

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



**CE** Compliance to 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  $\leq 6000$  psi (400bar);

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

**Accuracy** (% FSV):

for rangeability 1:1 =

$\leq 0,1$  for pressure ranges  $\leq 6000$  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  $\leq 6000$  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:**  $\leq 100$  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  $\leq 1450$  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)

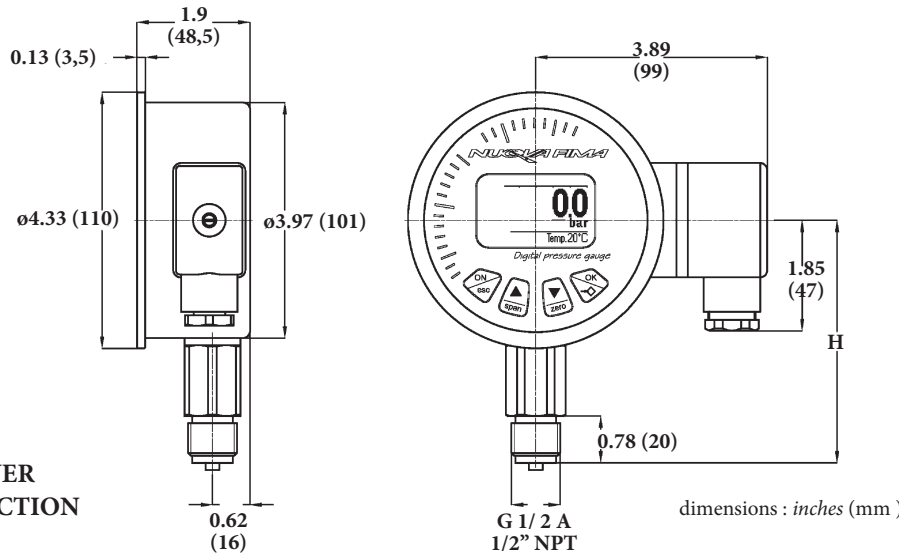
### PROGRAMMABLE OPTIONS

Password protection
Engineering units: 24 availables (1)
Rangeability, zero offset
Risoluzion 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

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# SDM 18



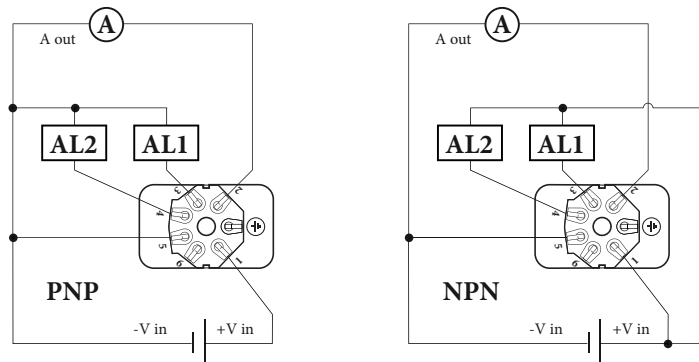
Pn (bar)	H
≤ 100	4.13" (105)
> 100	4.29" (109)

**A - LOWER CONNECTION**

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

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

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



## OPTIONS

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

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-2-

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