

# back side diaphragm seals, with threaded connection

# MGS9/111



Diaphragm seals are designed to isolate the sensing element of pressure gauges, pressure switches and electronic pressure transmitter from process fluids which may be corrosive, viscous, sedimentous and/or with a high temperature. The diaphragm is welded to the top housing and leak proof tested, to guarantee a separation between process fluid and fill transmission fluid. The upper part is detachable from the lower process side for cleaning. This construction feature and its compact design suits many application 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.

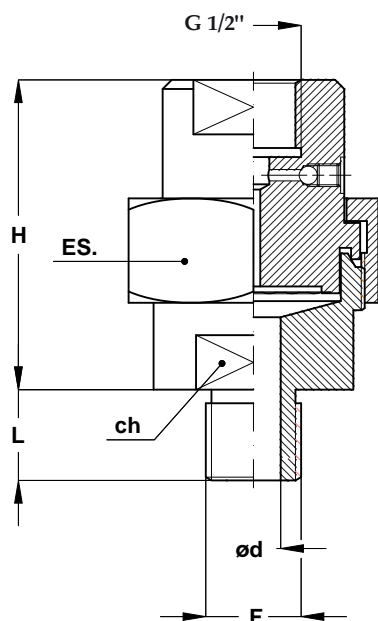
**Hexagonal nut:** AISI 304 st.st.

**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 and fixed by an aluminium protection label. For applications with capillary: should diaphragm seal and instrument not be at the same level, instrument adjustment is required. (For use and installation, see data sheet "MGS9")

<b>D</b> - Direct
<b>T</b> - Cooling extension
<b>1</b> - Nude capillary AISI304, 36.37" max (6 mt max)
<b>9</b> - Capillary AISI304 st.st., covered with AISI304 armour, 36.37" max (6 mt max)
<b>6</b> - Capillary AISI316 st.st., covered with AISI316 st.st. armour, 36.37" max (6 mt max)

## OPTIONS

<b>B</b> - Silicon liquid "B" for process fluid temperature from -4°F to +482°F (from -20°C to +250°C)
<b>C</b> - Silicon liquid "C" for process fluid temperature from +68°F to +644°F (from +20°C to +340°C)
<b>E</b> - Fluorinated liquid "E" for process fluid temperature from -76°F to +302°F (from -60°C to +150°C)
<b>C05</b> - Helium Test
<b>E30</b> - Nace version MR 01.03 (1)
<b>P02</b> - Oxygen degreasing
<b>P04</b> - Dye penetrant test

(1) Stainless steel process connection and Monel 400 or Hastelloy C276 diaphragm

## "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, T B...P04  
43M 1, 9, 6  
43F  
53F