

intrinsically safe pressure transmitter, ATEX version

SX 09

- ✓ - Zones : 0, 1, 2, 20, 21, 22
- ✓ - EMC emission and immunity: as per EN 61326.
- ✓ - Case: with ventilation device.
- ✓ - Calibration: adjustable.



Certificate :
CESI 06 ATEX 003 X

8.X09 - Standard Model

Instrument classification:

- category 1 ⁽¹⁾, atmosphere type GD, ignition protection Ex ia IIC as per EN 60079-0, EN 60079-11, EN 60079-26 and Ex ia D 20 as per EN 61241-0, EN 61241-11: **II 1 GD Ex ia IIC Ex iaD 20 (cod. 1GD)**;

- category 1/2, atmosphere type GD, ignition protection Ex ia IIC as per EN 60079-0, EN 60079-11, EN 60079-26 and Ex ia D 20 as per EN 61241-0, EN 61241-11: **II 1/2 GD Ex ia IIC Ex iaD 20 (cod. 2GD)**.

Temperature classes ⁽²⁾,

- T6 (T85°C)Ta ≤ 60 °C (cod. **T6B**);
- T5 (T100°C)Ta ≤ 80 °C (cod. **T5B**);
- T4 (T135°C)Ta ≤ 100 °C (cod. **T4B**).

Ranges: 0...40 IN WC / 0...6000 psi, relative (0...0,1/0...400 bar, relative); -30...0 IN HG, -30IN HG...350psi, relative (-1...0/-1...+24 bar, relative).

Accuracy (% span): ≤ 0,5 max for span ≤ 240 IN WC (600 mbar); ≤ 0,25 max for span > 240 IN WC (600 mbar).

Calibration: limit-point as per DIN 16086.

Repeatability: ≤ 0,15 % of span.

Thermal drift:

≤ 0.044 % span / °F (≤ 0,08 % span / °C) for span < 100 INWC (0,25 bar);

≤ 0.028 % span / °F (≤ 0,05 % span / °C) for span 100...≤ 240 INWC (0,25...≤0,6 bar);

≤ 0.017 % span / °F (≤ 0,03 % span / °C) for span > 240 INWC (0,6 bar);

Annual drift: ≤ 0,2 % of span.

Storage temperature: -13...+212 °F (-25...+100 °C).

Output signal: 4...20 mA.

Response time (10...90%): < 3 ms.

Zero and span calibration: ± 10 % span typical.

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

Sensor: piezoresistive.

Filling fluid: silicon oil.

Case: stainless steel, vented for pressure ranges ≤ 230 psi (≤ 16 bar).

Wetted parts: AISI316L st.st., NBR gasket.

Electric connections: junction boxes and cable exit are available, see on page 2.

Protection: IP 65 and IP 68 ⁽¹⁾ as per EN 60529 (relative to electrical connection type).

Weight: 0.55 lbs (0,25 kg)

(1) available with IP 68 metallic cable gland only;

(2) "Tp" : fluid process temperature ≤ "Ta" : ambient temperature; "Tp" & "Ta" ≥ -20 °C.

Ranges relative (1)	Overpressure psi, relative
0...40/0...240 IN WC	29
0...15 psi	43
0...25 psi	72
0...30 psi	145
0...60 psi	290
0...100 psi	290
0...160 psi	435
0...300 psi	725
0...600 psi	1740
0...1000 psi	2610
0...1500 psi	2900
0...2500 psi	4640
0...3500 psi	7250
0...6000 psi	11600

(1) Other unit of measurement and intermediate ranges are available, as requested by customer.

Ranges bar, relative (1)	Overpressure bar, relative
0...0,1/0...0,6	2
0...1	3
0...1,6	5
0...2,5	10
0...4/0...6	20
0...10	30
0...16	50
0...25	90
0...40	120
0...60	180
0...100	200
0...160	320
0...250	500
0...400	800

(1) Other unit of measurement and intermediate ranges are available, as requested by customer.

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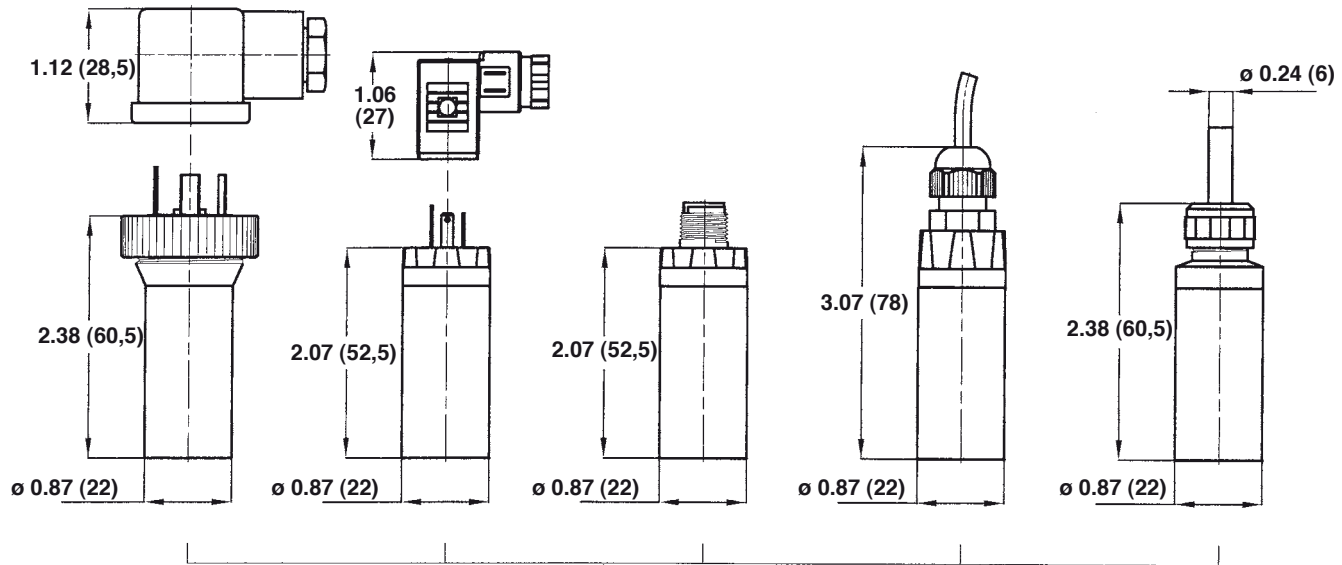
EN 175301-803 (Ex DIN 43650)
IP 65 (standard)

EN 175301-803 Form C
(Ex DIN 43650)
IP 65

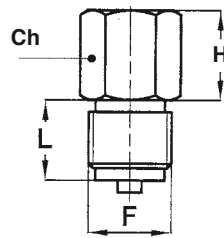
M 12 x 1
IP 65

Cable exit
IP 65

Cable exit
IP 68



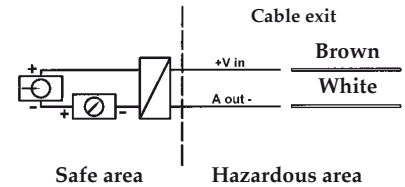
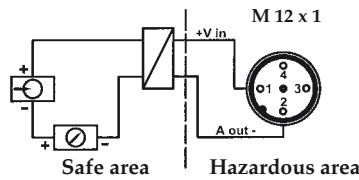
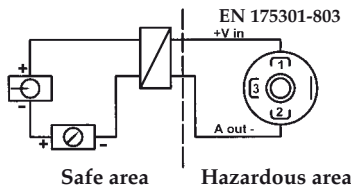
Electrical features	
N. of wires	2
Load (Ohm)	$R_L \leq (V_{in}-10)/0,02$
Supply: +V _{in}	10...30
Max current (I _i)	≤ 100 mA
Max power (P _i)	1,0 W
Capacitance (C _i)	19 nF
Inductivity (L _i)	0 mH



P _n (bar)	H	Ch
≤ 100	1.08" (27,5)	0.87" (22)
> 100	1.24" (31,5)	0.94" (24)

F	L
41M - G 1/2 A	0.78"
43M - 1/2-14 NPT	(20)
21M - G 1/4 A	0.51"
23M - 1/4-18 NPT	(13)

dimensions : inches (mm)



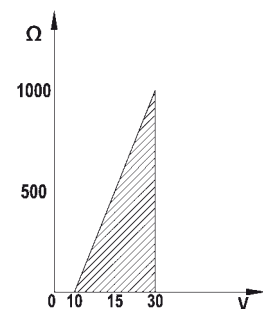
OPTIONS

Classification	II 1GD	II 1/2GD
--- - Junction box IP 65, as per EN 175301-803 Form A		T6...T4 (2)
SCC - Junction box IP 65, as per EN 175301-803 Form C (1)		T6...T4 (2)
M12 - Junction box IP 65, M12 x 1 (1)		T6...T5
PVC - Cable exit IP 65, with PVC cable (1)		T6...T5
U68 - Cable exit IP 68, with vented polyurethane cable (1)	T6	T6
CRP - CR gasket	T6...T5	T6...T5
EPD - EPDM gasket	T6...T4	T6...T4
NBR - NBR gasket	T6...T5	T6...T5
FPM - VITON gasket	T6...T4	T6...T4

(1) Zero calibration not available

(2) silicon gasket when T4 temp. class is choose

LOAD RESISTANCE



"HOW TO ORDER" SEQUENCE

Section / Model / Range / Process connection / Output signal / Classification / Temperature / Gasket / Options

8 X09 41M 43M 1 1GD 2GD T6B T5B T4B CRP EPD NBR FPM --- ... U68