

## pressure gauges with electric contacts DS 4", 6" (100-150 mm)



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

**EAC**

The electrical and inductive contacts pressure gauges are provided with free contacts in air which open and close electric circuits according to the position of the pointer. If combined with Bourdon tube pressure gauges, bellows, diaphragm and thermometers designed by NUOVA FIMA, they turn into pressure and temperature switches: the best and safest solution to automatize any kind of equipment.

### 1.M7.1 - Standard Model

**Ranges:** from 0...30 to 0...15000 psi (from 0...1.6 to 0...1000 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*  $+149\text{ }^{\circ}\text{F}$  ( $+65\text{ }^{\circ}\text{C}$ ).

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

**Over pressure:** not suitable.

**Protection:** IP 44 as per EN 60529/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.

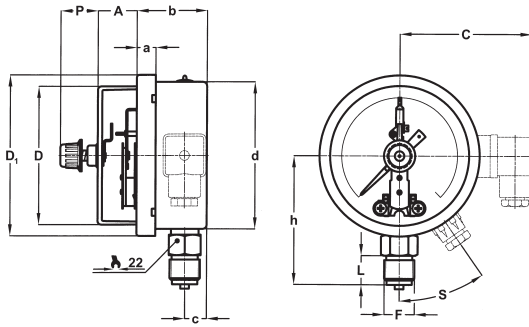
**Window:** plastic.

**Movement:** stainless steel.

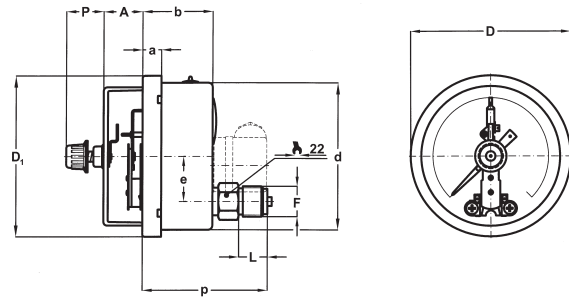
**Dial:** aluminium, white with black markings.

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

(1) 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

DS	Mounting	F	A (1)	a	b	C	c	D	D <sub>1</sub>	d	e	h	L	P	p	S
E 4" (100)	Lower	41M G 1/2 A	1.06"...2.36" (27...60)	0.51" (13)	1.91" (48,5)	2.72" (69)	0.59" (15)	3.74" (95)	4.35" (110,6)	3.98" (101)		3.39" (86)	0.79" (20)	0.77" (19,6)		35°
	Back	43M 1/2-14 NPT									1.22" (31)				3.54" (90)	
G 6" (150)	Lower	41M G 1/2 A	1.02"...2.32" (26...59)	0.59" (15)	1.99" (50,5)	2.72" (69)	0.61" (15,5)	5.55" (141)	6.34" (161)	5.89" (149,6)		4.61" (117)	0.79" (20)	0.77" (19,6)		35°
	Back	43M 1/2-14 NPT									1.88" (47,8)				3.50" (89)	

dimensions : inches (mm)

(1) dimensions for single/double contact;

CONTACT TYPE (1)

MODEL	DS 4" (100 mm)			DS 6" (150 mm)		
Contact type	Sliding and magnetic snap-action contact			Sliding and magnetic snap-action contact		
Contact number	1	2	2 independent	1	2	2 independent
Junction box ø exit cables: inches (mm)	3 poles + GND 0,23...0,35 (6...9)	3 poles + GND 0,23...0,35 (6...9)		3 poles + GND 0,23...0,35 (6...9)	3 poles + GND 0,23...0,35 (6...9)	
Cable exit ø cable: inches (mm)	2 poles + GND (2) 0,19 (4,8)	3 poles + GND (2) 0,23 (6)	4 poles + 1 0,27 (7)	2 poles + GND (2) 0,19 (4,8)	3 poles + GND (2) 0,23 (6)	4 poles + 1 0,27 (7)
Minimum range	15 psi (1bar)	23 psi (1,6 bar)	23 psi (1,6 bar)	15 psi (1bar)	23 psi (1,6 bar)	23 psi (1,6 bar)

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

"ELECTRIC CONTACTS".

(2) U-clamp back connection pressure gauges only.

OPTIONS

Model	
B -	"U"-clamp, for back connection pressure gauges
C -	Back flange, for lower connection pressure gauges
E -	Front flange, for back connection pressure gauges
CHI -	Removable key, protection IP 55

"HOW TO ORDER" SEQUENCE

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

I M7 I A E 41M 01S...M9D B, C, E  
D G 43M CHI