

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



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

EAC

They are designed to perform electrical activity on compressors, pumps, presses, hydraulic and pneumatics equipment as well as on chemical and petrochemical plants. Contacts, which are adjustable over the whole range, open or close the circuit depending on the position of the pointer. They can be liquid-filled in case of application within severe working conditions, such as quick and frequent pressure changes, vibrations and pulsations. The dampening liquid reduces the effects of the above-mentioned factors drastically as well as those caused by a corrosive atmosphere, making the pressure gauge and the electric contacts perform better and last longer. They are available also with inductive intrinsically safe contacts.

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: *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).

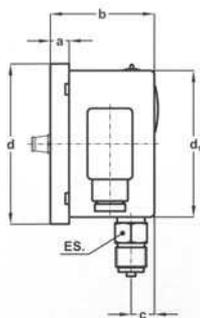
Process fluid temperature: *max* $+149\text{ }^{\circ}\text{F}$ ($+65\text{ }^{\circ}\text{C}$).

Filling liquid: silicon oil.

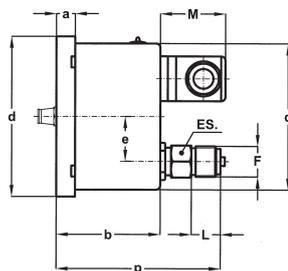
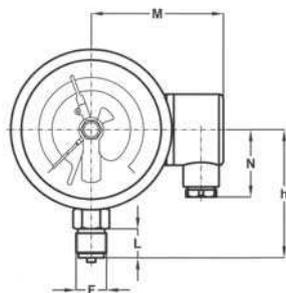
Protection: IP 65 as per EN 60529/IEC 529.

Other features: as Standard Model.

(1) Adding mechanical electric contacts may affect the accuracy of the instruments so that 1% becomes 1,5%, 1,6% becomes 2,4% etc. (add the 50% of accuracy; if the contact is a magnetically assisted type, this value cannot be added within the $\pm 5\%$ of setting point).



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"	2.81" - 3.24"	0.63" (16.1)	4.35" (110,6)	3.97" (101)		3.48" (88,5)		1.81" (46)	0.78"	0.86"	1.54 lbs (0,7 kg)
Back	43M 1/2-14 NPT	(13)	(71,5 - 82,5)				1.22" (31)		4.44" - 4.87" (112,9 - 123,9)		(20)	(22)	

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		
	Sliding contact, electronic			Magnetic snap-action contact, electronic		
Contact type						
Contact number	1	2	2 indipendent	1	2	2 indipendent
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**