

# Diaphragm Seals

Compact Type, High Pressure Connection, PN 1000

Model

## MDM 7952

### Application

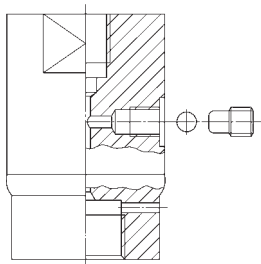
Diaphragm seals model MDM 7952 were especially developed for high pressure applications. They are provided with a high pressure process connection. Despite of the high nominal pressure, these diaphragm seals are designed very compact and suitable also for narrow mounting spaces. Diaphragm seals model MDM 7952 are often applied in chemical plants with discerning process media at high pressure. Various special materials are available.

Important information about advantages, applications, and features can be found in our model overview 7000 where you will also find an overview of our other chemical seal series. Please note especially the explanations about the influences of temperature and other special operating conditions, and the requirement of detailed ordering information resp. inquiries.

Please use our check list for pressure measuring instruments with chemical seal to ensure the completeness of all required ordering information (to find at our website, under "PDF-Download"). You can receive the check list in printed version with mail upon request.

### Construction

The diaphragm is welded to the upper and the lower housing. No additional sealing inside of the diaphragm seal required due to fully welding. The complete measuring system is evacuated, completely filled with a suitable high pressure filling liquid and hermetically sealed.



Do not open any connection of the system! Otherwise filling fluid will leak out and the measuring system cannot work properly anymore!



### Standard Configuration

#### Process Connection

HP M 16 x 1.5 female

#### Upper and Lower Housing

Stainless steel 316 L (1.4435), welded

#### Diaphragm

Stainless steel 316 L (1.4435), flush welded to the upper and the lower housing, effective  $\varnothing$  diaphragm  $d_M = 21$  mm (.83")

#### Nominal Pressure

PN 1000

#### Instrument Connection <sup>1)</sup>

G 1/4 female (1/4" BSP-f)

#### Filling Liquid

Glycerine (FN3)

#### Pressure Range Measuring Instrument

Pressure gauge NCS 63 (2 1/2"): 0- 10 bar to 0- 1000 bar,  
0-160 psi to 0- 15,000 psi,

also corresponding vacuum/pressure compound ranges;  
details for other pressure measuring instruments upon request

#### Reference Temperature

+20 °C (+ 68 °F), dial inscription for pressure gauges: tA 20 °C

<sup>1)</sup> Separately delivered standard MDM (not mounted to a measuring instrument) are provided with a filling port at the upper housing.

### Optional Special Configurations e.g.:

- Other filling fluids, suitable to the medium
- Instrument connection (female) 1/4" NPT, HP M16 x 1.5 or HP 9/16"-18 UNF
- Process connection HP 9/16"-18 UNF or G 1/4 (1/4" BSP) female, Model MDM 7952.1: 1/2" NPT or 1/4" NPT female
- Special material for lower part and diaphragm, or for the complete chemical seal, e.g. other stainless steel alloys, Hastelloy alloy C4 (2.4610) or C276 (2.4819), other materials or material combinations upon request
- Ambient or medium temperature differing from +20 °C (+68 °F) (Please state the details of the operating conditions!)

### How to Order:

Please note the detailed information about the required ordering information

- in our model overview 7000 and our check list for measuring instruments with chemical seal
- on the data sheet for the measuring instrument that shall be attached

Model: **MDM 7952**  
Process connection: **HP M16x1.5 female**  
Nominal pressure: **PN 1000**  
Material: **1.4435** (316 L), others see above.  
Instrument connection<sup>2)</sup>: **G 1/4 female** (1/4" BSP, standard, others see above)

Special configurations: see above

Please point out especially when the medium or ambient temperature is different than +20 °C (+68 °F).

**Example:** MDM 7952, HP M16 x 1,5,  
PN 1000, 1.4435, G 1/4 female

<sup>2)</sup> to state only for separately ordered diaphragm seals



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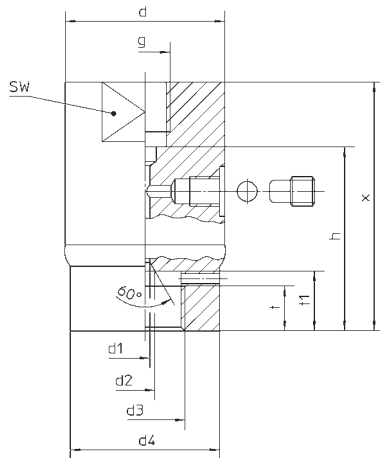


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## Dimensions and Weight



### Dimensions ( mm / inches ) and Weight ( kg / lb )

Model	d	d1	d2	d3	d4	g	h	t	t1	x <sup>±1</sup>	SW	Weight (approx.)
MDM 7952	32 <b>1.26</b>	2.5 <b>.10</b>	4.3 <b>.17</b>	HP M 16 x 1,5	30 <b>1.18</b>	G 1/4 <b>1/4" BSP</b>	37 <b>1.46</b>	9 <b>.35</b>	12 <b>.47</b>	50 <b>1.97</b>	27 <b>1.06</b>	0.25 <b>.55</b>

The information in this leaflet is given in good faith, but we reserve the right to make changes without notice.