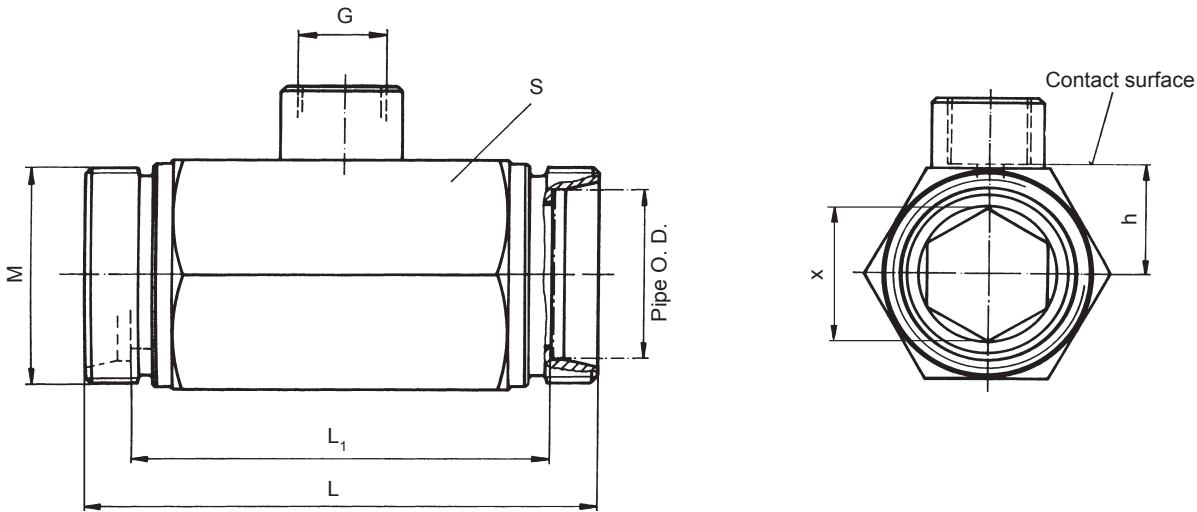
Ordering code / Minimum pressure ranges

Code	Pipe	Pressure gauges ⁽¹⁾		Transmitters ⁽²⁾	P max.
		NS 50 / 63 mm	NS 100 / 150 / 160 mm		
1683	12 x 1.5	0 ... 6 bar	0 ... 16 bar	0 ... 1 bar	250 bar
1685	18 x 1.5	0 ... 4 bar	0 ... 10 bar	0 ... 1 bar	160 bar
1686	22 x 2	0 ... 2.5 bar	0 ... 6 bar	0 ... 1 bar	160 bar
1687	28 x 2	0 ... 1.6 bar	0 ... 4 bar	0 ... 1 bar	100 bar
1688	35 x 2	0 ... 1.6 bar	0 ... 4 bar	0 ... 1 bar	100 bar
1689	42 x 3	0 ... 1.6 bar	0 ... 4 bar	0 ... 1 bar	100 bar

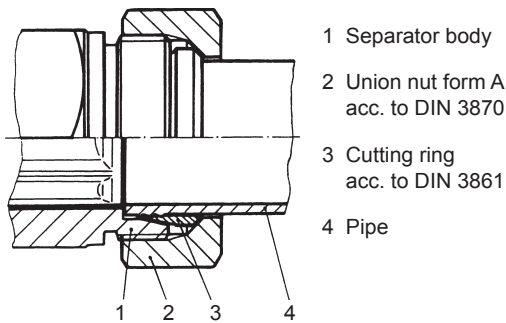
⁽¹⁾ and corresponding compound pressure ranges

⁽²⁾ lower pressure ranges on request

Dimensions



Connection example



Dimension chart

Pipe	M	L	L ₁	G	S	h	x	Weight kg	Inner shape
12 x 1.5	M18 x 1.5	150	136	G ¼	27	13.5	10	0.7	4-sided
18 x 1.5	M26 x 1.5	135	120	G ¼	27	13.5	15.5	0.5	4-sided
22 x 2	M30 x 2	130	115	G ½	32	16	19	0.8	4-sided
28 x 2	M36 x 2	120	105	G ½	41	20.5	22.5	1.0	4-sided
35 x 2	M45 x 2	120	99	G ½	46	23	29	1.1	6-sided
42 x 3	M52 x 2	120	98	G ½	55	27.5	35	1.5	6-sided

Ordering example

MEX 5 - D 2 0 . B22 / 1683 - 9007 - 0125 - LRS1

In-line diaphragm seal, for pipes 12 x 1.5

Option: Adjustment at specific fluid temperature

Adjustment temperature: 125°C

Filling fluid LRS1: Vaseline (-15 ... +150 °C)