

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 pressure gauges with electrical and inductive contacts are equipped with free contacts in air that open and close electric circuits depending on the position of the pointer. When combined with Bourdon tube pressure gauges, bellows, diaphragms, and thermometers designed by NUOVA FIMA, they function as pressure and temperature switches.

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.

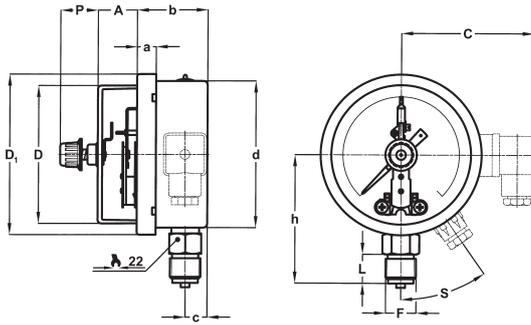
Window: plastic.

Movement: stainless steel.

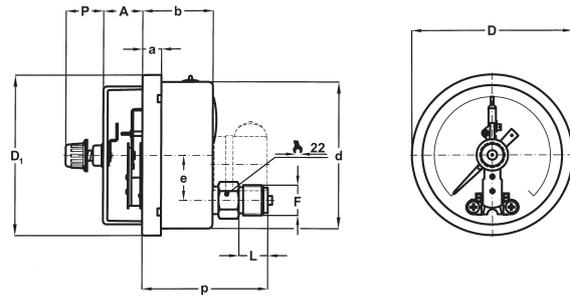
Dial: aluminium, white with black markings.

Pointer: not adjustable, aluminium, black

(1) The 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

DS	Mounting	F	A (1)	a	b	C	c	D	D ₁	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