

# bourdon tube "solid-front" pressure gauges NACE MR0103/MR0175 (ISO 15156) version turret case - DS 4.5" (125mm)

# MGS60



These instruments are built in conformity with the construction and safety specifications of **ASME B40.1**.

In case of leaks or break of the elastic element the operator is protected by a stainless steel safety cell solid front and by the blow-out back. They are usually used in the petrochemical industry. They are built to resist to the most severe conditions created by H<sub>2</sub>S, by the environment and for those fluids which have high viscosity and do not crystallize. The TIG welding between the safety cell and the process socket strengthens the instrument and assures a better tight in case of dampening fluid. The advantages of filling the case of the instrument with a dampening fluid are: reduced pointer fluctuation, reduced wear of rotating parts of the movement when pulsant vibrations and pulsations occur. Moreover condensation and corrosive atmospheres which could damage the internal parts.

## 1.60.2 - Fillable Model - Lower connection only

**Design:** ASME B40.1, ISO 15156.

**Ranges:** from 0...15 to 0...10000 *psi* (from 0...1 to 0...600 bar or equivalent units).

**Accuracy:** 1A Grade as per ASME B40.1 ( $\pm 1\%$  of FSV).

**Ambient temperature:** -13...+149°F (-25...+65°C).

**Process fluid temperature:** -22...+302°F (-30...+150°C max).

**Thermal drift:**  $\pm 0,4\%$  / 10 K of range (starting from 68°F - 20°C).

**Working pressure:**

100% of FSV for static pressure;

90% of FSV for pulsating pressure.

**Overpressure limit:** 30% of FSV (max 12 h).

**Protection degree:** IP 65 as per IEC 529.

**Socket material:** AISI 316L st.st. or MONEL 400

**Bourdon tube:** MONEL 400 seamless tube.

**Leak test:** Helium Test leak search

(max  $1 \times 10^{-6}$  mbar x 1 x s-1).

**Case and blow out disk:** strengthened polyammides, fiber glass, UV rays stabilized.

**Ring:** strengthened polypropylene fiber glass.

**Safety cell:** stainless steel.

**Window:** tempered glass.

**Movement:** stainless steel with internal limit stops for minimum and maximum pressure.

**Dial:** aluminium, white with black markings.

**Pointer:** adjustable, aluminium, black.

## 1.60.3 - Filled Model - Lower connection only

**Filling liquid:** glycerine 98%, silicon oil or Fluorinated fluid.

**Ambient temperature:**

+59...149°F (+15...+65 °C) with glycerine filling;

-49...+149°F (-45...+65 °C) with silicon oil filling;

-76...+149°F (-60...+65 °C) with fluorinated fluid filling.

**Fluid process temperature:** +149°F (+65 °C).

**Protection degree:** IP 67 as per IEC 529.

**Compensating device:** gum.

**Other features:** as fillable model.

## 1.60.1 - Standard Model - Back connection only

**Protection degree:** IP 55 as per IEC 529.

**Case:** phenolic resin.

**Ring and blow out disk:** strengthened polyammides, fiber glass.

**Safety cell:** not available.

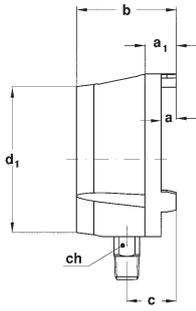
**Separating wall:** phenolic resin.

**Other features:** as fillable model.

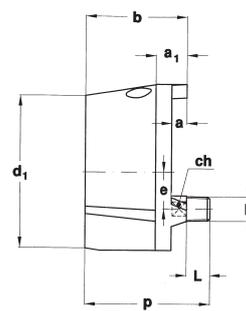
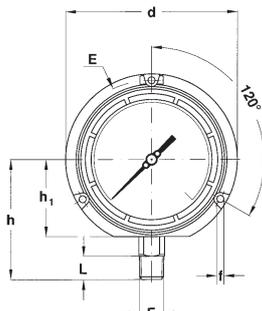
**bourdon tube "solid-front" pressure gauges**  
**NACE MR0103/MR0175 (ISO 15156) version, turret case DS 4.5" (125mm)**

**MGS60**

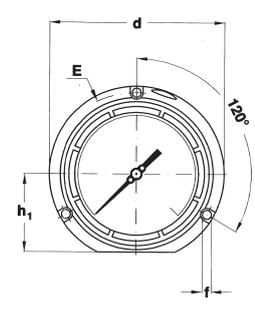
RB1-03/08



**A - LOWER CONNECTION**



**D - BACK CONNECTION,  
FOR STANDARD MODEL ONLY**



Mounting	F	a	a <sub>1</sub>	b	c	d	d <sub>1</sub>	e	E	f	h	h <sub>1</sub>	p	ch	L	Weight (1)
<b>Lower</b>	<b>43M</b> 1/2-14 NPT	0.51" (13)	1.06" (27)	3.38" (86)	1.65" (42)	5.82" (148)	4.96" (126)		5.39" (137)	0.25" (6,5)	4.07" (103,5)	2.61" (66,5)		0.86" (22)	0.78" (20)	1.78 lbs (0,81 kg)
<b>Back</b>	<b>43M</b> 1/2-14 NPT	0.51" (13)	1.06" (27)	3.38" (86)		5.82" (148)	5.07" (129)	1.22" (31)	5.39" (137)	0.23" (6)	4.07" (103,5)	2.61" (66,5)	4.17" (106)	0.66" (17)	0.78" (20)	1.78 lbs (0,81 kg)

dimensions : inches (mm)

(1) add 1.10 lbs (0,5 kg) when filled

**OPTIONS**

Model	standard	fillable	filled
<b>E07</b> - Socket material MONEL 400	◆	◆	◆
<b>E30</b> - NACE MR0103/MR0175 (ISO 15156) certificate	◆	◆	◆
<b>F11</b> - Panel mounting kit	◆	◆	◆
<b>F30</b> - Fluorinated fluid filling			◆
<b>P01</b> - Suitable for filling with silicone/fluid filling		◆	
<b>P03</b> - Blow out disk with compensating device		◆	
<b>S10</b> - Silicone filling			◆
<b>T01</b> - Tropicalization	◆	◆	◆
<b>T32</b> - Safety glass window	◆	◆	◆

**"HOW TO ORDER" SEQUENCE**

Section / Model / Case / Mounting / Diameter / Special version / Range / Process connection / Options  
**1 60 1 A F --- 41M E30...T32**  
**2 D E07**  
**3**

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