



Main Features

- Directly integrated in the pipe
- Excellent cleaning behaviour
- Wetted parts 1.4435 / 1.4404 (316L) or 1.4571 (316Ti)
- Compatible to SIP and CIP processes
- Easy and fast installation

Applications

- Food & Beverage
- Laboratory & Medical

Description

This in-line diaphragm seals are used to design hygienic process connections for pressure gauges and protect the pressure gauges from high temperatures and aggressive process fluids.

In-line diaphragm seals with hygienic process connections ensure efficient cleaning processes and avoid pollutions and developing of bacterias in hygienic production processes.

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. For hygienic applications a choice of FDA conform filling fluids is available.

Process connection	NAUE aseptic connection, metric thread for pipes according to EN ISO 1127, row 1
Pressure ranges	0 ... 1 bar to 0 ... 60 bar (see table below)
Body material	Stainless Steel 1.4435 (316L) or 1.4571 (316Ti)
Diaphragm	Stainless Steel 1.4435 or 1.4404 (AISI 316L) or 1.4571 (316Ti)
Surface roughness	Wetted parts $Ra \leq 0.8 \mu m$ Option 1359: electropolished, $Ra \leq 0.5 \mu m$ (except welding)
Working temperature	-20 ... 225 °C (depending on the filling fluid)
Filling fluids	LRS1: Vaseline (-15 ... +150 °C, FDA conform) LRS10: Vaseline (-20 ... +225 °C, FDA conform) Other filling fluids on request
Gaskets	Not included

Ordering code / Minimum pressure ranges

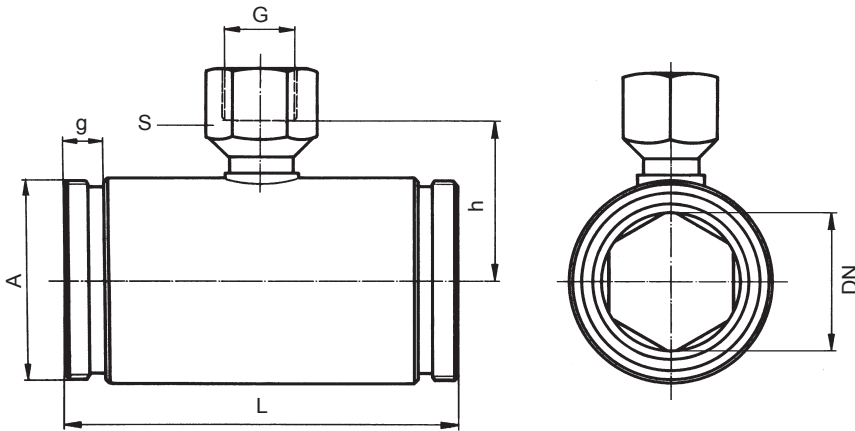
Code	DN	Pressure gauges ⁽¹⁾		Transmitters ⁽²⁾	P max. ⁽³⁾
		NS 50-63 mm	NS 100-150-160 mm		
1547	10	0 ... 6 bar	0 ... 25 bar	0 ... 1 bar	60 bar
1541	15	0 ... 1.6 bar	0 ... 2.5 bar	0 ... 1 bar	40 bar
1545	20	0 ... 1.6 bar	0 ... 2.5 bar	0 ... 1 bar	40 bar
1542	25	0 ... 1.6 bar	0 ... 2.5 bar	0 ... 1 bar	40 bar
1543	40	0 ... 1.6 bar	0 ... 1.6 bar	0 ... 1 bar	40 bar
1544	50	0 ... 1.6 bar	0 ... 1.6 bar	0 ... 1 bar	40 bar
1546	80	0 ... 1.6 bar	0 ... 1.6 bar	0 ... 1 bar	40 bar

⁽¹⁾ and corresponding compound pressure ranges

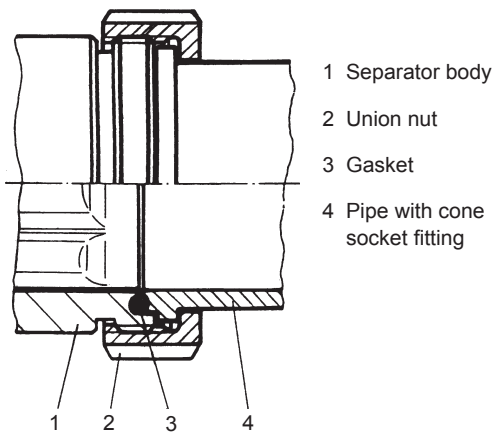
⁽²⁾ lower pressure ranges on request

⁽³⁾ depending on the used fixing elements (not part of the delivery).

Dimensions



Connection example



Dimension chart

DN	A	L	h	G	g	S	Pipe	Gasket	Weight kg	Inner shape
10	M22 x 1.5	140	13	G ¼	12	Ø 17	13.5 x 1.6	10.5 x 2.5	0.5	4-sided
15	M30 x 2	130	26	G ¼	12	17	21.3 x 1.6	18.5 x 3.0	0.6	4-sided
20	M36 x 2	120	30	G ¼	12	17	26.9 x 2.0	25.0 x 3.0	0.8	4-sided
25	M42 x 2	120	33	G ½	12	27	33.7 x 2.0	30.0 x 3.0	0.9	6-sided
40	M56 x 2	110	39	G ½	14	27	48.3 x 2.0	45.0 x 3.0	1.3	6-sided
50	M68 x 2	100	45	G ½	14	27	60.3 x 2.6	55.0 x 3.0	1.6	8-sided
80	M110 x 3	100	61	G ½	18	27	88.9 x 2.6	84.0 x 4.0	2.9	8-sided

Ordering example

MEX 5 - D 3 0 . B22 / 1542 - 1359 - LRS1

In-line diaphragm seal, DN 25

Option: Electropolished, Ra ≤ 0.5 µm (except welding)

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