

multifunction digital pressure instrument: gauge, transmitter, switch



CE Compliance with the requirements of directives:
EMC 2014/30/EU - PED 2014/68/EU - RoHS 2011/65/EU



8.D18 - Standard Model

Display output: 5 digit x 0.47" (12 mm) height, with analog bar graph.

Display type: graphic with resolution 128 x 64 dots, backlit.

Output signal: 4...20 mA (cod. A), with separated supply (3 wires).

Rangeability (on signal output):

1:5 for pressure ranges ≤ 6000 psi (400bar);

1:2 for pressure ranges > 6000 psi (400bar).

Accuracy (% FSV):

for rangeability 1:1 =

$\leq 0,1$ for pressure ranges ≤ 6000 psi (400bar);

$\leq 0,25$ for pressure ranges > 6000 psi (400bar);

for rangeability $\neq 1:1$,

standard accuracy x (nominal range/calibrated range).

Alarm contacts: nr.2, PNP or NPN.

Calibration: limit-point as per DIN 16086.

Process fluid temperature: $-4...+176$ °F ($-20...+80$ °C).

Compensated temperature range: $+32...+176$ °F; ($0...+80$ °C).

Ambient temperature: $-4...+158$ °F ($-20...+70$ °C).

Supply and max load: see on page 2.

Additional displayed informations: alarms state, minimum or maximum peak value, minimum or maximum ambient temperature, current value of signal output, system alarms.

Safety designation: S1 as per EN 837-2.

Keyboard: polyester.

Sensor: piezoresistive for pressure ranges ≤ 6000 psi (400bar);

st.st. thin film for pressure ranges > 6000 psi (400bar).

Electric connection: junction box as per VDE with exit for cables $\varnothing 0.27...0.51$ " ($\varnothing 7...13$ mm).

Response time: 0,1 s.

Adsorbed current: ≤ 100 mA + alarms current.

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

Socket material: AISI 316L st.st.

Case: stainless steel, vented for pressure ranges ≤ 1450 psi (100bar).

Ring: stainless steel, crimped.

Weight: 0,52 kg.

Nominal Ranges in Hg...psi, relative (bar, relative)	Minimum Range psi, relative (bar, relative)	Overpressure psi, relative (bar, relative)
-3...6 (-0,1...0,4)	1.45 (0,1)	11.6 (0,8)
-12...23 (-0,4...1,6)	5.8 (0,4)	46.4 (3,2)
-30...85 (-1...6)	20.3 (1,4)	174 (12)
-30...230 (-1...16)	49.3 (3,4)	464 (32)
-30...580 (-1...40)	119 (8,2)	1160 (80)
-30...1450 (-1...100)	293 (20,2)	2900 (200)
-30...3600 (-1...250)	728 (50,2)	5400 (375)
-30...5800 (-1...400)	1163 (80,2)	8700 (600)
0...14500 (0...1000)	7250 (500)	15950 (1100)
0...23000 (0...1600)	11600 (800)	24650 (1700)

PROGRAMMABLE OPTIONS

Password protection
Engineering units: 24 availables (1)
Rangeability, zero offset
Resolution and displayed value damping
Analogic output damping
Alarm contact type: NPN or PNP
Histeresys, window and delay of alarm contacts
Backlight time

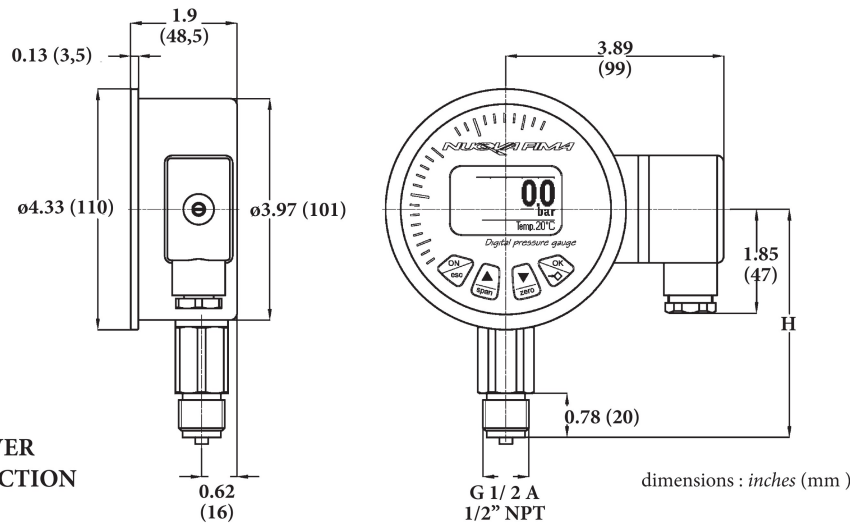
(1) bar; mbar; at; kPa; MPa; PSI; kg/cm²; mmHg; inHg; mH₂O; cmH₂O;
mmH₂O; mm; m; feet; inch; l; kg; t; m3; gal; lb; %; mA

**multifunction digital pressure instrument:
gauge, transmitter, switch**

SDM 18

RR3 - 04/13

IN ORDER TO IMPROVE THEIR PRODUCTION, MESSRS. NUOVA FIMA RESERVE THE RIGHT TO THEMSELVES TO MAKE ALL THE MODIFICATIONS THAT THEY DEEM INDISPENSABLE AT ANY TIME. UPDATED DATA-SHEETS ARE AVAILABLE ON SITE: www.nuovafima.com



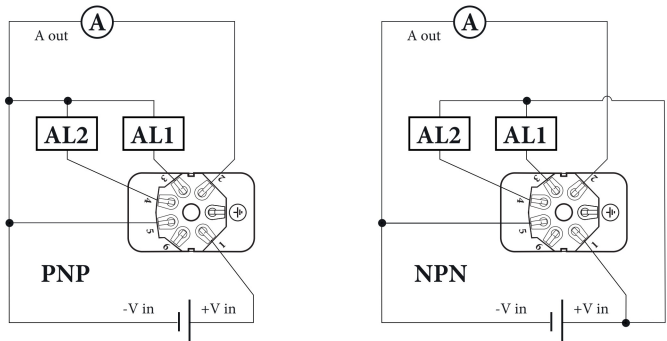
**A - LOWER
CONNECTION**

Pn (bar)	H
≤ 100	4.13" (105)
> 100	4.29" (109)

Output signal	4...20 mA
N. wires	3
Load (Ohm)	$R_L \leq (V_{in} - 11) / 0,02$
Supply: +V _{in}	11...30
Ground	(pls. refer to Installation Manual)

Alarms	2
Tipo, programmable	PNP, NPN
Max output current: I _{out} (1)	100 mA
Min. load (Ohm)	$R_{Lm} \geq (V_{in} - 1) / I_{out}$
Supply: +V _{in}	11...30

(1) max value current 0,6 A available on request, NPN or PNP type for both alarms



OPTIONS

CRP - CR gasket, for pressure ranges ≤ 1500 psi (100 bar); process fluid temperature: -40...+176 °F (-40...+85°C)
EPD - EPDM gasket, for pressure ranges ≤ 1500 psi (100 bar); process fluid temperature: +5...+212 °F (-40...+100°C)
FPM - VITON gasket, for pressure ranges ≤ 6000 psi (400 bar); process fluid temperature: -40...+212 °F (-15...+100°C)
NBR - NBR gasket; process fluid temperature: -13...+176 °F (-25...+85°C)
NP2 - Nr. 2 NPN alarms with 0,6A output current
PN2 - Nr. 2 PNP alarms with 0,6A output current

“HOW TO ORDER” SEQUENCE

Section / Model / Case / Mounting / Diameter / Range / Process connection / Output signal / Gasket / Options

8 D18 1 A E - DN100 41M - G 1/2 A A CRP NP2
43M - 1/2" NPT EPD PN2
FPM
NBR

