

pressure gauges with electric contacts all stainless steel construction DS 4" (100mm)



CE Compliance with requirements of
LVD 2014/35/EU - PED 2014/68/EU

EAC

Used for electrical operations on compressors, pumps, presses, hydraulic, oleodynamic, and pneumatic circuits, as well as in chemical and petrochemical plants. The contacts open and close the circuits depending on the position of the pointer and are adjustable across the entire range. For use in particularly harsh conditions, such as rapid and frequent pressure changes, vibrations, and pulsations, they are manufactured with a damping liquid filling. This filling significantly reduces the effects of these factors, as well as those caused by aggressive atmospheres, improving both the durability and performance stability of the pressure gauge and the electrical contacts. Intrinsically safe inductive contacts are also available.

1.M2.1 - 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: $\text{max } +212\text{ }^{\circ}\text{F}$ ($+100\text{ }^{\circ}\text{C}$).

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: stainless steel, bayonet lock.

Window: plastic.

Movement: stainless steel.

Dial: aluminium, white with black markings.

Pointer: not adjustable, aluminium, black.

1.M2.3 - Filled Model

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

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

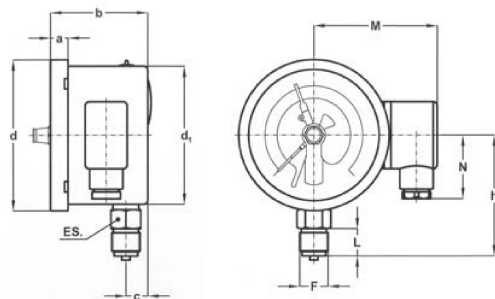
Process fluid temperature: $\text{max } +149\text{ }^{\circ}\text{F}$ ($+65\text{ }^{\circ}\text{C}$).

Filling liquid: silicon oil.

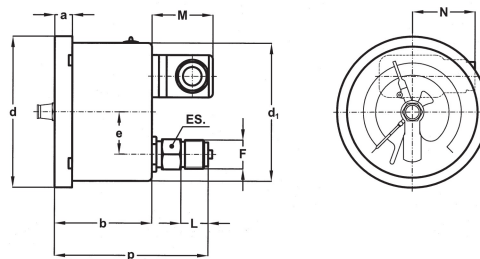
Protection: IP 65 as per EN 60529/IEC 529.

Other features: as Standard Model.

(1) the interference of the contacts affects the accuracy: when the instrument's pointer is influenced by the action of the contact arm, add 50% of the instrument's accuracy (excluding the intervention zone between $\pm 5\%$ if the electrical contact is of the magnetic snap type).



A - LOWER CONNECTION



D - BACK CONNECTION

Mounting	F	a	b (1)	c	d	d ₁	e	h	p (1)	N	L	ch	Weight (2)
Lower	41M G 1/2 A	0.51" (13)	2.81" - 3.24" (71,5 - 82,5)	0.63" (16,1)	4.35" (110,6)	3.97" (101)		3.48" (88,5)		1.81" (46)	0.78" (20)	0.86" (22)	1.54 lbs (0,7 kg)
Back	43M 1/2-14 NPT						1.22" (31)		4.44" - 4.87" (112,9 - 123,9)				

dimensions : inches (mm)

(1) dimensions for single/double contact;
(2) when filled, add 0.77 lbs (0,35 kg) for single contact and 0.88 lbs (0,4 kg) for double contact

CONTACT TYPE (1)

MODEL	Standard			Filled		
Contact type	Sliding contact, electronic			Magnetic snap-action contact, electronic		
Contact number	1	2	2 independent	1	2	2 independent
Junction box	3 poles + GND	3 poles + GND	6 poles + GND	6 poles + GND	6 poles + GND	6 poles + GND
ø exit cables: inches (mm)	0,23...0,35 (6...9)	0,23...0,35 (6...9)	0,27...0,51 (7...13)	0,27...0,51 (7...13)	0,27...0,51 (7...13)	0,27...0,51 (7...13)
Minimum range	15 psi (1bar)	23 psi (1,6 bar)	23 psi (1,6 bar)	23 psi (1,6 bar)	36 psi (2,5 bar)	36 psi (2,5 bar)

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

OPTIONS

ATEX version, with intrinsically safety inductive contact (1)
C - Back flange, for lower connection pressure gauges
E - Front flange, for back connection pressure gauges
E65 - Protection IP 65 as per IEC 529, for standard model

(1) See ATEX data-sheet for technical details

"HOW TO ORDER" SEQUENCE

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

1 M2 1 A E 41M 01S...M9D C, E
3 D 43M E1...B22 E65