

## back side diaphragm seals, with threaded connection



Designed to isolate the sensing element of pressure gauges, pressure switches, and electronic pressure transmitters from process fluids that are corrosive, viscous, sediment-laden, and at high temperature and pressure. The diaphragm is welded to the top housing and is leak-proof tested, to ensure that the process fluid and the transmission fluid are completely separated. The upper part is detachable from the lower process side for cleaning. This construction characteristics and its compact design suit many applications that require frequent maintenance.

### 4.111 - MGS9/111

**Working pressure:** *from 0...100 to 3000 psi (from 0...6 bar to 0...250 bar).*

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

**Accuracy\*:** (add to instrument accuracy)  $\pm 0,5\%$  for direct mounting;  
 $\pm 1\%$  for capillary mounting.

**Instrument connection:** AISI 316 st.st.

**Diaphragm:** welded,

**4** - AISI 316L st.st.,

**9** - Hastelloy C276,

**6** - Monel 400.

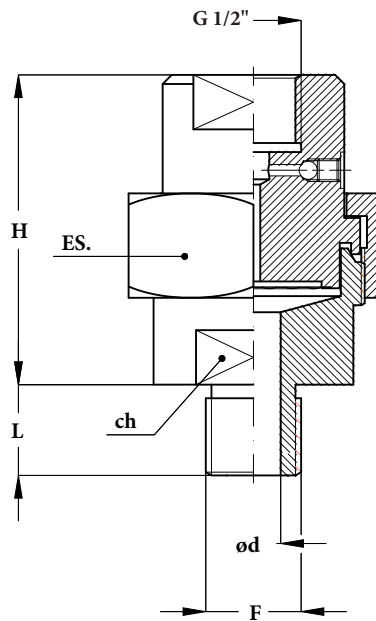
**Hexagonal nut:** AISI 304 st.st.

**Process connection:**

**4** - AISI 316 st.st.

**Filling liquid:** silicon oil.

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



F	d	H	L	ES.	Ch
<b>41M</b> G 1/2 A	0.47" (12)	2.67" (68)	0.78" (20)	2.16" (55)	1.41" (36)
<b>43M</b> 1/2-14 NPT	0.47" (12)	2.67" (68)	0.78" (20)	2.16" (55)	1.41" (36)
<b>43F</b> 1/2-14 NPT F		2.67" (68)		2.16" (55)	1.41" (36)
<b>53F</b> 3/4-14 NPT F		2.67" (68)		2.16" (55)	1.41" (36)

dimensions : inches (mm)

## 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). (For use and installation, see data sheet "4")

<b>D</b> - Direct	<b>9</b> - Capillary AISI304 st.st., AISI304 st.st. armoured, 36.37" max (6 mt max)
<b>I</b> - Nude capillary AISI304, 36.37" max (6 mt max)	<b>6</b> - 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)	<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)			

## OPTIONS

<b>C05</b> - Helium Test
<b>E30</b> - Nace version MR 01.03 (1)
<b>P02</b> - Oxygen degreasing (2)
<b>P04</b> - Dye penetrant test

- (1) Stainless steel process connection and Monel 400 or Hastelloy C276 diaphragm
- (2) To be ordered together with fluorinated liquid filling

## "HOW TO ORDER" SEQUENCE

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

4 111 4 4, 6, 9 41M 41F - G 1/2 F D B...G  
43M 1, 9, 6 C05...P04  
43F  
53F