

## intrinsically safe pressure transmitter, ATEX version, accuracy 0,35 %



Certificate :  
0425 ATEX 2635

### 8.X09

**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...1000 bar, relative; -1...0/-1...+24 bar, relative; 0...1/0...25 bar, absolute.

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

**Non-linearity (BFSL):** ≤ ± 0,175 % of the range, according to IEC 61298-2.

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

**Accuracy:** ≤ ± 0,35% 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:** piezoresistive, with silicon oil.

**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:** 0,25 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 0,6 bar

(5) with properly assembled electric connection

Ranges bar, relative	Overpressure bar, relative
0...0,1	0,3
0...0,16	0,5
0...0,25	0,8
0...0,4	1,2
0...0,6	1,8
0...1	2
0...1,6	3,2
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	380
0...400	600
0...600	900
0...1000	1500

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 09

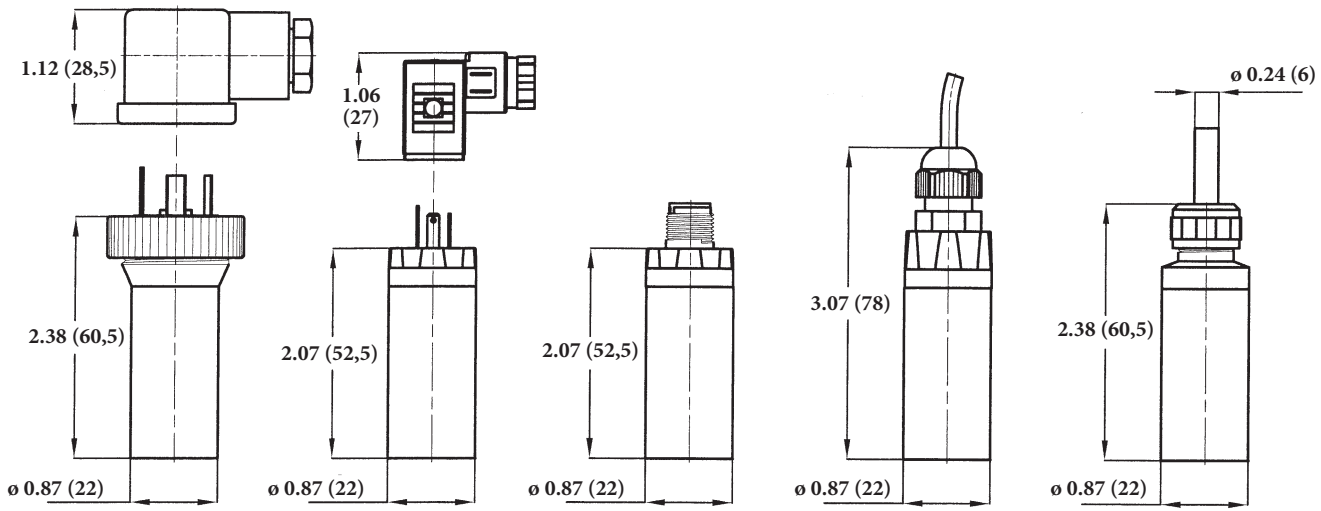
EN 175301-803 (Ex DIN 43650)  
IP 65 (standard)

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

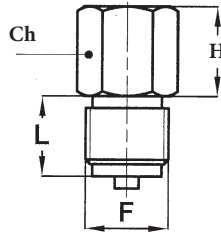
M 12 x 1  
IP 65

Cable exit  
IP 65

Cable exit  
IP 68



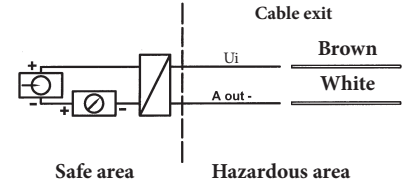
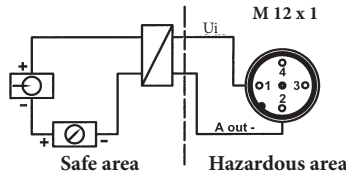
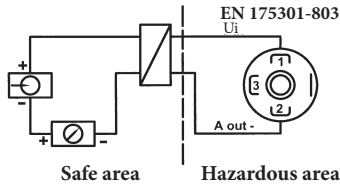
Electrical features	
N. of wires	2
Load (Ohm)	$R_L \leq (U_i - 10) / 0,02$
Supply ( $U_i$ )	10...30 Vdc
Max current ( $I_i$ )	$\leq 100$ mA
Max power ( $P_i$ )	1,0 W
Capacitance ( $C_i$ )	19 nF
Inductivity ( $L_i$ )	0 mH



$P_n$ (bar)	H	Ch
$\leq 100$	1.08" (27,5)	0.87" (22)
$> 100$	1.24" (31,5)	0.94" (24)

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

dimensions : inches (mm)



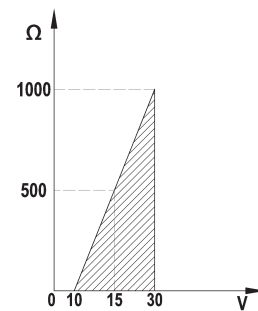
## OPTIONS

Classification	II 1GD	II 1/2GD
--- - Junction box IP 65, as per EN 175301-803 Form A		T6...T4 (2)
<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) 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 1 1GD T6B CRP --- ... U68**  
**43M 2GD T5B EPD**  
**T4B NBR**  
**FPM**

