

# Diaphragm seal MD 51 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 SMS 1147

	Process con- nection		Nominal	Minimum range* (in bar) at nominal size					Part no.
		connection	pressure	sure 63 100	100	160	DMU	DMU 13 Vario	1 411 110.
	DN 1½"	Welded con- nection	PN 40	0.6 bar	0.6 bar	0.6 bar	1 bar	1 bar	31320W
	DN 2"	Welded con- nection	PN 40	0.6 bar	0.6 bar	0.6 bar	0.6 bar	1 bar	31321W

Blue part no. = in-stock items

## Grooved union nut SMS 1147

	Process con nection	Instrument	Nominal pressure	Minimum range* (in bar) at nominal size					Part no.
				63	100	160	DMU	DMU 13 Vario	Part IIO.
	DN 1½"	Welded con- nection	PN 40	0.6 bar	0.6 bar	0.6 bar	1 bar	1 bar	31314W
	DN 2½"	Welded con- nection	PN 25	0.6 bar	0.6 bar	0.6 bar	0.6 bar	0.6 bar	31316W

1/3

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

SMS 1147

DN 11/2", DN 2", DN 21/2"

Surface roughness RA

≤ 0.8 µm

Diaphragm

Stainless steel 316 L

Instrument connection

Welded connection

## **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"

#### 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

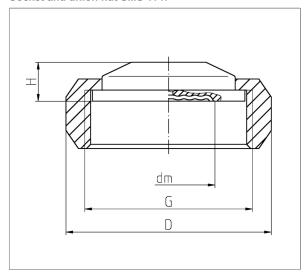
- Bourdon tube pressure gauges NG 50, 63, 80, 100, 160
- Pressure transducers (DMU)
- Pressure switches (DS)





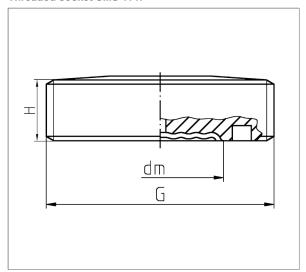
# **Technical drawings**

# Socket and union nut SMS 1147



DN	PN	dm	G	Н
1½"	40	36	Rd60x1/6	17
2"	40	48	Rd70x1/6	17
21/2"	25	48	Rd85x1/6	17

## Threaded socket SMS 1147



DN	PN	dm	G	D	Н
11/2"	40	36	Rd60x1/6	74	14
2"	40	48	Rd70x1/6	84	14
21/3"	25	48	Rd85x1/6	100	14