

Diaphragm Seals

Female Thread, Male Thread or Flange Connection
PN 600 (10,000 lb/sq.in.)

Model **MDM 7280**

This data sheet contains all important features of model MDM 7280 with ordering information.

Further important information about advantages, applications, specifications, constructions, and user instructions can be found on general information leaflet **7000**. Please note especially the explanations about the influences of temperature and other special operating conditions, and the requirement of detailed ordering information resp. inquiries. You will also find an overview of our other chemical seal series there.

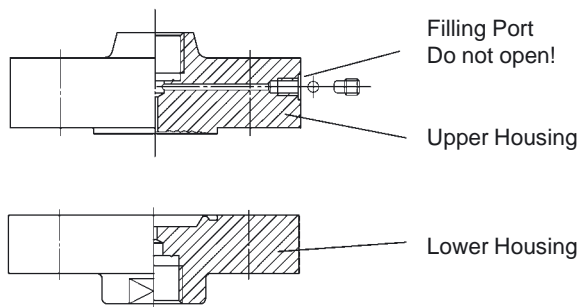
Application

Chemical seals model MDM 7280 are suitable for aggressive, thick or viscous fluids, or hot media. Pressure gauges can be attached, but also pressure switches or transmitters up to PN 600 (**10,000 psi**).

Construction

The membrane is welded to the upper housing. A filling port in the upper housing is used for filling the system.

The lower housing with process connection (female thread, male thread, or flange) and the upper housing are tied together by six screws M 20.



Standard Configuration

Upper Housing with Instrument Connection

316 stainless steel (1.4571), instrument connection 1/2" BSP female

Membrane

316 stainless steel (1.4435) welded to the upper housing; effective diameter of the membrane $\varnothing d_M = 38 \text{ mm}$ (**1.5"**)

Pressure Ranges

Suitable for pressure gauges with ranges
0/400 bar (**6,000 psi**) or 0/600 bar (**10,000 psi**)

For lower ranges see model MDM 7210 resp. 7211.

Lower Housing with Process Connection

316 stainless steel (1.4571), process connection 1/2" BSP female

Gasket

Metal to metal

Attachment Screws

Carbon steel zinc plated

Filling Fluid

Silicone oil

Reference Temperature

Approximately +20 °C (**68 °F**)

Dimensional drawings see reverse side.



Optional Special Configurations

- Instrument connection 1/4" NPT , 1/2" NPT or 1/4" BSP female
- Process connection
 - with female thread 1/2", 1" or 2" NPT (BSP upon request),
 - with male thread 1" or 2" NPT (BSP upon request),
 - with male adapter 1/2" NPT or 1/2" BSP, or others upon request;
- Flanges according to DIN or ASME
- Membrane tantalum, Hastelloy B2 or C 276, monel 400, titanium or others, welded to the upper housing
- Lower housing with process connection: Hastelloy C4 / membrane Hastelloy C276; lower housing with process connection and membrane monel; others upon request
- Attachment screws 316 stainless steel
- Other reference temperature than +20 °C (**68 °F**), up to max. 200 °C (**392 °F**)
- Filling fluid glycerine, halocarbon or others, compatible to the medium
- Capillary line between diaphragm seal and instrument [Please take into consideration that a mounting device like a gauge holder bracket, a rear flange, or a front flange for mounting the pressure gauge will be required.]
- Cooling element [strongly recommended for medium temperatures +100 °C (+212 °F) and up, in case that the chemical seal shall be mounted to the measuring instrument without capillary line]

How to Order:

Please note the detailed information about how to order on our general information leaflet 7000 and on the data sheet for the measuring instrument that shall be attached.

| | |
|----------------------------------|--|
| Model code: | MDM 7280 |
| Instrument connection: | G 1/2 (1/2" BSP) female (=standard) |
| Material of wetted parts: | stainless steel (=standard) others see above |
| Process connection: | G 1/2 (1/2" BSP) female (=standard) others see above |
| Screws: | carbon steel zinc plated (=standard) |
| Optional special configurations: | see above |



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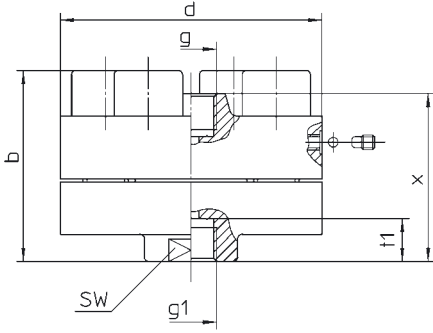
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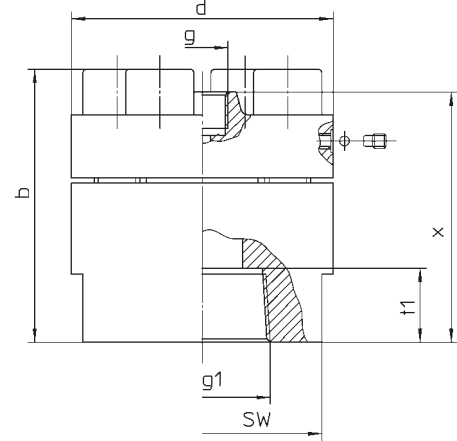
7280
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Dimensional Data and Weights

1/2" BSP female



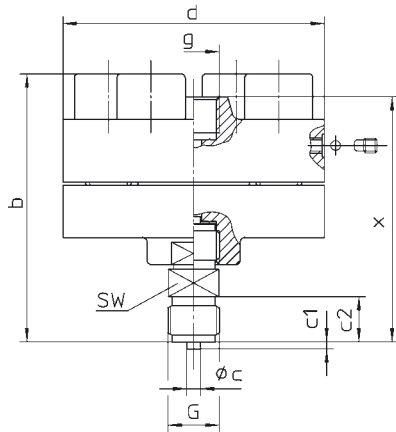
1" NPT, 2" NPT female



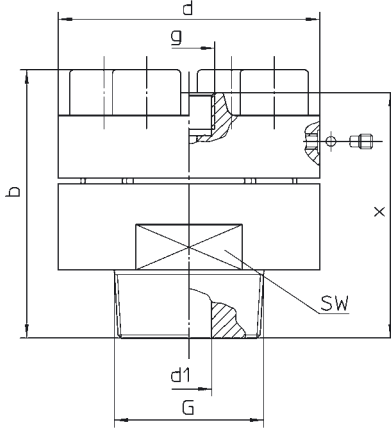
Dimensional Data (mm / inches) and Weight (kg / lb)

| Female Process Connection | d | b ^{±2} | g | g1 | t 1 | x ^{±2} | SW | Weight (approx.) |
|------------------------------|-------------|-----------------|-------------------------------------|-------------------------------------|--------------|-----------------|-------------|------------------|
| G 1/2 (1/2" BSP) or 1/2" NPT | 115 4.53 | 84 3.31 | G 1/2 (1/2" BSP) or 1/2" NPT female | G 1/2 (1/2" BSP) or 1/2" NPT female | 19 0.75 | 74 2.91 | 36 1.42 | 4.690 10.34 |
| 1" NPT | 115 4.53 | 120 4.72 | | 1" NPT female | 32.5 1.28 | 110 4.33 | 105 4.13 | 8.560 18.87 |
| 2" NPT | 115 4.53 | 120 4.72 | | 2" NPT female | 32.5 1.28 | 110 4.33 | 105 4.13 | 7.650 16.87 |

1/2" BSP male



1" NPT, 2" NPT male



Dimensional Data (mm / inches) and Weight (kg / lb)

| Male Process Connection | c | c1 | c2 | d | d1 | b ^{±2} | g | G | x ^{±2} | SW | Weight (approx.) |
|-------------------------|----------|----------|-----------|-------------|------------|-----------------|-------------------------------------|--------------------------------|-----------------|-------------|------------------|
| G 1/2 B 1/2" BSP male | 6 .24 | 3 .12 | 20 .79 | 115 4.53 | — | 118 4.65 | G 1/2 (1/2" BSP) or 1/2" NPT female | G 1/2 B (1/2" BSP) or 1/2" NPT | 108 4.25 | 22 0.87 | 4.840 10.67 |
| 1" NPT male | — | — | — | | 10 0.39 | 112 4.41 | | 1" NPT | 102 4.02 | 36 1.42 | 3.870 8.53 |
| 2" NPT male | — | — | — | | 20 0.79 | 118 4.65 | | 2" NPT | 108 4.25 | 105 4.13 | 6.320 13.93 |

DIN or ASME flanges upon request.

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