

## bourdon tube "solid-front" pressure gauges all stainless steel construction DS 2.5" (63mm)



PED 2014/68/EU

Instruments compliant with the safety requirements of EN 837-1 "S3" and ASME B40.1 standards.

In the event of leaks or rupture of the elastic element, the operator is protected by a solid wall positioned at the front of the instrument and by the blow-out back.

They are commonly used in the chemical and petrochemical industries, in conventional power plants, and, in the version filled with damping fluid, on systems and machines that generate or operate under pulsating pressures and are subject to vibrations.

### 1.20.1 - Standard Model

**Design:** EN 837-1.

**Safety designation:** S3 as per EN 837-2.

**Ranges:** from 0...15 to 0...15000 psi; from 0...1 to 0...1000 bar (or other equivalent units)

**Accuracy class:** 1,6 as per EN 837-1.

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

**Process fluid temperature:** max +212°F (+100 °C).

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

**Working pressure:**

75% of FSV for static pressure;

66% of FSV for pulsating pressure.

**Over pressure limit (15 min max):**

25% of FSV for pressure ranges ≤ 1500 psi (100 bar);

15% of FSV for pressure ranges over 1500 psi (100 bar).

**Protection degree:** IP 55 as per EN 60529/IEC 529.

**Socket material:** AISI 316L st.st.

**Bourdon tube:** AISI 316L st.st.

**Case:** stainless steel.

**Ring:** stainless steel, bayonet lock.

**Blow out disk:** plastic.

**Window:** safety glass.

**Movement:** stainless steel.

**Dial:** plastic.

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

### 1.20.2 - Fillable Model

**Protection degree:** IP 67 as per EN 60529/IEC 529.

**Pointer:** not adjustable, aluminium, black.

**Other features:** as Standard Model.

### 1.20.3 - Filled Model

**Damping liquid:** glycerine 98%, silicon oil or fluorinated fluid.

**Ambient temperature:**

+32...+149 °F (0...+65 °C) with glycerine filling;

-40...+149 °F (-40...+65 °C) with silicon oil filling;

-40...+149 °F (-40...+65 °C) with fluorinated fluid filling.

**Process fluid temperature:** max +149°F (+65 °C).

**Protection degree:** IP 67 as per EN 60529/IEC 529.

**Pointer:** not adjustable, aluminium, black.

**Other features:** as Standard Model.

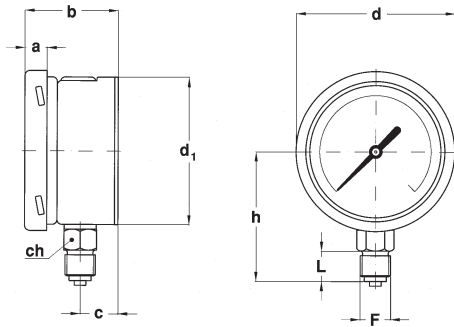
### INSTRUMENTS FOR OXYGEN

Glycerine or silicone must not be used with highly oxidizing agents such as oxygen, chlorine, nitric acid or hydrogen peroxide, as they may cause spontaneous chemical reactions, flammability or explosion. Instead, the use of fluorinated fluid instead is recommended in these cases.

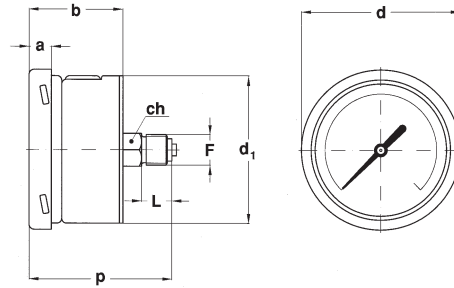
**bourdon tube "solid-front" pressure gauges**  
**all stainless steel construction, DS 2.5" (63mm)**

**MG520**

RG-03/14



**A - LOWER CONNECTION**



**D - BACK CONNECTION**

| Mounting | F                | a     | b     | c      | d     | d <sub>1</sub> | h             | p             | L     | ch                          | Weight (1) |
|----------|------------------|-------|-------|--------|-------|----------------|---------------|---------------|-------|-----------------------------|------------|
| Lower    | 21M - G 1/4 A    | 0.39" | 1.57" | 0.65"  | 2.67" | 2.46"          | 2.13" - 2.17" |               | 0.51" | (0.55 x 0.31 - 0.55 x 0.35) | 0.44 lbs   |
|          | 23M - 1/4-18 NPT | (10)  | (40)  | (16,7) | (68)  | (62,6)         | (54,3 - 55,3) |               | (13)  | (14 x 8 - 14 x 9)           | (0,2 kg)   |
| Back     | 21M - G 1/4 A    | 0.39" | 1.57" |        | 2.67" | 2.46"          |               | 2.32" - 2.36" | 0.51" | (0.55 x 0.31 - 0.55 x 0.35) | 0.50 lbs   |
|          | 23M - 1/4-18 NPT | (10)  | (40)  |        | (68)  | (62,6)         |               | (59,1 - 60,1) | (13)  | (14 x 8 - 14 x 9)           | (0,23 kg)  |

dimensions : inches (mm)

(1) add 0.22 lbs (0,1 kg) when filled

**OPTIONS**

| Model   | standard | fillable | filled |
|---|----------|----------|--------|
| <b>E</b> - Front flange, for back connection pressure gauges      | ◆        | ◆        | ◆      |
| <b>P01</b> - Suitable for filling with silicone/Fluorinated fluid |          | ◆        |        |
| <b>P02</b> - Oxygen service                                       | ◆        | ◆ (2)    | ◆ (1)  |
| <b>S10</b> - Silicone filling                                     |          |          | ◆      |
| <b>F30</b> - Fluorinated fluid filling                            |          |          | ◆      |

- (1) to be ordered only with instruments filled of fluorinated fluid
- (2) to be ordered with instruments suitable for fluorinated fluid filling

**"HOW TO ORDER" SEQUENCE**

Section / Model / Case / Mounting / Diameter / Range / Process connection / Options  
**1 20 1 A C 21M E**  
**2 D 23M P01...F30**  
**3**

