

Diaphragm seals for hygienic applications



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

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

SMS 1147

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

Can be mounted to

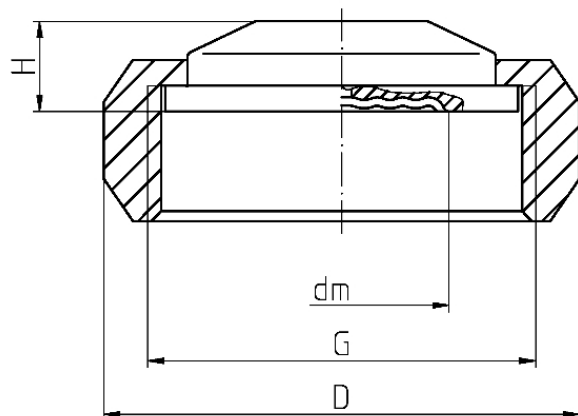
- Bourdon tube pressure gauges NG 50, 63, 80, 100, 160
- Pressure transducers (DMU)
- Pressure switches (DS)

Options

- other designs (Südmö, 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

Socket and union nut SMS 1147



DN	PN	dm	G	D	H
1½"	40	36	Rd60x1/6	74	14
2"	40	48	Rd70x1/6	84	14
2½"	25	48	Rd85x1/6	100	14

Versions

Process connection	standard	Instrument connection	Nominal pressure	minimum range* (in bar) at nominal size						Part no.
				63	100	160	DMU	DMU 13 Vario		
DN 1½"	Grooved union nut SMS 1147	Welded connection	PN 40	0.6 bar	0.6 bar	0.6 bar	1 bar	1 bar	●	31314W
DN 2"	Grooved union nut SMS 1147	Welded connection	PN 40	0.6 bar	0.6 bar	0.6 bar	0.6 bar	1 bar	●	31315W
DN 2½"	Grooved union nut SMS 1147	Welded connection	PN 25	0.6 bar	0.6 bar	0.6 bar	0.6 bar	0.6 bar	●	31316W

● in-stock items

● Non-stock items