



### 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  | DIN 11851  |
| Pressure ranges     | 0 ... 1 bar to 0 ... 40 bar<br>(see table below)   |
| Body material       | Stainless Steel 1.4571 (316Ti)   |
| Diaphragm           | Stainless Steel 1.4435 or 1.4404 (AISI 316L)<br>or 1.4571 (316Ti)  |
| Surface roughness   | Wetted parts Ra ≤ 0.8 µm<br>Option 1359: electropolished, Ra ≤ 0.5 µm<br>(except welding)  |
| Working temperature | -20 ... 225 °C (depending on the filling fluid)  |
| Filling fluids      | LRS1: Vaseline (-15 ... +150 °C, FDA conform)<br>LRS10: Vaseline (-20 ... +225 °C, FDA conform)<br>Other filling fluids on request |
| Gaskets             | Not included   |

### Ordering code / Minimum pressure ranges

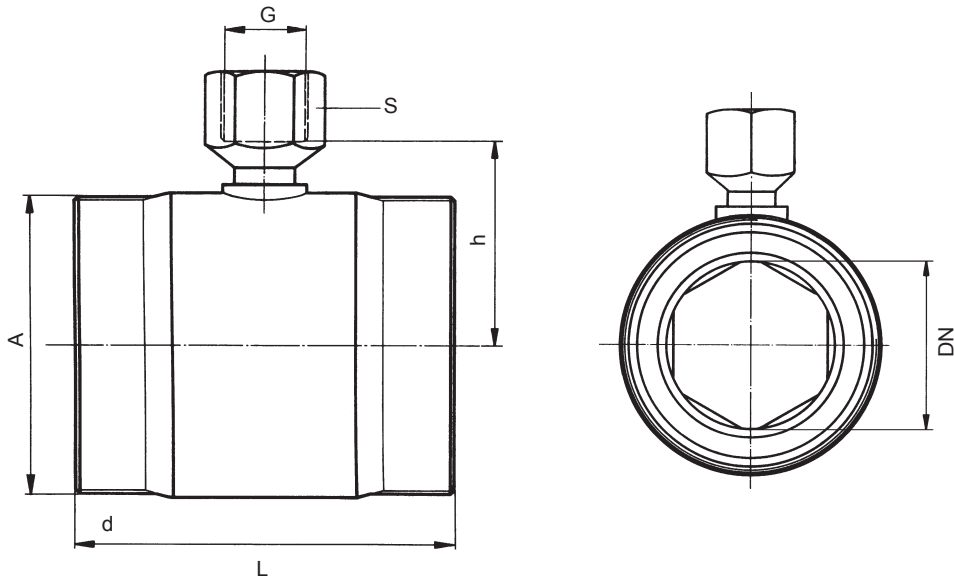
| Code | DN  | Pressure gauges <sup>(1)</sup> |                   | Transmitters <sup>(2)</sup> | P max. <sup>(3)</sup> |
|------|-----|--------------------------------|-------------------|-----------------------------|-----------------------|
|      |     | NS 50-63 mm                    | NS 100-150-160 mm |                             |                       |
| 1530 | 10  | 0 ... 4 bar                    | –                 | 0 ... 1 bar                 | 40 bar                |
| 1531 | 15  | 0 ... 1.6 bar                  | 0 ... 2.5 bar     | 0 ... 1 bar                 | 40 bar                |
| 1538 | 20  | 0 ... 1.6 bar                  | 0 ... 1.6 bar     | 0 ... 1 bar                 | 40 bar                |
| 1532 | 25  | 0 ... 1.6 bar                  | 0 ... 1.6 bar     | 0 ... 1 bar                 | 40 bar                |
| 1537 | 32  | 0 ... 1.6 bar                  | 0 ... 1.6 bar     | 0 ... 1 bar                 | 40 bar                |
| 1534 | 40  | 0 ... 1.6 bar                  | 0 ... 1.6 bar     | 0 ... 1 bar                 | 40 bar                |
| 1533 | 50  | 0 ... 1.6 bar                  | 0 ... 1.6 bar     | 0 ... 1 bar                 | 40 bar                |
| 1536 | 65  | 0 ... 1.6 bar                  | 0 ... 1.6 bar     | 0 ... 1 bar                 | 40 bar                |
| 1535 | 80  | 0 ... 1.6 bar                  | 0 ... 1.6 bar     | 0 ... 1 bar                 | 40 bar                |
| 1539 | 100 | 0 ... 1.6 bar                  | 0 ... 1.6 bar     | 0 ... 1 bar                 | 40 bar                |

<sup>(1)</sup> and corresponding compound pressure ranges

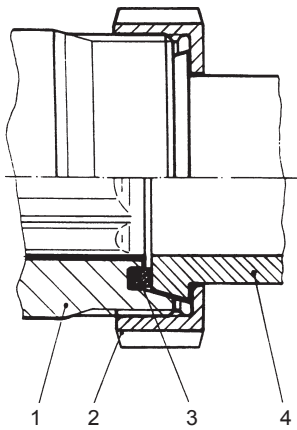
<sup>(2)</sup> lower pressure ranges on request

<sup>(3)</sup> depending on the used fixing elements (not part of the delivery).

## Dimensions



### Connection example



- 1 Separator body
- 2 Union nut F DIN 11851
- 3 Gasket G DIN 11851
- 4 Pipe with cone socket fitting

### Dimension chart

| DN  | A         | L   | h  | G     | S  | Weight kg | Inner shape |
|-----|-----------|-----|----|-------|----|-----------|-------------|
| 10  | 28 x 1/8  | 140 | 22 | G 1/4 | 17 | 0.6       | 4-sided     |
| 15  | 34 x 1/8  | 130 | 27 | G 1/4 | 17 | 0.8       | 4-sided     |
| 20  | 44 x 1/6  | 130 | 32 | G 1/2 | 27 | 1.3       | 4-sided     |
| 25  | 52 x 1/6  | 130 | 39 | G 1/2 | 27 | 1.7       | 6-sided     |
| 32  | 58 x 1/6  | 130 | 41 | G 1/2 | 27 | 2.0       | 6-sided     |
| 40  | 65 x 1/6  | 120 | 51 | G 1/2 | 27 | 2.2       | 6-sided     |
| 50  | 78 x 1/6  | 100 | 51 | G 1/2 | 27 | 2.3       | 6-sided     |
| 65  | 95 x 1/6  | 100 | 60 | G 1/2 | 27 | 3.0       | 8-sided     |
| 80  | 110 x 1/4 | 100 | 68 | G 1/2 | 27 | 3.4       | 8-sided     |
| 100 | 130 x 1/4 | 100 | 78 | G 1/2 | 27 | 4.0       | 8-sided     |

## Ordering example

MEX 5 - D 3 0 . B22 / 1532 - 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)