

diaphragm seal with threaded connection



Diaphragm seals are designed to isolate the sensing element of pressure gauges, pressure switches, and electronic pressure transmitters from process fluids that may be corrosive, viscous, sediment-laden, or at high temperature. In model 1B0, the diaphragm is welded, while in model 1BS it is mechanically clamped between the upper housing and the intermediate ring. The diaphragm is leak-proof tested to ensure that the filling fluid and the process fluid remain completely separated. This diaphragm seal can be easily cleaned by removing the lower housing. Its construction and compact design make it suitable for many applications requiring frequent maintenance operations.

4.1B0 - MGS9/1B0 - without intermediate ring

Available ranges (see table below): *from 0...40 INWC to 0...580 psi* (from 0...0,1 to 0...40 bar).

Max working pressure: 0...870 psi (60 bar) (3).

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

Accuracy (1): (add to instrument accuracy) ±0,5% for direct mounting, ±1% for capillary mounting.

Instrument connection: AISI 304 st.st.

Diaphragm material:

4 - AISI 316L st.st.,

6 - Monel 400,

9 - Hastelloy C 276,

B - Tantalum,

J - Alloy 600,

I - Alloy 825;

Gaskets: PTFE up to +482°F (+250°C); graphite over +482°F (+250°C)

Process connection:

5 - AISI 316L st.st.

N - AISI 316L st.st. PTFE coated (2),

6 - Monel 400

9 - Hastelloy C 276.

Clamp nuts and bolts: AISI 304 st.st.

Filling liquids: Silicon oil.

4.1BS - MGS9/1BS - with intermediate ring

Available ranges (see table below): *from -30...0 INHG to 0...580 psi* (from -1...0 to 0...40 bar).

Max working pressure: 0...870 psi (60 bar) (3).

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

Accuracy (1): (add to instrument accuracy) ±0,5% for direct mounting, ±1% for capillary mounting.

Instrument connection: AISI 304 st.st..

Diaphragm material:

4 - AISI 316L st.st.

8 - AISI 316L st.st. PTFE coated,(2)

E - Hastelloy C276 PTFE coated,(2)

C - Tantalum PTFE coated,(2)

2 - Titanium.

Gaskets: PTFE up to +482°F (+250°C); graphite over +482°F (+250°C)

Process connection and intermediate ring:

5 - AISI 316L st.st.

N - AISI 316L st.st.,PTFE coated,(2)

F - Polipropylene,

V - PVC.

Clamp bolts: AISI 304 st.st.

Filling liquids: Silicon oil.

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

(2) Max temperature +302°F (+150°C), with PTFE coating - G 1/2 A only

(3) In case of order on demand of "continuous duty" model or in case of accidental overpressure, please see our catalogue MGS9/2B

Ranges

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

MGS9/1B



dimensions : *inches* (mm)

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