

back side diaphragm seal for high pressure, with threaded connection



PED 2014/68/EU

Designed to isolate the sensing element of pressure gauges, pressure switches, and electronic pressure transmitters from process fluids that are corrosive, viscous, sediment-laden, and at high temperature and pressure. A flexible diaphragm, mechanically clamped and leak-tested, ensures the separation between the transmission fluid and the process fluid. In model MGS9/1A0, cleaning the diaphragm seal is possible by removing the upper housing from the process connection cup. Both models are characterized by the absence of sealing gaskets between the housings. The construction of model MGS9/1A0 makes it particularly suitable for applications where compact dimensions and quick cleaning operations are essential due to frequent maintenance requirements.

4.1AS - MGS9/1AS

Working pressure: from 0...6000 to 0...8000 psi; (from 0...400 bar to 0...600 bar).

Working temperature: -49...+302 °F (-45°C...+150°C).

Accuracy*: (add to instrument accuracy) ±0,5% for direct mounting; ±1% for capillary mounting.

Instrument connection: AISI 316 st. st.

Diaphragm: metallic seal,

4 - AISI 316L st.st.,

9 - Hastelloy C276,

6 - Monel 400.

Process connection:

4 - AISI 316 st.st.,

5 - AISI 316 L st.st.

Clamp bolts: high tensile carbon steel.

Filling liquid: silicon oil.

4.1A0 - MGS9/1A0

Working pressure: from 0...1000 to 0...6000 psi; (from 0...60 bar to 0...400 bar).

Working temperature: -49...+302 °F (-45°C...+150°C).

Accuracy*: (add to instrument accuracy) ±0,5% for direct mounting; ±1% for capillary mounting.

Instrument connection: AISI 316 st. st.

Diaphragm: metallic seal,

4 - AISI 316L st.st.,

9 - Hastelloy C276,

6 - Monel 400.

Intermediate ring: AISI 316 st.st.

Process connection:

4 - AISI 316 st.st.,

5 - AISI 316 L st.st.

Clamp bolts: stainless steel.

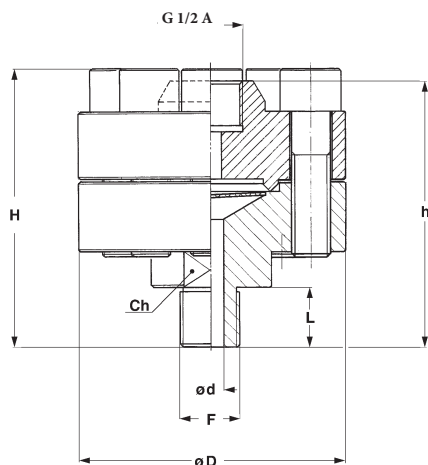
Filling liquid: silicon oil.

* at 68°F (20 °C) process temperature (or state temperature when ordering)

back side diaphragm seal for high pressure, with threaded connection

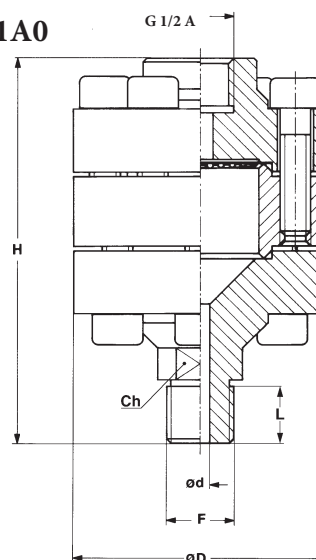
MGS9/1A

MGS9/1AS



F	d	H	h	L	D	Ch
41M - G 1/2 B	0.27"	3.66"	3.50"	0.78"	3.50"	1.41"
43M - 1/2 NPT	(7)	(93)	(89)	(20)	(89)	(36)

MGS9/1A0



F	d	H	L	D	Ch
41M - G 1/2 B	0.23"	4.78"	0.78"	3.14"	0.86"
43M - 1/2 NPT	(6)	(121,5)	(20)	(80)	(22)

dimensions : inches (mm)

ASSEMBLING

All diaphragm seals are mounted on the instruments and fixed by an aluminium protection label. For applications with capillary: should diaphragm seal and instrument not be at the same level, instrument adjustment is required). (For use and installation, see data sheet "4")

D - Direct	9 - Capillary AISI304 st.st., AISI304 st.st. armoured, 36.37" max (6 mt max)
1 - Nude capillary AISI304, 36.37" max (6 mt max)	6 - Capillary AISI316 st.st., AISI316 st.st. armoured, 36.37" max (6 mt max)

FILLING FLUIDS and process fluid temperature

Fluid	Vacuum	Pressure	Fluid	Vacuum	Pressure
Standard silicon oil	-40...+122°F (-40...+100°C)	-40...+302°F (-40...+150°C)	E - Fluorinated liquid "E"	-40...+212°F (-40...+100°C)	-40...+302°F (-40...+150°C)
B - Silicon oil "B"	-40...+302°F (-40...+150°C)	-40...+482°F (-40...+250°C)	F - Silicon oil "C"	-130...+176°F (-90...+80°C)	-130...+302°F (-90...+150°C)
C - Silicon oil "C"	-14...+392°F (-10...+200°C)	-14...+662°F (-10...+350°C)	G - Mineral food oil "G"	-14...+302°F (-10...+150°C)	-14...+392°F (-10...+200°C)
D - Silicon oil "D"	-14...+392°F (-10...+200°C)	-14...+752°F (-10...+400°C)			

OPTIONS

R20 - Adaptor G 1/2 A M/F
R22 - Adaptor G 1/2 A M x 1/2 - 14 NPT F
R21 - Adaptor G 1/2 A M x 1/4 - 18 NPT F
T11 - Washing plug
C05 - Helium Test
E30 - Nace version MR0103 (1) - MR0175 (ISO 15156) (2)

(1) Stainless steel process connection and Monel 400 or Hastelloy C276 diaphragm. (2) Wetted parts hastelloy C276

"HOW TO ORDER" SEQUENCE

Section/Model/Connection material/Diaphragm material/Process Connection/Instrument connection/Assembling/Options

4 1AS 4 4, 9, 6 41M 41F - G 1/2 F D B...G
1A0 5 43M 1, 9, 6 R20...E30