

# pressure gauges with electric contacts all stainless steel construction DS 6" (150mm)

# MCE20



**CE** Compliance to requirements of  
LVD 2006/95/EC - PED 97/23/EC

These instruments are manufactured in accordance with the safety norms prescribed by UNI 8541, DIN 16006 e ANSI B40.1. They are used to control the electrical operation of compressors, pumps, presses, hydraulic and pneumatic equipments, chemical and petrochemical plant. In the event of leakage or break of sensing element, the operator is protected by a solid baffle wall placed on the instrument front and by the rear blow out wall. The contacts open or close the circuit depending on the position of the indicating pointer and they are adjustable over the whole range. For application on severe working conditions, such as rapid and frequent pressure change, vibration and pulsation, they are manufactured with the case liquid filled. The filling drastically reduce the effects of such factors as well as those caused by the corrosive atmosphere, making longer life and better performances of the pressure gauge and their electric contacts. They are also available with inductive contacts intrinsically safe.

## 1.M3.1 - Standard Model

**Ranges:** from 0...15 to 0...20000 psi (from 0...1 to 0...1600 bar or equivalent units).

**Mechanical contact:** sliding contact, magnetic snap-action, electronic, inductive.

**Accuracy:**  $\pm 1,0\%$  as per EN 837-1 - DIN 16085 (1).

**Ambient temperature:**  $-13...+149\text{ }^{\circ}\text{F}$  ( $-25...+65\text{ }^{\circ}\text{C}$ ).

**Process fluid temperature:** *max*  $+212\text{ }^{\circ}\text{F}$  ( $+100\text{ }^{\circ}\text{C}$ ).

**Working pressure:** *max* 75% of the full scale value.

**Over pressure:** not suitable.

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

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

**Elastic element:** AISI 316L st.st.

**Case:** stainless steel.

**Ring and blow out disk:** stainless steel.

**Window:** plastic.

**Movement:** stainless steel.

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

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

## 1.M3.3 - Filled Model, Lower connection only

**Mechanical contact:** magnetic snap-action.

**Accuracy:**  $\pm 1,6\%$  as per EN 837-1 - DIN 16085 (1).

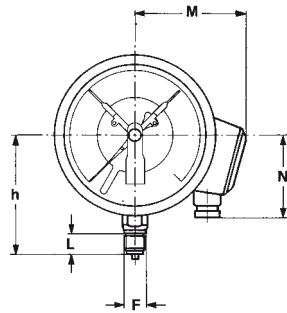
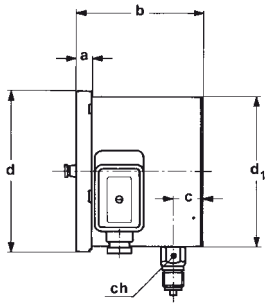
**Process fluid temperature:** *max*  $+149\text{ }^{\circ}\text{F}$  ( $+65\text{ }^{\circ}\text{C}$ ).

**Protection:** IP 65 as per EN 60529/IEC 529.

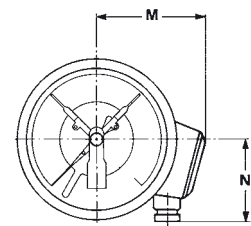
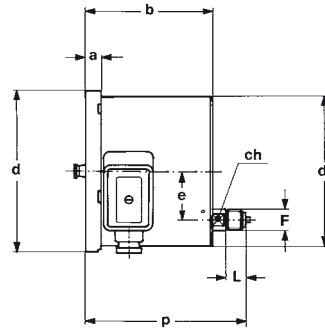
**Filling liquids:** silicone dielectric oil.

**Other features:** as Standard Model.

(1) The addition of mechanical electric contacts affects the accuracy of instruments such that 1% becomes 1,5%, 1,6% becomes 2,4% etc. (add the 50% of accuracy; if the contact is of the magnetically assisted type, this value can't be added within the  $\pm 5\%$  of setting point).



A - LOWER CONNECTION



D - BACK CONNECTION

Mounting	F	a	b	c	d	d <sub>1</sub>	e	h	p	M	N	L	ch	Weight (1)
Lower	41M G 1/2 A	0.59" (15)	5" (127)	1.18" (30)	6.34" (161)	5.89" (149,5)		4.65" (118)		4.33" (110)	3.27" (83)	0.78" (20)	0.94" (24)	3.19 lbs (1,45 kg)
Back							1.88" (47,8)	6.30" (160)	0.67" (17)				3.08 lbs (1,4 kg)	

dimensions : inches (mm)

(1) when filled, add 3.63 lbs (1,65 kg)

### CONTACT TYPE (1)

MODEL	Standard		Filled	
Contact type	Sliding contact		Magnetic snap-action contact	
Contact number	1	2	1	2
Junction box	4 poles + GND	4 poles + GND	4 poles + GND	4 poles + GND
ø exit cables: inches (mm)	0,35...0,55 (9...14)	0,35...0,55 (9...14)	0,35...0,55 (9...14)	0,35...0,55 (9...14)
Minimum range	15 psi (1bar)	23 psi (1,6 bar)	23 psi (1,6 bar)	36 psi (2,5 bar)

(1) Functional characteristics, electric diagrams and contact types are available on data-sheets :

"ELECTRIC CONTACTS".

### OPTIONS

C - Back flange, for lower connection pressure gauges
P02 - Oxygen service
E65 - Protection IP 65 as per IEC 529, for standard model

### "HOW TO ORDER" SEQUENCE

Section / Model / Case / Mounting / Diameter / Range / Process connection / Electric contact / Options

1 M3 1 A G 41M 01S...M9D C  
3 D P02, E65