

"In line" diaphragm seal, with flanged connection



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 position permit an accurate and deeper cleaning. Process sizes are ASME/UNI/DIN flanged to suit application in chemical, petrochemical, water treatment and paper industries.

4.400 - MGS9/4

Working pressure: from 0...15 to 0...600 psi (from 0...1 to 0...40 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**), Hastelloy B2 (cod. **1**), Tantalum (cod. **B**), Titanium (cod. **2**), Nickel (cod. **7**), AISI 316 L st.st. PTFE coated** (cod. **8**), Incoloy 825 (cod. **I**), Inconel 600 (cod. **J**).

Flanged process connection: AISI 316 st.st. (cod. **4**), AISI316 L st.st. (cod. **5**), Monel 400 (cod. **6**), Hastelloy C276 (cod. **9**), Hastelloy B2 (cod. **1**), Tantalum (cod. **B**), Titanium (cod. **2**), Nickel (cod. **7**), AISI

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

316 st.st. PTFE** coated (cod. **N**), ASTM A182 gr. F51 (cod. **S**).

Dimensions : DN 15...50 e PN 10...40 UNI-DIN step seal; 1/2"...2" class 150...600 RF as per ASME B16.5.

UNI-DIN 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.

** 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)
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

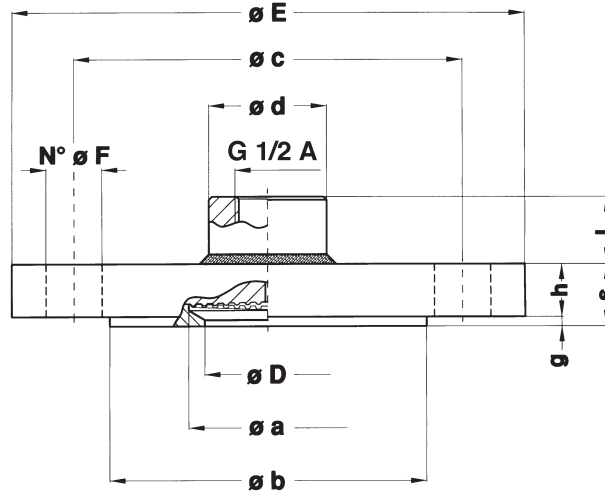
C05 - Helium Test (1)	P04 - Dye penetrant test (1)
E30 - NACE MR0103/MR0175 (ISO 15156) (2)	

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

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

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UNI-DIN STANDARDS

dimensions : mm

DN	PN-bar	Code	D	E	c	b	a	d	g	h	s	L	N (1)	F	Ranges (2)
15	10...40	OK0	15	95	65	45	40	28	2	17	19	16,5	4	14	2,5...40
20	10...40	PK0	20	105	75	58	40	28	2	17	19	16,5	4	14	2,5...40
25	10...40	QK0	25	115	85	68	50	38	2	17	19	24,5	4	14	1...40
40	10...40	SK0	40	150	110	88	50	38	3	16	19	24,5	4	18	1...40
50	10...40	TK0	50	165	125	102	50	38	3	17	20	23,5	4	18	1...40

(1) N° holes .

(2) bar ranges, for instruments with dial size $\geq 4''$ (100mm).

ASME STANDARDS

dimensions : inches

DN	Class	Code	D	E	c	b	a	d	g	h	s	L	N (1)	F	Ranges (3)
1/2"	150	4AA	0.59"	3.5"	2.37"	1.37"	1.18"	1.02"	0.06"	0.66"	0.72"	0.64"	4	0.62"	100...290 (4)
1/2"	300	4BA	0.59"	3.74"	2.62"	1.37"	1.18"	1.02"	0.06"	0.66"	0.72"	0.64"	4	0.62"	100...580
1/2"	600	4DA	0.59"	3.74"	2.62"	1.37"	1.18"	1.02"	0.25"	0.66"	0.95"	0.64"	4	0.62"	100...580
3/4"	150	5AA	0.78"	3.87"	2.74"	1.68"	1.57"	1.10"	0.06"	0.66"	0.72"	0.64"	4	0.62"	60...290
3/4"	300	5BA	0.78"	4.62"	3.24"	1.68"	1.57"	1.10"	0.06"	0.66"	0.72"	0.64"	4	0.74"	60...580
3/4"	600	5DA	0.78"	4.62"	3.24"	1.68"	1.57"	1.10"	0.25"	0.66"	0.95"	0.64"	4	0.74"	60...580
1"	150	6AA	0.98"	4.25"	3.12"	2"	1.57"	1.10"	0.06"	0.7"	0.76"	0.64"	4	0.62"	60...290
1"	300	6BA	0.98"	4.88"	3.5"	2"	1.96"	1.49"	0.06"	0.7"	0.76"	0.96"	4	0.74"	15...580
1"	600	6DA	0.98"	4.88"	3.5"	2"	1.96"	1.49"	0.25"	0.7"	0.96"	0.96"	4	0.74"	15...580
1 1/2"	150	AAA	1.57"	5"	3.87"	2.87"	1.96"	1.49"	0.06"	0.7"	0.76"	0.96"	4	0.62"	15...290
1 1/2"	300	ABA	1.57"	6.12"	4.5"	2.87"	1.96"	1.49"	0.06"	0.80"	0.86"	0.86"	4	0.86"	15...580
1 1/2"	600	ADA	1.57"	6.12"	4.5"	2.87"	1.96"	1.49"	0.25"	0.88"	1.14"	0.59"	4	0.86"	15...580
2"	150	BAA	1.96"	6"	4.74"	3.62"	1.96"	1.49"	0.06"	0.74"	0.80"	0.92"	4	0.74"	15...290
2"	300	BBA	1.96"	6.49"	5"	3.62"	1.96"	1.49"	0.06"	0.88"	0.94"	0.78"	8	0.74"	15...580
2"	600	BDA	1.96"	6.49"	5"	3.62"	1.96"	1.49"	0.25"	1.04"	1.25"	0.47"	8	0.74"	15...580

(1) N° holes .

(2) bar ranges, for instruments with dial size $\geq 4''$ (100mm).

(3) psi ranges, for instruments with dial size $\geq 4''$ (100mm).

(4) not available, when PTFE coated.

"HOW TO ORDER" SEQUENCE

Section	Model	Connection material	Diaphragm connection	Process	Flange finishing	Instrument connection	Assembling	Options
4	400	4, 5, 6 9, 1, B 2, 7, N, S	4, 6, 9 1, B, 2 7, 8, I, J	OK0..TK0 4AA...BDA	RF3...RF8	41F - G 1/2 F	D 1, 9, 6	B...G C04...P04

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