

## intrinsically safe pressure transmitter, ATEX version, accuracy 0,5 %



II 1 GD Ex ia IIC Ex ia IIIC  
II 1/2 GD Ex ia IIC Ex ia IIIC

Certificate :  
0425 ATEX 2635

### 8.X18

**Ignition protection** Ex ia as per EN 60079-0, EN 60079-11, EN 60079-26, atmosphere type GD :

- category 1 <sup>(1)</sup>, marking II 1 GD Ex ia IIC Ex ia IIIC (cod. **1GD**);
- category 1/2, marking II 1/2 GD Ex ia IIC Ex ia IIIC (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**).

**Measuring ranges:** 0...1/0...600 bar, relative; -1...0/-1...+24 bar, relative; 0...1/0..25 bar, absolute.

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

**Non-linearity (BFSL):** ≤ ± 0,25 % of the range, according to IEC 61298-2.

**Non-repeatability:** ≤ 0,1 % of the range, according to IEC 61298-2.

**Accuracy:** ≤ ± 0,5% of the range <sup>(3)</sup>.

**Thermal drift:** between 0 and 80°C, 1% of span; 2,5% of span, max <sup>(4)</sup>.

**Long term drift:** ≤ 0,1 % of span.

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

**Stocking temperature:** -30...+85 °C.

**Response time:** <4 ms (measuring); <150 ms (switching on).

**Emission and immunity:** according to EN 61326, (group 1 - class B; industrial applications).

**Vibration resistance:** 20g (10...2000 Hz, according to IEC 60068-2-6).

**Shock resistance:** 40g (6 ms, according to IEC 60068-2-27).

**Sensor:** ceramic in Al<sub>2</sub>O<sub>3</sub>.

**Case:** in AISI 316L, vented up to 16 bar.

**Protection degree:** IP 65 according to IEC 60529 <sup>(5)</sup>.

**Process connection:** in AISI 316L, hole ø 2,5 mm (with restrictor ø 0,7 mm for measuring ranges ≥ 60 bar).

**Weight:** 0,20 kg

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

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

(3) max measuring error according to IEC 61298-2, including non-linearity and hysteresis (limit-point calibration and reference conditions according to IEC 61298-1); accuracy ≤ ± 0,75% of span for measuring ranges 0...1 bar and 0...600 bar.

(4) + 0,5% of span for measuring range 1 bar

(5) with properly assembled electric connection

Ranges bar, relative	Overpressure bar, relative
0...1	5
0...1,6	5
0...2,5	5
0...4	8
0...6	12
0...10	20
0...16	32
0...25	50
0...40	80
0...60	120
0...100	200
0...160	320
0...250	500
0...400	600
0...600	800

Other ranges available on demand. Units of measurement available in psi, MPa, kPa too.

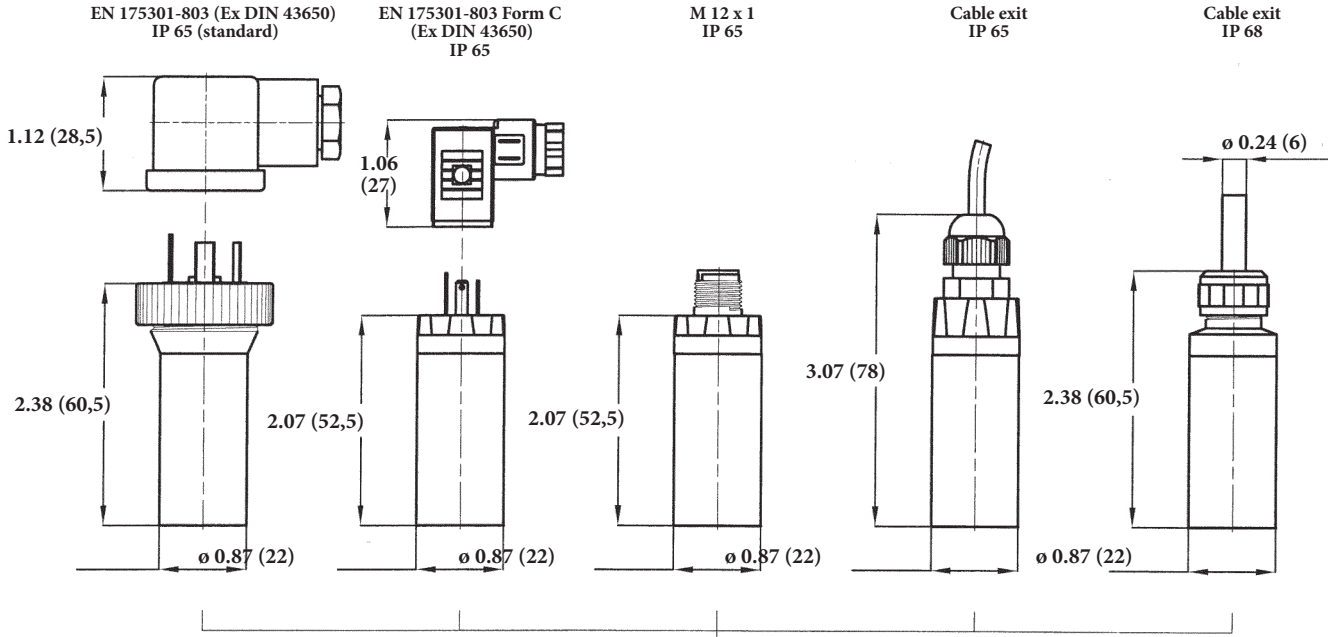
Compliance to requirements of directives: ATEX 2014/34/EU - EMC 2014/30/EU - PED 2014/68/EU - RoHS 2011/65/CE

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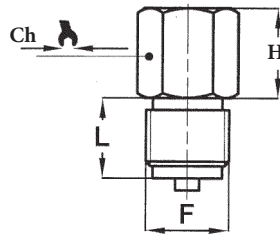
# SX 18

RC7-10/15

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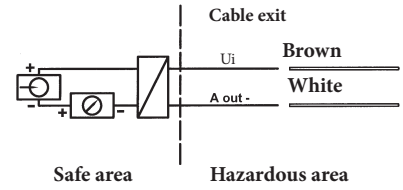
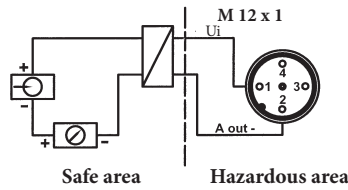
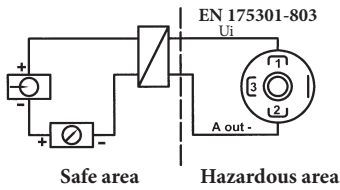
Electrical features	
N. of wires	2
Load (Ohm)	$R_L \leq (V_{in}-10)/0,02$
Supply: (U <sub>i</sub> )	10...30 Vdc
Max current (I <sub>i</sub> )	≤ 100 mA
Max power (P <sub>i</sub> )	1,0 W
Capacitance (C <sub>i</sub> )	19 nF
Inductivity (L <sub>i</sub> )	0 mH



P <sub>n</sub> (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
<b>41M</b> - G 1/2 A	0.78" (20)
<b>43M</b> - 1/2-14 NPT	
<b>21M</b> - G 1/4 A	0.51" (13)
<b>23M</b> - 1/4-18 NPT	

dimensions : inches (mm)



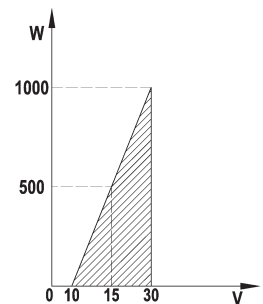
## OPTIONS

Classification	II 1GD	II 1/2GD
--- - Junction box IP 65, as per EN 175301-803 Form A		T6...T4 (2)
<b>SCC</b> - Junction box IP 65, as per EN 175301-803 Form C (1)		T6...T4 (2)
<b>M12</b> - Junction box IP 65, M12 x 1 (1)		T6...T5
<b>PVC</b> - Cable exit IP 65, with PVC cable (1)		T6...T5
<b>U68</b> - Cable exit IP 68, with vented polyurethane cable (1)	T6	T6
<b>CRP</b> - CR gasket	T6...T5	T6...T5
<b>EPD</b> - EPDM gasket	T6...T4	T6...T4
<b>NBR</b> - NBR gasket	T6...T5	T6...T5
<b>FPM</b> - 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**  
**21M**  
**23M** **T5B** **EPD**  
**T4B** **NBR**  
**FPM**

