

# intrinsically safe pressure transmitter, ATEX version

# SX 18



- ✓ - 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.X18 - Standard Model

### Instrument classification:

- category 1 <sup>(1)</sup>, 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 <sup>(2)</sup>,

- 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...15/0...10000 psi, relative (0...1/0...600 bar, relative);  
-30"...0/-30"...350 psi, relative (-1...0/-1...+24 bar, relative);  
0...15/0...200 psi, absolute (0...1/0...16 bar, absolute).

**Accuracy (% span):** ≤ 0,25 typical; ≤ 0,5 max.

**Calibration:** limit-point as per DIN 16086.

**Repeatability:** ≤ 0,15 % of span.

**Thermal drift:** ≤ 0,011 % span / °F (≤ 0,02 % span / °C).

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

**Output signal:** 4...20 mA (cod. **1**).

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

**Zero and span calibration:** ± 10 % span typical.

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

**Process connection:** AISI 316L st.st .

**Sensor:** ceramic.

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

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

**Protection:** IP 65 and IP 68 <sup>(1)</sup> as per EN 60529 / IEC529 (relative to electrical connection type).

**Weight:** 0.44 lbs (0,20 kg)

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

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

Ranges psi, relative (1)	Overpressure psi, relat	Burst pressure psi, relative
0...15/0...30	72	100
0...60	145	175
0...100/0...160	290	360
0...300	580	725
0...600	1450	1740
0...1000/0...1500	2900	3625
0...2000/0...3000	7250	8700
0...5000/0...6000	8700	11600
0...10000	11600	13050

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

Ranges bar, relative (1)	Overpressure bar, relative	Burst pressure bar, relative
0...1/0...2,5	5	7
0...4	10	12
0...6/0...10	20	25
0...16	40	50
0...25/0...40	100	120
0...60/0...100	200	250
0...160/0...250	500	600
0...400	600	800
0...600	800	900

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

**Compliance to requirements of directives:**  
ATEX 94/9/EC - EMC 2004/108/EC - PED 97/23/EC - RoHS 2011/65/EC

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RB5 - 07/11

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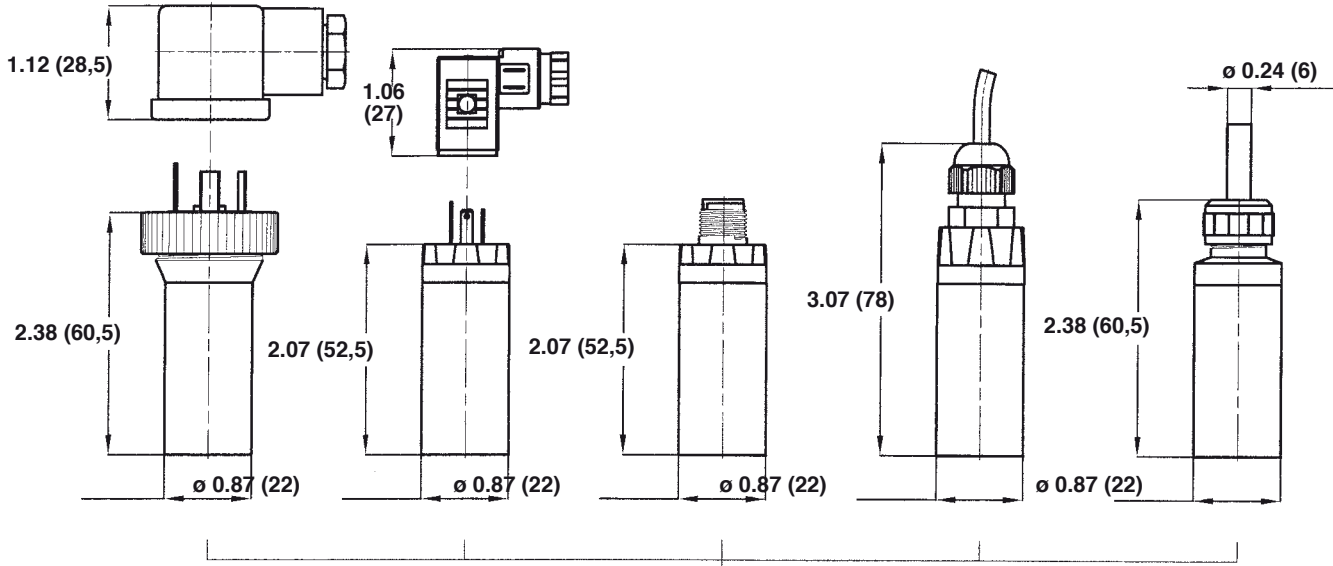
EN 175301-803 (Ex DIN 43650)  
IP 65 (standard)

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

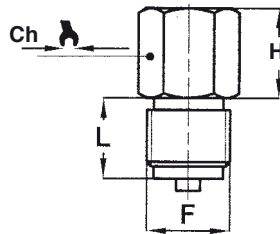
M 12 x 1  
IP 65

Cable exit  
IP 65

Cable exit  
IP 68



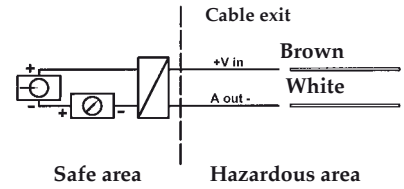
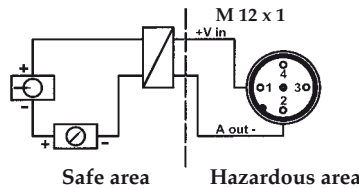
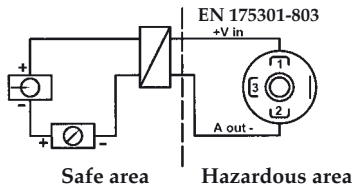
Electrical features	
N. of wires	2
Load (Ohm)	$R_L \leq (V_{in}-10) / 0,02$
Supply: +Vin	10...30
Max current (Ii)	$\leq 100$ mA
Max power (Pi)	1,0 W
Capacitance (Ci)	19 nF
Inductivity (Li)	0 mH



Pn (bar)	H	Ch
1...4	1.06" (27)	0.87" (22)
6...400	0.89" (22,5)	0.87" (22)
> 400	0.89" (22,5)	0.94" (24)

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

dimensions : inches (mm)



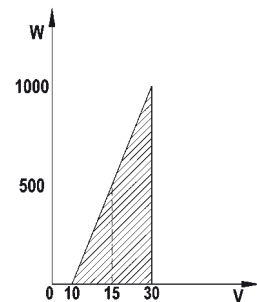
## OPTIONS

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) silicone is the only available gasket for T4 class

## LOAD RESISTANCE



## "HOW TO ORDER" SEQUENCE

Section / Model / Range / Process connection / Output signal / Classification / Temperature / Gasket / Options  
**8**   **X18**   **41M**   **1**   **1GD**   **T6B**   **CRP**   **--- ... U68**  
**43M**   **2GD**   **T5B**   **EPD**  
**21M**   **T4B**   **NBR**  
**23M**   **FPM**