

"in line" diaphragm seal



Diaphragm seals are designed to isolate the sensing element of pressure gauges and pressure switches from process fluids which may be corrosive, viscous, sedimentous and/or with a high temperature. The diaphragm is welded to the upper body, to ensure separation of filling fluid from process medium. The "in-line" diaphragm position enables deep cleaning of their surfaces. Flange clamping with metallic sealing guarantees the system against leakage at high process fluid temperatures and pressures.

4.R00 - MGS9/R

Working pressure: *from 0...100 to 0...3000 psi (from 0...6 to 0...250 bar).*

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

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

Instrument connection: AISI 316 st.st.

Bolts and lock ring: AISI 304 st.st.

Diaphragm: welded to process connection,

4 - AISI 316 L st.st,

9 - Hastelloy C276.

Process connection:

4 - AISI 316 st.st.,

5 - AISI 316L st.st.

Process connection, welded type:

7RC - saddle, for pipe size DN 2" ...4";

7MS - "in line", for pipe size 1/2" ...1";

7MT - "in line", for pipe size 1" 1/2...4".

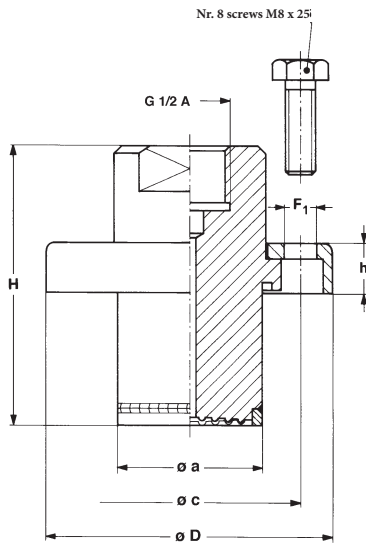
Process connection, flanged type: (Mod. 7FL)

- "in line", for flange size 1" 1/2 - 2" ; 150...900 RF;

- "in line", for flange size DN 40...50, PN 10...100 step seal. **Filling**

liquid: silicon oil.

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



h	H	a	c	D	F ₁
0.51"	2.91"	1.49"	2.28"	2.95"	0.33"
(13)	(74)	(38)	(58)	(75)	(8,5)

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)
I - 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

C05 - Helium Test	P04 - Dye penetrant test
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"HOW TO ORDER" SEQUENCE

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

4 R00 4,5 4,9 --- 41F - G 1/2 F D B...G
1, 9, 6 C05, P04

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