

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

# MGS20



These Solid-Front instruments are built in accordance with safety specifications of **EN 837-1 "S3"** and **ASME B40.1**. The safety construction consists of a solid separating wall in stainless steel, placed between the scale and the elastic element and a blow out back which is released from the case whenever an internal pressure, due to leaks, is created or the elastic element is broken. A leak tight fit is ensured if the instrument is filled with a dampening fluid to prevent damage due to vibration. These instruments are designed for use in food, beverage, pharmaceutical, cryogenic, chemical and petrochemical processing industries, and in conventional and nuclear power plants. They are built to resist the most severe operating conditions created by the ambient environment and the process medium.

## 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;

100% of FSV for static pressure (max 12 hours)

**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 IEC 529.

**Socket material:** AISI 316 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 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:**

+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.

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

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

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

**Other features:** as Standard Model.

## INSTRUMENTS FOR OXYGEN

Glycerine or silicone should not be used with highly oxidizing agents such as oxygen, chlorine, nitric acid or hydrogen peroxide, because of danger of spontaneous chemical reaction, inflammability or explosion. The use of fluorinated fluid is recommended in these cases.

