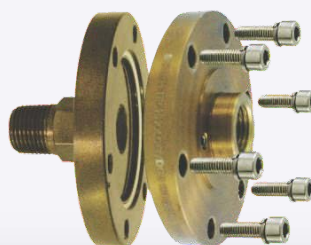




## DS1-SERIES

DIRECT THREADED DIAPHRAGM SEAL



\* Wetted parts PTFE coated



### FEATURES



- Direct threaded processing type
- Applicable with most measuring instruments
- Double laser welding diaphragm design
- Wide range corrosive applications
- Stainless steel wetted parts with options
- Various diaphragm materials selection
- Diaphragm or wetted parts coating or lining
- Pressure range -1..0, -1...+24 to 0.. 40 bar
- Various liquid filling supported

### DESIGN MATERIAL



- **Upper and lower body**  
SS 316 (Standard) or SS316L
- **Diaphragm**  
SS 316L (Standard), \*Optional material PTFE (Teflon)
- **Sealing ring / gasket**  
PTFE / Viton seal \*Optional Nitrile, Rubber, Fluoroplastic
- **Fastening screw**  
SS 304
- **Diaphragm filling**  
Standard silicone oil

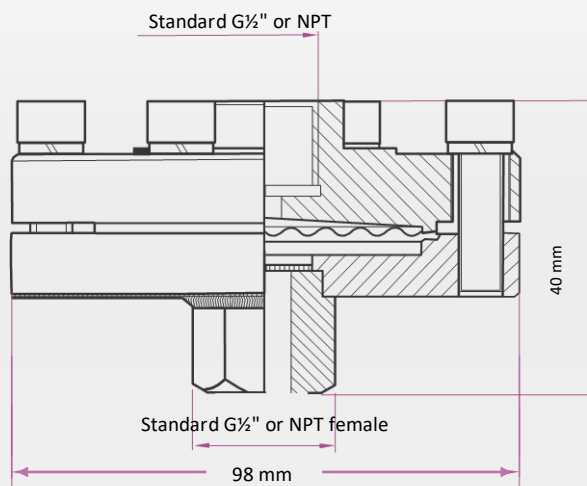
### TECHNICAL SPECIFICATION

- **Model and pressure configuration**  
Pressure : 0..1 bar to 40 bar  
Vacuum : -1..0 bar  
Compound : -1..24 bar
- **Body diameter size**  
Ø 98 mm
- **Instrument connection size**  
Standard G/2" or 12"NPT
- **Diaphragm filling reference**
- **Instrument/Process Connection Size**  
G1/2 or NPT, other connection size available
- **Working temperature range**  
Working temperature -40°..+150°C Please refer to filling selection table
- **Optional Accessories**  
Stainless steel armoured capillary, max. 15m  
Cooling tower AR100.. AR300 (T> 100°C)

| Working Fluid    | Working Temp. | Specific Gravity       | Service                                      |
|------------------|---------------|------------------------|--|
| Silicone oil Std | -40°..+130°C  | 0.94 g/cm <sup>2</sup> | General industry                             |
| Silicone oil DC2 | -30°..+200°C  | 1.07 g/cm <sup>2</sup> | High temperature                             |
| Fluorocarbon oil | -30°..+160°C  | 1.93 g/cm <sup>2</sup> | H <sub>2</sub> , O <sub>2</sub> , salt, acid |
| Glycerine water  | -5° ..+100°C  | 1.27 g/cm <sup>2</sup> | Food, sanitary                               |
| Vegetable oil    | -5° ..+100°C  | 0.93 g/cm <sup>2</sup> | Food, sanitary                               |



## DIMENSIONS (mm)



## ORDERING CODE



### 1 DIAPHRAGM

|    | Diaphragm Material |
|----|--------------------|
| SS | SS 316 L           |
| TI | Titanium           |
| TA | Tantalum           |
| HC | Hastelloy (H276C)  |
| MO | Monel (Cu30Ni70)   |
| XX | Other material     |

### 2 PROCESS CONNECTION

|    | Process Connection    |
|----|-----------------------|
| G2 | G 1/2"                |
| N2 | 1/2" NPT              |
| G1 | G 1"                  |
| N1 | 1" NPT                |
| X  | Other connection size |

### 3 FILLING

|   | Diaphragm Filling                  |
|---|------------------------------------|
| A | Standard silicone oil -40°..+130°C |
| B | Hi-temp. silicone oil -30°..+200°C |
| C | Fluorocarbon oil -30°..+160°C      |
| D | Glycerine-Water -5° ..+100°C       |
| E | Vegetable oil -5° ..+100°C         |

### 4 OPTION

|    | Option                                |
|----|---------------------------------------|
| OM | Other upper / lower body material     |
| AC | Capillary (Meter), eg. AC5 - 5 meters |
| DC | PTFE diaphragm coating                |
| DF | PTFE diaphragm foil                   |
| DW | PTFE wetted part coating              |
| DL | PTFE housing lining                   |
| FL | PTFE wetted part lining               |
| AX | Cooling tower, AR100.. AR300          |