

## pressure gauges with electric contacts DS 4" (100mm)



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



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.M1.1 - Standard Model

**Ranges:** from 0...30 to 0...15000 *psi* (from 0...1 to 0...1000 bar or equivalent units).

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

**Accuracy:**  $\pm 1,0\%$  as per UNI 8293 - 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 IEC 529.

**Socket material:** copper alloy.

**Elastic element:**

copper alloy for pressure ranges  $\leq 580\text{ }psi$  (40 bar);

AISI 316 L st.st. for pressure ranges  $\geq 870\text{ }psi$  (60 bar).

**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.M1.3 - Filled Model

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

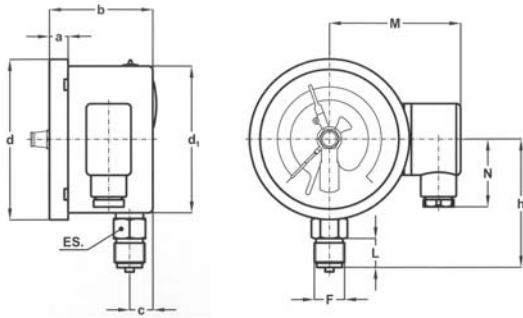
**Accuracy:**  $\pm 1,6\%$  as per UNI 8293 - DIN 16085 (1).

**Filling liquid:** silicon oil.

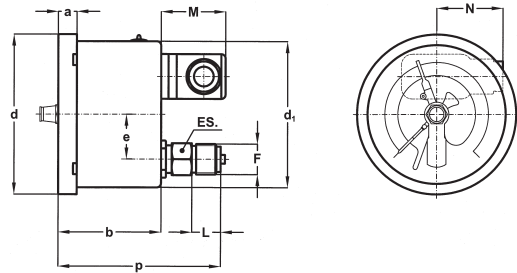
**Protection:** IP 65 as per IEC 529.

**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 <sub>1</sub>	e	h	p (1)	N	L	ch	Weight (2)
Lower	<b>41M</b> G 1/2 A	0.51"	2.81" - 3.24"	0.63" (16.1)	4.35"	3.97"		3.48" (88,5)		1.81" (46)	0.78"	0.86"	1.54 lbs
Back	<b>43M</b> 1/2-14 NPT	(13)	(71,5 - 82,5)		(110,6)	(101)	1.22" (31)		4.44" - 4.87" (112,9 - 123,9)		(20)	(22)	(0,7 kg)

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 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

<b>C</b> - Back flange, for lower connection pressure gauges
<b>E</b> - Front flange, for back connection pressure gauges
<b>E65</b> - 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** **M1** **1** **A** **E** **41M** **01S...M9D** **C, E**  
**3** **D** **43M** **E65**