"In line" diaphragm seal, with flanged connection

MGS9/4

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/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...1to 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, Hastelloy B2, Hastelloy C276, Tantaluum, Titanium, Nickel, Monel 400, AISI 316 L st.st. PTFE coated (1), Incoloy 825, Inconel 600.
Flanged process connection: AISI 316 st.s, AISI316 L st.st, Hastelloy B2, Hastelloy C276, Tantaluum, Titanium, Nickel, Monel 400, AISI 316 st.st. PTFE (1) coated, ASTM A182 gr. F51.
Dimensions : DN 15...50 e PN 10...40 UNI-DIN step seal; 1/2"...2" class 150...600 RF as per ASME B16.5.
Finishing: UNI - Ra 12,5 µm max; DIN - Rz 40...160 µm; ASME - AARH 125...250 µin.
Filling liquid: silicon oil.

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

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

ASSEMBLING

All diaphragm seals are mounted on the instruments ad fixed by an aluminium protection label. For applications with capillary: shoul diaphragm seal and instrument not be at the same level, instrument adjustment is required: *max 36.37"* (6 mt). (For use and installation, see data sheet "4")

Direct	Nude capillary AISI304, *36.37" max* (6 mt max)
Cooling extension	Capillary AISI304 st.st., AISI304 st.st. armoured, *36.37" max* (6 mt max)
Adaptor G 1/2 A M/F with filling screw	Capillary AISI316 st.st., AISI316 st.st. armoured, *36.37" max* (6 mt max)
Adaptor G 1/2 A M x 1/4 - 18 NPT F with filling screw	

OPTIONS

Silicon liquid "B"for process fluid temperature *from -4°F to +482°F* (from -20°C to +250°C)	Helium Test (1)
Silicon liquid "C" for process fluid temperature *from +68°F to +644°F* (from +20°C to +340°C)	Die penetrant test (1)
Fluorinated liquid "E" for process fluid temperature *from -76°F to +302°F* (from -60°C +150°C)	NACE MR 01.03 version (2)
	NACE version MR 01.75 (ISO 15156) (3)

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

(2) With Monel 400 or Hastelloy C diaphragm only.
(3) Hastelloy C276 wetted parts

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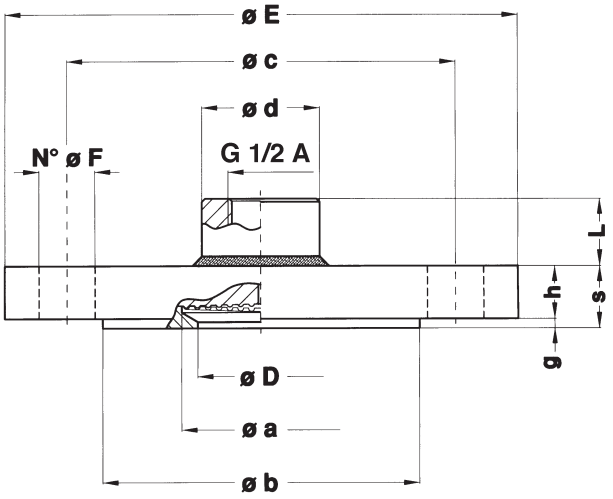

UNI-DIN STANDARDS

dimensions : mm

DN	PN-bar	D	E	c	b	a	d	g	h	s	L	N (1)	F	Ranges (2)
15	10...40	15	95	65	45	40	28	2	17	19	16,5	4	14	2,5...40
20	10...40	20	105	75	58	40	28	2	17	19	16,5	4	14	2,5...40
25	10...40	25	115	85	68	50	38	2	17	19	24,5	4	14	1...40
40	10...40	40	150	110	88	50	38	3	16	19	24,5	4	18	1...40
50	10...40	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 ≥ 4" (100mm).

ASME STANDARDS

dimensions : *inches*

DN	Class	D	E	c	b	a	d	g	h	s	L	N (1)	F	Ranges (3)
1/2"	150	*0.59"*	*3.5"*	*2.37"*	*1.37"*	*1.18"*	*1.02"*	*0.06"*	*0.66"*	*0.72"*	*0.64"*	4	*0.62"*	100...160 (4)
1/2"	300	*0.59"*	*3.74"*	*2.62"*	*1.37"*	*1.18"*	*1.02"*	*0.06"*	*0.66"*	*0.72"*	*0.64"*	4	*0.62"*	100...400
1/2"	600	*0.59"*	*3.74"*	*2.62"*	*1.37"*	*1.18"*	*1.02"*	*0.25"*	*0.66"*	*0.95"*	*0.64"*	4	*0.62"*	100...600
3/4"	150	*0.78"*	*3.87"*	*2.74"*	*1.68"*	*1.57"*	*1.10"*	*0.06"*	*0.66"*	*0.72"*	*0.64"*	4	*0.62"*	60...160
3/4"	300	*0.78"*	*4.62"*	*3.24"*	*1.68"*	*1.57"*	*1.10"*	*0.06"*	*0.66"*	*0.72"*	*0.64"*	4	*0.74"*	60...400
3/4"	600	*0.78"*	*4.62"*	*3.24"*	*1.68"*	*1.57"*	*1.10"*	*0.25"*	*0.66"*	*0.95"*	*0.64"*	4	*0.74"*	60...600
1"	150	*0.98"*	*4.25"*	*3.12"*	*2"*	*1.57"*	*1.10"*	*0.06"*	*0.7"*	*0.76"*	*0.64"*	4	*0.62"*	60...160
1"	300	*0.98"*	*4.88"*	*3.5"*	*2"*	*1.96"*	*1.49"*	*0.06"*	*0.7"*	*0.76"*	*0.96"*	4	*0.74"*	15...400
1"	600	*0.98"*	*4.88"*	*3.5"*	*2"*	*1.96"*	*1.49"*	*0.25"*	*0.7"*	*0.96"*	*0.96"*	4	*0.74"*	15...600
1"1/2	150	*1.57"*	*5"*	*3.87"*	*2.87"*	*1.96"*	*1.49"*	*0.06"*	*0.7"*	*0.76"*	*0.96"*	4	*0.62"*	15...160
1"1/2	300	*1.57"*	*6.12"*	*4.5"*	*2.87"*	*1.96"*	*1.49"*	*0.06"*	*0.80"*	*0.86"*	*0.86"*	4	*0.86"*	15...400
1"1/2	600	*1.57"*	*6.12"*	*4.5"*	*2.87"*	*1.96"*	*1.49"*	*0.25"*	*0.88"*	*1.14"*	*0.59"*	4	*0.86"*	15...600
2"	150	*1.96"*	*6"*	*4.74"*	*3.62"*	*1.96"*	*1.49"*	*0.06"*	*0.74"*	*0.80"*	*0.92"*	4	*0.74"*	15...160
2"	300	*1.96"*	*6.49"*	*5"*	*3.62"*	*1.96"*	*1.49"*	*0.06"*	*0.88"*	*0.94"*	*0.78"*	8	*0.74"*	15...400
2"	600	*1.96"*	*6.49"*	5"	3.62"	1.96"	1.49"	0.25"	1.04"	1.25"	0.47"	8	*0,74"*	15...600

(1) N° holes .

(2) bar ranges, for instruments with dial size ≥ 4" (100mm).

(3) psi ranges, for instruments with dial size ≥ 4" (100mm).

(4) not available, when PTFE coated.

"HOW TO ORDER" SEQUENCE

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

4 400

NUOVA FIMA S.p.A. - www.nuovafima.com
P.O. BOX 58 - VIA C. BATTISTI 59 - 28045 INVORIO (NO) ITALY
TEL. +39 0322 253200 - FAX +39 0322 253232