

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



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

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 ⁽¹⁾, 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 ⁽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**).

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 ⁽³⁾.

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

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 ⁽⁵⁾.

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

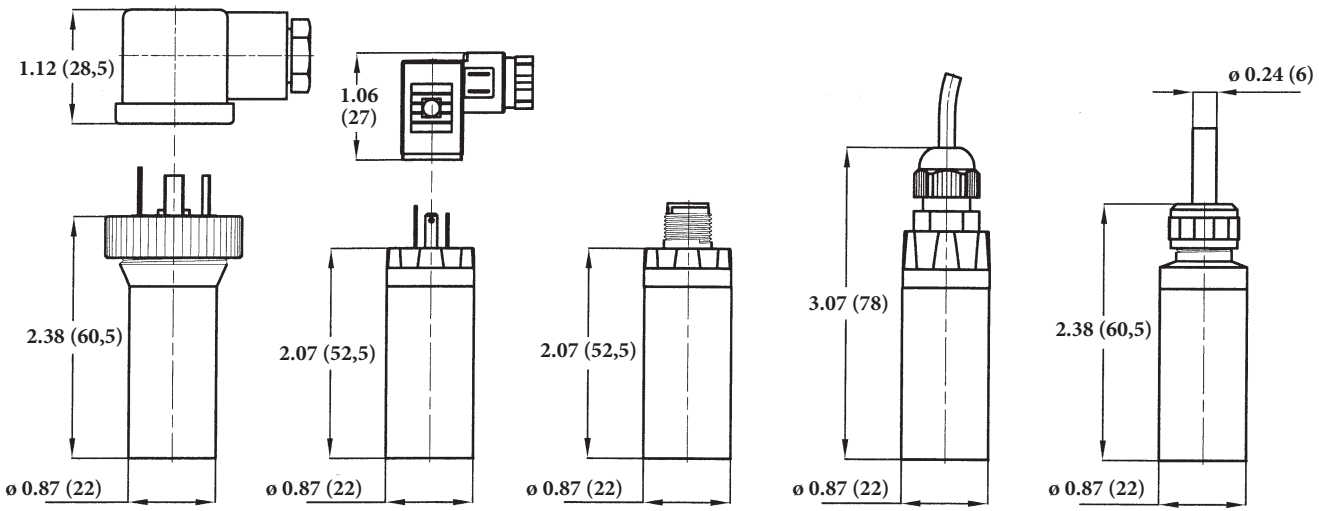
EN 175301-803 (Ex DIN 43650)
IP 65 (standard)

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

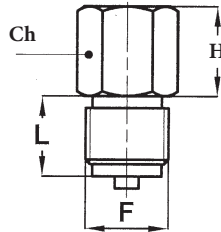
M 12 x 1
IP 65

Cable exit
IP 65

Cable exit
IP 68



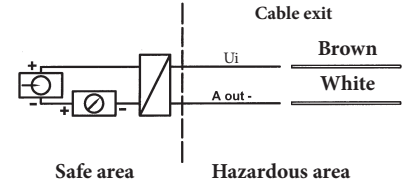
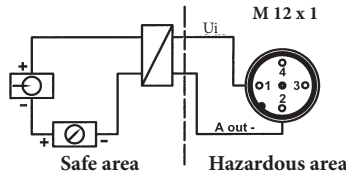
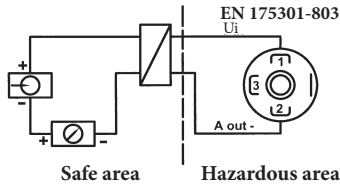
| Electrical features | |
|-----------------------|------------------------------|
| N. of wires | 2 |
| Load (Ohm) | $R_L \leq (U_i - 10) / 0,02$ |
| Supply (U_i) | 10...30 Vdc |
| Max current (I_i) | ≤ 100 mA |
| Max power (P_i) | 1,0 W |
| Capacitance (C_i) | 19 nF |
| Inductivity (L_i) | 0 mH |



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

dimensions : inches (mm)



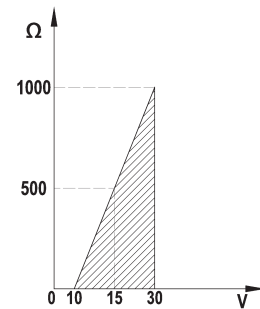
OPTIONS

| 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) 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 T5B EPD
T4B NBR
FPM