

"wafer" diaphragm seal



Diaphragm seals are designed to isolate the sensing element of pressure gauges, pressure switches and electronic pressure transmitters from process liquids which may be corrosive, viscous, sedimentous and/or with a high temperature. The diaphragm welded to the upper body and leak proof tested, ensure separation of filling fluid from process medium. Diaphragm faced position permit an accurate and deeper cleaning. Process sizes are ASME - EN 1092 flanged to suit application in chemical, petrochemical, water treatment, paper.

4.WAF - MGS9/WAFER

Working pressure: *from 0...40 INWC to 0...2000 psi* (da 0...100 mbar a 0...160 bar), depending on flange type.

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

Instrument connection: AISI 304 st.st. capillary, to be welded on the transmitter.

Diaphragm: AISI 316L st.st. (cod. **4**), Hastelloy C276 (cod. **9**), Hastelloy B2 (cod. **1**), Tantalum (cod. **B**).

Process connection: AISI 316 st.st. (cod. **4**), AISI 316L st.st. (cod. **5**), Hastelloy C276 (cod. **9**).

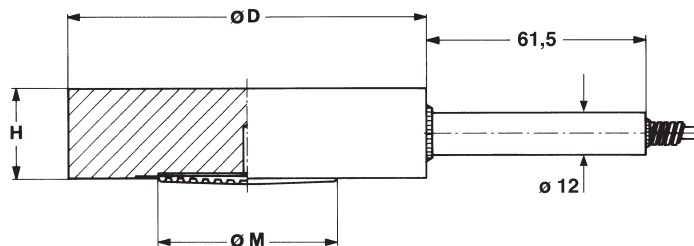
AISI 316 st.st flanged connection:

-ASME B16.5 standards: 2" - 3"; class 150...2500 form RF; -EN 1092 standard: DN 50 - 80 ; PN 16...160 step seal.

EN 1092 flanges finishing: type B1 (PN 2,5...40) = Ra 3,2...12,5 µm (cod. **RF7**); type B2 (PN 63...100) = Ra 0,8...3,2 µm (cod. **RF8**).

ASME flanges finishing: type RF = Ra 125...250 AARH (cod. **RF3**).

Filling liquid: silicon oil.



FLANGED CONNECTION AS PER EN 1092

DN	PN-bar	Code	D	M	H
50	16...160	TX0	4.01" (102)	1.96" (50)	0.78" (20)
80	16...160	VX0	5.43" (138)	2.55" (65)	

dimensions : inches (mm)

FLANGED CONNECTION AS PER ASME B16.5

DN	Class	Code	D	M	H
2"	150...2500	BJA	3,62"	1,96"	0,78"
3"	150...2500	EJA	5"	2,55"	0,78"

dimensions : inches

ASSEMBLING

Should diaphragm seal and instrument not be at a same level, instrument on installation is required.

1 - Capillary AISI304 st.st. 236" max (6 mt max)
9 - Capillary AISI304 st.st., AISI304 st.st. armoured, 236" max (6 mt max)
6 - Capillary AISI316 st.st., AISI316 st.st. armoured, 236" 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)			

"HOW TO ORDER" SEQUENCE

Section	Model	Connection	Diaphragm	Process	Flange	Instrument	Assembling	Options
	material	material		connection	finishing	connection		
4	WAF	4, 5, 9	4, 9 1, B	TX0...VX0 BJA...EJA	RF3 RF7 RF8	23M - 1/4 NPT M 41F - G 1/2 F	1, 9, 6	B...G