

compact diaphragm seals, welded



Diaphragm seals are designed to isolate the sensing element of pressure gauges and pressure switches from process fluids that may be corrosive, viscous, sediment-laden and/or with a high temperature. The diaphragm is welded to the body to ensure that the filling fluid and the process medium are completely separated. Threaded connections allow their use in all applications where the compact size of the assembly is important and where instruments with a 2,5" (63 mm) diameter are required.

4.MIA - MGS9/MINI/A

Working pressure: up to 0...6000 psi (up to 0...400 bar), as from RANGES table.

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

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

Instrument connection: AISI 316 L st.st.

Diaphragm: welded,

4 - AISI 316 L st.st.

Process connection:

5 - AISI 316 L st.st.

Filling liquid: silicon oil.

4.MIB - MGS9/MINI/B

Working pressure: up to 0...1000 psi (up to 0...60 bar), as from RANGES table.

Other features: as model MGS9/MIA.

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

RANGES

Gauge DS	MGS9/MIA	MGS9/MIB
2.5" (63 mm)	0...60/0...6000 psi (0...4/0...400 bar)	-30...0 InHG /0...1000 psi (-1...0/0...60 bar)
4"...6" (100...150 mm)	0...200/0...6000 psi (0...16/0...400 bar)	

ASSEMBLING

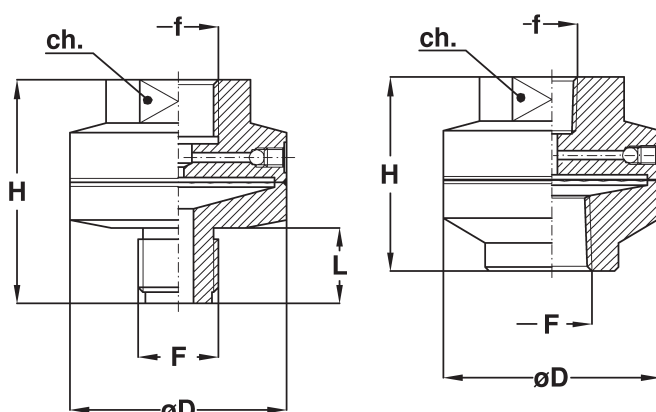
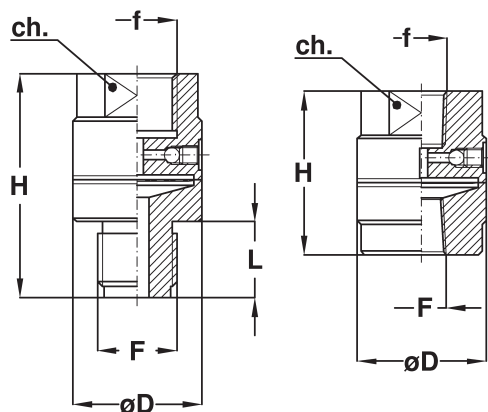
D - All diaphragm seals are mounted directly on the instruments.

All diaphragm seals are mounted on the instruments and fixed by an aluminium protection label.

MGS9/MIA

MGS9/MIB

f
41F - G 1/2
21F - G 1/4
23F - 1/4-18 NPT



F (1)	D	H	Ch	L
23F 1/4-18 NPT F	1.33" (34)	1.69" (43)	1.06" (27)	-
43M 1/2-14 NPT M	1.33" (34)	2.32" (59)	1.06" (27)	0.78" (20)
43F 1/2-14 NPT F	1.33" (34)	1.69" (43)	1.06" (27)	-
41M G 1/2 B	1.33" (34)	2.32" (59)	1.06" (27)	0.78" (20)

(1) other threads available on request
dimensions : inches (mm)

F (1)	D	H	Ch	L
23F 1/4-18 NPT F	2.24" (57)	2" (51)	1.25" (32)	-
43M 1/2-14 NPT M	2.24" (57)	2.32" (59)	1.25" (32)	0.78" (20)
43F 1/2-14 NPT F	2.24" (57)	2" (51)	1.25" (32)	-
41M G 1/2 B	2.24" (57)	2.32" (59)	1.25" (32)	0.78" (20)

(1) other threads available on request
dimensions : inches (mm)

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)			

"HOW TO ORDER" SEQUENCE

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

4 MIA 5 4 41M 21F D B...G
MIB 43M 23F
23F 41F