

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 H₂S, 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 (± 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 1×10^{-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.

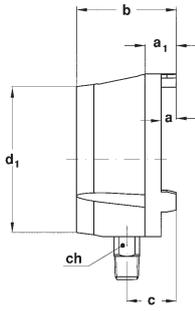
Separating wall: phenolic resin.

Other features: as fillable model.

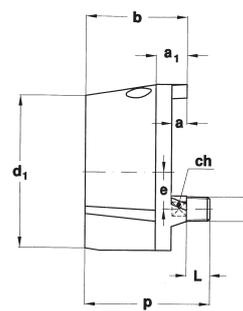
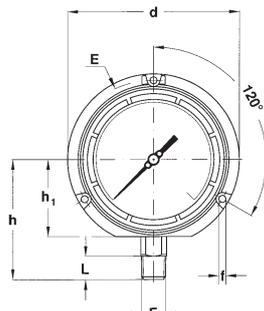
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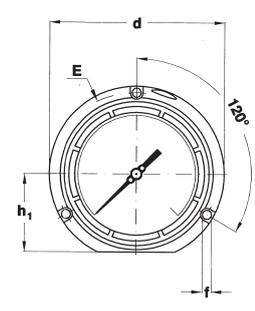
RB1-03/08



A - LOWER CONNECTION



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



| Mounting | F | a | a ₁ | b | c | d | d ₁ | e | E | f | h | h ₁ | p | ch | L | Weight (1) |
|--------------|--------------------------|---------------|----------------|---------------|---------------|----------------|----------------|---------------|----------------|----------------|------------------|-----------------|----------------|---------------|---------------|-----------------------|
| Lower | 43M 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) |
| Back | 43M 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 |
|---|----------|----------|--------|
| E07 - Socket material MONEL 400 | ◆ | ◆ | ◆ |
| E30 - NACE MR0103/MR0175 (ISO 15156) certificate | ◆ | ◆ | ◆ |
| F11 - Panel mounting kit | ◆ | ◆ | ◆ |
| F30 - Fluorinated fluid filling | | | ◆ |
| P01 - Suitable for filling with silicone/fluid filling | | ◆ | |
| P03 - Blow out disk with compensating device | | ◆ | |
| S10 - Silicone filling | | | ◆ |
| T01 - Tropicalization | ◆ | ◆ | ◆ |
| T32 - 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