

## 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, sedimentous and/or with a high temperature. The diaphragm is welded to the body, to ensure separation of the filling fluid from the process medium. The threaded connection make it easy to use on all applications where the reduced size of the system is important and also where gauges of 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

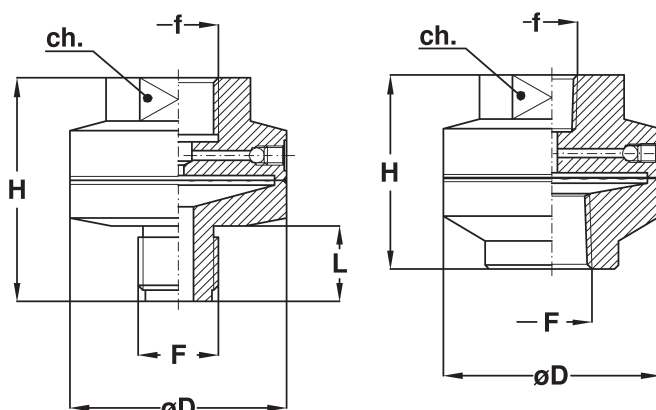
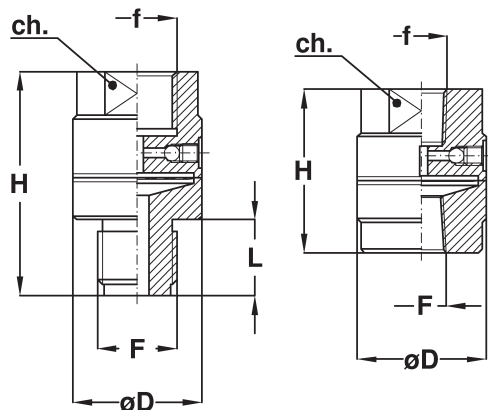
**D** - All diaphragm seals are mounted directly on the instruments.

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
<b>23F</b> 1/4-18 NPT F	1.33" (34)	1.69" (43)	1.06" (27)	-
<b>43M</b> 1/2-14 NPT M	1.33" (34)	2.32" (59)	1.06" (27)	0.78" (20)
<b>43F</b> 1/2-14 NPT F	1.33" (34)	1.69" (43)	1.06" (27)	-
<b>41M</b> 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
<b>23F</b> 1/4-18 NPT F	2.24" (57)	2" (51)	1.25" (32)	-
<b>43M</b> 1/2-14 NPT M	2.24" (57)	2.32" (59)	1.25" (32)	0.78" (20)
<b>43F</b> 1/2-14 NPT F	2.24" (57)	2" (51)	1.25" (32)	-
<b>41M</b> 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)	<b>E</b> - Fluorinated liquid "E"	-40...+212°F (-40...+100°C)	-40...+302°F (-40...+150°C)
<b>B</b> - Silicon oil "B"	-40...+302°F (-40...+150°C)	-40...+482°F (-40...+250°C)	<b>F</b> - Silicon oil "C"	-130...+176°F (-90...+80°C)	-130...+302°F (-90...+150°C)
<b>C</b> - Silicon oil "C"	-14...+392°F (-10...+200°C)	-14...+662°F (-10...+350°C)	<b>G</b> - Mineral food oil "G"	-14...+302°F (-10...+150°C)	-14...+392°F (-10...+200°C)
<b>D</b> - 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  
43F