

diaphragm seals, welded, flanged connections

MGS9/6WF



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 upper part is detachable from the lower process side for cleaning. An optional flushing hole is available to allow the seal to be cleaned and purged without removal from the process. A choice of wetted part material is available to suit practically all applications.

4.6WF - MGS9/6WF

Working pressure: from -30...0 INHG to 0...2000 psi, 2540 psi max (from -1...0 to 0...160 bar, 175 bar max).

Process 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 304 st.st .

Diaphragm, welded: AISI 316L st.st (cod. **4**), Monel 400 (cod. **6**), Hastelloy C276 (cod. **9**), Hastelloy B2 (cod. **1**), Tantalum (cod. **B**).

Gasket: PTFE (max. +482°F; +250°C).

Flanged process connection: AISI 316L st.st (cod. **4**), AISI 316L

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

st.st (cod. **5**), Monel 400 (cod. **6**), Hastelloy C276 (cod. **9**), Hastelloy B2 (cod. **1**).

Dimensions : DN 15...50, PN 6...100 EN 1092 step seal; 1/2" ...2" class 150...1500 RF as per ASME B16.5.

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.

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, 236" max (6 mt max)
T - Cooling extension	6 - Capillary AISI316 st.st., AISI316 st.st. armoured, 236" max (6 mt max)
1 - Nude capillary AISI304, 236" max (6 mt max)	

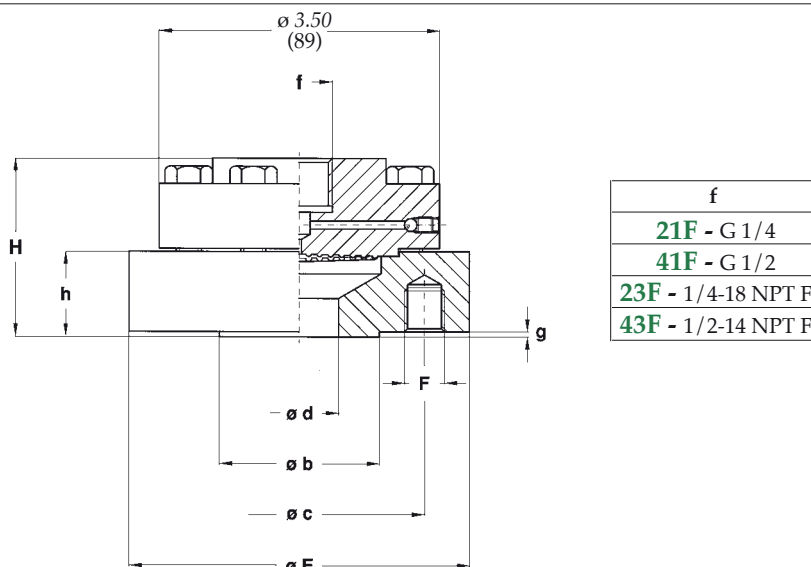
OPTIONS

B - Silicon liquid "B" for process fluid temperature from -4°F to +482°F (from -20°C to +250°C)
C - Silicon liquid "C" for process fluid temperature from +68°F to +644°F (from +20°C to +340°C)
E - Fluorinated liquid "E" for process fluid temperature from -76°F to +302°F (from -60°C to +150°C)
C05 - Helium Test (1)
P04 - Dye penetrant test (1)
S40 - Special overpressure
E30 - NACE version MR0103 (2) - MR0175 (3)
TS4 - Washing plug (1)
P15 - Studs, nuts and washers
CS4 - AISI 316 st.st top housing

(1) Available for some excutions pls. consult our technical dep. to check their feasibility.

(2) With Monel 400 or Hastelloy C diaphragm only.

(3) With Hastelloy C process connection and diaphragm only.



EN 1092 STANDARD

dimensions : mm

DN (1)	PN-bar	Code	h	H	E	b	d	g	c	F	N (2)	L (3)
15	6	OO0	34	63,5	80	40	15	2	55	M10	4	70
15	16...40	OS0	27	56,5	95	45	15	2	65	M12	4	70
15	100	OU0	45	74,5	105	45	15	2	75	M12	4	70
25	6	QO0	27	56,5	100	60	25	2	75	M10	4	70
25	16...40	QSO	27	56,5	115	68	25	2	85	M12	4	70
25	100	QU0	45	74,5	140	68	25	2	100	M16	4	70
50	6	TO0	27	56,5	140	90	50	3	110	M12	4	70
50	16...40	TS0	27	56,5	165	102	50	3	125	M16	4	70
50	100	TU0	45	74,5	195	102	50	3	145	M24	4	70

1) DN20, 40 and over are available.

3) studs length.

2) N° holes.

ASME STANDARDS

dimensions : inches

DN (1)	Classe	Code	h	H	E	b	d	g	c	N (2)	L (3)	F
1/2"	150	4AA	1.33"	2.5"	3.50"	1.37"	0.59"	0.06"	2.37"	4	3.34"	1/2" 13UNC
1/2"	300	4BA	1.06"	2.22"	3.74"	1.37"	0.59"	0.06"	2.62"	4	3.34"	1/2" 13UNC
1/2"	600	4DA	1.90"	3.07"	3.74"	1.37"	0.59"	0.24"	2.62"	4	3.34"	1/2" 13UNC
1/2"	900...1500	4FA	1.90"	3.07"	4.74"	1.37"	0.59"	0.24"	3.24"	4	4.92"	3/4" 10UNC
1"	150	6AA	1.06"	56.5	4.25"	2"	0.98"	0.06"	3.12"	4	3.34"	1/2" 13UNC
1"	300	6BA	1.49"	67.5	4.88"	2"	0.98"	0.06"	3.5"	4	4.52"	5/8" 11UNC
1"	600	6DA	1.90"	3.07"	4.88"	2"	0.98"	0.24"	3.5"	4	4.52"	5/8" 11UNC
1"	900...1500	6FA	1.90"	3.07"	5.86"	2"	0.98"	0.24"	4"	4	6.10"	7/8" 9UNC
2"	150	BAA	1.06"	56.5	152.5	3.62"	50	0.06"	4.74"	4	4.52"	5/8" 11UNC
2"	300	BBA	1.06"	56.5	6.49"	3.62"	1.96"	0.06"	5"	8	4.52"	5/8" 11UNC
2"	600	BDA	1.90"	3.07"	6.49"	3.62"	1.96"	0.24"	5"	8	4.52"	5/8" 11UNC
2"	900	BEA	1.75"	2.91"	8.5"	3.62"	1.96"	0.24"	6.5"	8	6.10"	$\phi 26$ (x 7/8" 9UNC)
2"	1500	BFA	1.75"	2.91"	8.5"	3.62"	1.96"	0.24"	6.5"	8	6.10"	$\phi 26$ (x 7/8" 9UNC)

1) 3/4", 1" 1/2 and over are available.

3) studs length.

2) N° holes

"HOW TO ORDER" SEQUENCE

Section	Model material	Connection material	Diaphragm connection	Process	Flange finishing	Instrument connection	Assembling	Options
4	6WF	4, 5, 6 9, 1	5, 6, 9 1, B	OO0...TU0 4AA...BFA	RF3...RF8	21F, 41F 23F, 43F	D, T 1, 9, 6	B, C, E C05...CS4