

back side diaphragm seals, with flanged connection

Diaphragm seals are designed to isolate the sensing element of pressure gauges, pressure switches and electronic pressure transmitter from process fluids which may be corrosive, viscous, sedimentous and/or with a high temperature. The diaphragm is leak proof tested to guarantee fill fluid separation from process fluid. Process side are ASME/EN 1092 flanged to suit application in chemical, petrochemical, water treatment and paper industries.



4.600 - MGS9/6

Instrument type	Minimum range	Maximum range	Notes
Bourdon tube, DS 4", 6" (100...150 mm)	0...10 psi (0...0,6 bar)	0...580 psi (0...40 bar)	Vacuum and compound gauges included
Diaphragm differential pressure gauges	0...100 InH ₂ O (0...250 mbar)	0...360 psi (0...25 bar)	Max static pressure 60 bar
Diaphragm pressure switches	0...15 psi (0...15 bar)	0...580 psi (0...40 bar)	Vacuum and compound gauges included
Pressure transmitters	0...40 InH ₂ O (0...100 mbar)	0...580 psi (0...40 bar)	Max static pressure 60 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: AISI 316L st.st. (cod. **4**), Monel 400 (cod. **6**), Hastelloy C276 (cod. **9**), Tantalum (cod. **B**), Titanium (cod. **2**) and AISI 316L st.st. PTFE coated (cod. **8**)**.

Gaskets: PTFE (max. 250°C).

Flanged process connection: in AISI 316 st.st. (cod. **4**), AISI 316L st.st. (cod. **5**), AISI 316L st.st. PTFE coated (cod. **N**)**.

Dimensions: DN 15...50, PN 6...40 EN 1092 step seal; 1/2"...2" class 150...600 RF as per ASME B16.5.

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

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.

Studs, nuts: AISI 304 st.st.

** max. temperature 328°F (150 °C), with PTFE coating.

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)			

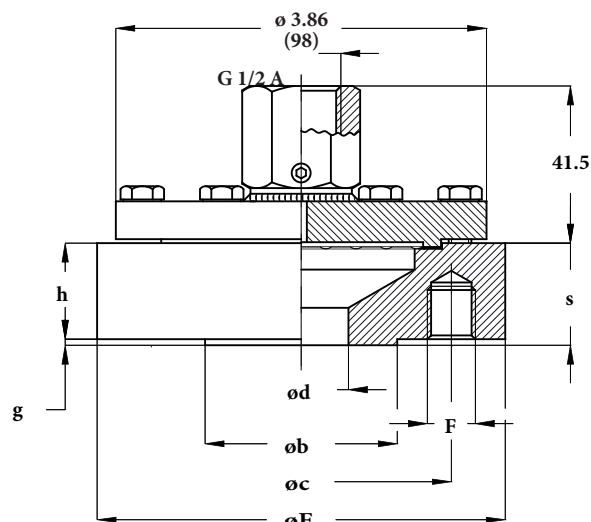
OPTIONS

C05 - Helium Test (1)	P15 - Studs, nuts and washers
E30 - Nace version bMR0103 (2) - MR0175 (ISO 15156) (3)	TS4 - Washing plug (1)

(1) available only on some executions: contact our Technical Department.

(2) Monel 400 or Hastelloy C diaphragm.

(3) Hastelloy C process connection and diaphragm.



EN 1092 STANDARD

dimensions : mm

DN (1)	PN	Code	E	h	b	d	g	c	s	F	N (1)
15	10...16	OQ0	95	24,5	45	15	2	65	26,5	M12	4
	25...40	OS0									
20	10...16	PQ0	105	22,5	58	20	2	75	24,5	M12	4
	25...40	PS0									
25	10...16	QQ0	115	20,5	68	25	2	85	22,5	M12	4
	25...40	QS0									
40	10...16	SQ0	150	18	88	40	3	110	21	M16	4
	25...40	SS0									
50	10...16	TQ0	165	18	102	50	3	125	21	M16	4
	25...40	TS0									

1) DN20 and over DN50 are available

2) N° holes

ASME STANDARDS

dimensions : inches

DN (1)	Class	Code	h	E	b	d	g	c	s	N (1)	F
1/2"	150	4AA	1.06"	3.54"	1.37"	0.59"	0.08"	2.37"	1.14"	4	1/2"-13UNC
1/2"	300	4BA	1"	3.74"	1.37"	0.59"	0.08"	2.63"	1.08"	4	1/2"-13UNC
1/2"	600	4DA	1"	3.74"	1.37"	0.59"	0.27"	2.63"	1.28"	4	1/2"-13UNC
3/4"	150	5AA	0.98"	3.94"	1.69"	0.79"	0.08"	2.75"	1.14"	4	1/2"-13UNC
3/4"	300	5BA	1.34"	4.53"	1.69"	0.79"	0.08"	2.63"	1.06"	4	5/8"-11UNC
3/4"	600	5DA	1.34"	4.53"	1.69"	0.79"	0.27"	3.25"	1.61"	4	5/8"-11UNC
1"	150	6AA	0.9"	4.33"	2"	0.98"	0.08"	3.25"	0.98"	4	1/2"-13UNC
1"	300	6BA	1.34"	4.92"	2"	0.98"	0.08"	3.5"	1.42"	4	5/8"-11UNC
1"	600	6DA	1.34"	4.92"	2"	0.98"	0.27"	3.5"	1.61"	4	5/8"-11UNC
1 1/2"	150	AAA	0.69"	4.92"	2.87"	1.57"	0.08"	3.87"	0.77"	4	1/2"-13UNC
1 1/2"	300	ABA	0.83"	6.1"	2.87"	1.57"	0.08"	4.5"	0.9"	4	3/4"-10UNC
1 1/2"	600	ADA	0.88"	6.1"	2.87"	1.57"	0.27"	4.5"	1.17"	4	3/4"-10UNC
2"	150	BAA	0.69"	5.9"	3.63"	1.97"	0.08"	4.75"	0.77"	4	5/8"-11UNC
2"	300	BBA	0.81"	6.5"	3.63"	1.97"	0.08"	5"	0.89"	8	5/8"-11UNC
2"	600	BDA	1"	6.5"	3.63"	1.97"	0.27"	5"	1.28"	8	5/8"-11UNC

1) 3/4" is available

2) Nr. holes

"HOW TO ORDER" SEQUENCE

Section	Model	Connection	Diaphragm	Process	Flange	Instrument	Assembling	Options
material	material	material	material	connection	finishing	connection	material	material
4	600	4, 5, N	4, 6, 9 B, 2, 8	OOO...TS0 4AA...BDA	RF3...RF8	41F - G 1/2 F	D 1, 9, 6	B...G C05...TS4