

# Special Diaphragm Seal With Flushing System

## DS104 Series

### Features

- Various threaded sizes and flanged connection
- Applicable with most measuring instruments
- Double laser welding diaphragm design
- Cleaning In Process (CIP) and Sterilization
- 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 optional

### Special



\*Double welded diaphragm



### Technical Specification

- Model and pressure configuration  
Pressure : 0.. 1bar to 40 bar  
Vaccum :-1.. 0 bar  
Compound :-1..24 bar
- Body diameter size  
Standard Ø 98 mm
- Instrument Connection Size  
Standard G<sup>1/2</sup>" or 1/2"NPT, Female
- Process Connection Size  
Male threaded 1" .. 2" or optional  
\* Flanged and to DIN 2501, ASME B16.5, etc  
DIN 2501 : DN15..50, PN 2.5..40  
ASME B16.5 : 1/2" ..2", Rating 150#..600#  
Finish Ra 3.2.. 6.3µm
- Working temperature range  
Working media -40°..+240°C,  
Please refer to filling selection table

### Material

- Upper / Lower body  
SS 316 (Standard) or \*SS316L
- Diaphragm  
SS 316L (Standard),  
\*Optional Titanium, Monel, Hastelloy,  
Tantalum, or others
- Sealing ring / gasket to diaphragm  
PTFE, \* Viton, Nitrile, Rubber, Fluoroplastic
- Diaphragm filling  
Standard silicone oil
- Optional Accessories in Stainless steel  
Armoured capillary, max.15m  
Cooling tower AR100  
Overrange protector  
Angle tube  
Snubber



### Dimension



\*Flushing port, size 1/8" or 1/4"

\*DS104 with Flushing system

#### Diaphragm filling reference

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	-5°.. +70°C	1.27 g/cm <sup>2</sup>	Food, sanitary
Vegetable oil	-5°.. +100°C	0.93 g/cm <sup>2</sup>	Food, sanitary

#### Flange Facing

Standard	Flange Facing
ISO PN 10..40	Raised Face (RF), Flat Face (FF), Male tongue, Female groove, M/F spigot
DIN PN 20..40	Raised Face (RF) - RF de 1.6/6.4, Male tongue - Large/Small, Female groove
ASME Class 150..600	Ring Type Joint (RTJ), Female spigot - Large/Small, Male spigot - Large/Small

### Ordering Code



### DS104 - Diaphragm<sup>①</sup> - Connection<sup>②</sup> - Filling<sup>③</sup> \*Option<sup>④</sup>

①	Diaphragm Material
SS	SS 316 L
TI	Titanium
TA	Tantalum
HC	Hastelloy (H276C)
MO	Monel (Cu30Ni70)
XX	Other material

②	Process Connection
G2	G 1/2"
N2	1/2"NPT
G1	G 1"
N1	1"NPT
XX	Flanged and connection...

③	Diaphragm Filling
A	Standard silicone oil -40°..+130°C
B	Hi-temp. silicone oil -30°..+200°C

④	Option
AC	Capillary (Meter), eg. AC5 - 5 meters
DC	PTFE diaphragm coating
DH	Halar coating
DF	PTFE diaphragm foil
DW	PTFE wetted parts coating
DL	PTFE diaphragm lining
CX	Cooling tower, C1.. C3
AV	Angle tube valve