



Diaphragm seal MD 50 for hygienic processes



Benefits

- All materials FDA-listed
- SIP/CIP enabled
- No dead space
- Various standards available

Application

Diaphragm seals MD 50/51 with food law compliant screwed pipe connection for hygienic process separation of pressure measuring and control units in pipes or tanks. For mounting to Bourdon tube pressure gauges, pressure transducers and pressure switches. For installation in hygienic processes without dead spaces.

Food and beverages industry

Dairies

Beverage machines

Breweries

Versions

Threaded socket DIN 11851

	Process con- nection	Instrument connection	Nominal pressure	Minimum range* (in bar) at nominal size					Part no.
				63	100	160	DMU	DMU 13 Vario	
	DN 25	Welded con- nection	PN 40	4 bar	4 bar	4 bar	1 bar	–	31306W
	DN 32	Welded con- nection	PN 40	0.6 bar	1.6 bar	1.6 bar	1 bar	–	31307W
	DN 40	Welded con- nection	PN 40	0.6 bar	0.6 bar	0.6 bar	1 bar	1 bar	31308W
	DN 50	Welded con- nection	PN 25	0.6 bar	0.6 bar	0.6 bar	0.6 bar	0.6 bar	31309W
	DN 65	Welded con- nection	PN 25	0.6 bar	0.6 bar	0.6 bar	0.6 bar	0.6 bar	31310W

Blue part no. = in-stock items

**Grooved union nut DIN 11851**

	Process connection	Instrument connection	Nominal pressure	Minimum range* (in bar) at nominal size					Part no.
				63	100	160	DMU	DMU 13 Vario	
	DN 25	Welded connection	PN 40	4 bar	4 bar	4 bar	1 bar	–	31300W
	DN 32	Welded connection	PN 40	0.6 bar	1.6 bar	1.6 bar	1 bar	–	31301W
	DN 40	Welded connection	PN 40	0.6 bar	0.6 bar	0.6 bar	1 bar	1 bar	31302W
	DN 50	Welded connection	PN 25	0.6 bar	0.6 bar	0.6 bar	0.6 bar	0.6 bar	31303W
	DN 65	Welded connection	PN 25	0.6 bar	0.6 bar	0.6 bar	0.6 bar	0.6 bar	31304W

Blue part no. = in-stock items

Description

All materials used are FDA-listed. The chemical seal and the measuring instrument are welded together, resulting in an inseparable single, shock- and vibration-resistant unit that does not require additional external protection. The chemical seals are available with various nominal diameters; due to their compact design, they are suitable for a wide range of applications.

Technical specifications**Process connection**

Stainless steel 316 L

DIN 11851

DN 25, DN 32, DN 40, DN 50, DN 65

Surface roughness R_A $\leq 0.8 \mu\text{m}$ **Diaphragm**

Stainless steel 316 L

Instrument connection

Welded connection

Pressure transmission liquid

Paraffin oil (FM 09), FDA-listed

Pressure range

See overview of versions

Nominal pressure

PN 40, PN 25

Can be mounted to

- Bourdon tube pressure gauges NG 50, 63, 80, 100, 160
- Pressure transducers (DMU)
- Pressure switches (DS)

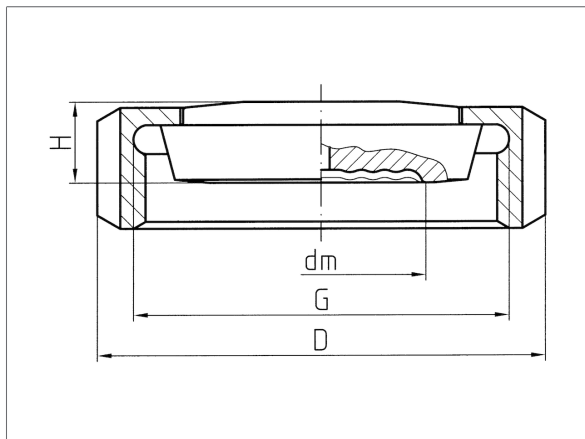
Options

- Other designs (Südmo, Guth)
- Other materials
- Electropolished
- Cooling element
- Capillary
- Other pressure transmission liquids
- Accessories such as union nuts and seals
- Other process connections:
 - MD 52-1: DIN 11864-1 GS or ÜM, design A/B, DN 25/80, H3
 - DIN 11853-1 GS or ÜM, DN 25/80, H3
 - MD 52-2: DIN 11864-2 NF or BF, design A/B, DN 25/80, H3
 - DIN 11853-2 NF or BF, DN 25/80, H3
 - MD 52-3: DIN 11864-3 NKS or BKS, design A/B, DN 25/80, H3
 - DIN 11853-3 NKS or BKS, DN 25/80, H3
 - MD 53: APV-RJT 1" to 3"
 - MD 54: IDF 1" to 3"
 - MD 55: APV-ISS 1" to 3"



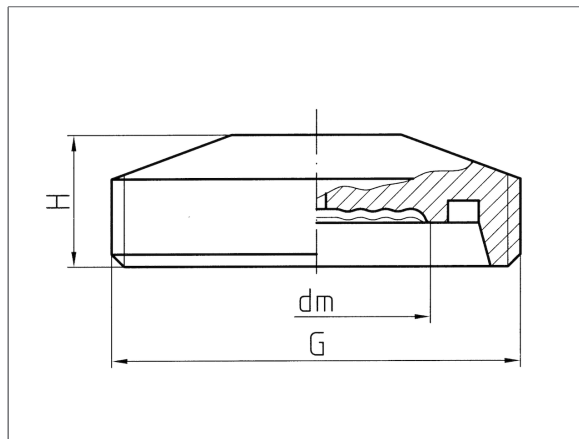
Technical drawings

Tapered socket DIN 11851 type D/DIN 11887 type B with grooved union nut DIN 11851 type F



DN	PN	dm	G	H
25	40	23,5	Rd52x1/6	21
32	40	28	Rd58x1/6	21
40	40	36	Rd65x1/6	21
50	25	48	Rd78x1/6	21
65	25	-	Rd95x1/6	-

Threaded socket DIN 11851 type C/DIN 11887 type A



DN	PN	dm	G	D	H
25	40	23,5	Rd52x1/6	63	14
32	40	28	Rd58x1/6	70	14
40	40	36	Rd65x1/6	78	14
50	25	48	Rd78x1/6	92	15
65	25	48	Rd95x1/6	112	16