

# pressure transmitter

# ST 09



- ✓ - *EMC emission and immunity: as per EN 61326.*
- ✓ - *Wiring: shieldless cable.*
- ✓ - *Case: with ventilation device.*
- ✓ - *Compensated temperature range: +32...+176 °F (0...+80°C).*
- ✓ - *Calibration: adjustable.*



**CE** Compliance to requirements of directives:  
EMC 89/336/CEE - PED 97/23/CE - RoHS 02/95/CE - RAEE 02/96/CE - 03/108/CE

## 8.S09 - Standard Model

**Ranges:** 0...40 IN WC / 0...870 psi, relative (0...1/0...60bar, relative);  
-30...0 IN HG, -30IN HG...350 psi, 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 pressure ranges > 240 INWC (0,6 bar);

**Annual drift:** ≤ 0,2 % of span.

**Process fluid temperature:** -13...+185 °F (-25...+85 °C).

**Ambient temperature:** -13...+185 °F (-25...+85 °C).

**Storage temperature:** -13...+185 °F (-25...+85 °C).

**Output signals:** 4...20 mA.

**Supply and max load:** see on page 2.

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

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

**Range calibration:** ± 10 % span typical.

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

**Sensor:** piezoresistive.

**Filling fluid:** silicon oil.

**Case:** stainless steel, vented for span ≤ 16 bar.

**Wetted parts:** AISI316L st.st.

**Electric connection:** \*EN 175301-803, exit for cables ø 0.23...0.35" (6...9 mm).

**Protection degree:** IP 65 as per IEC 529 / EN 60529.

**Weight:** 0.50 lbs" (0,23 kg).

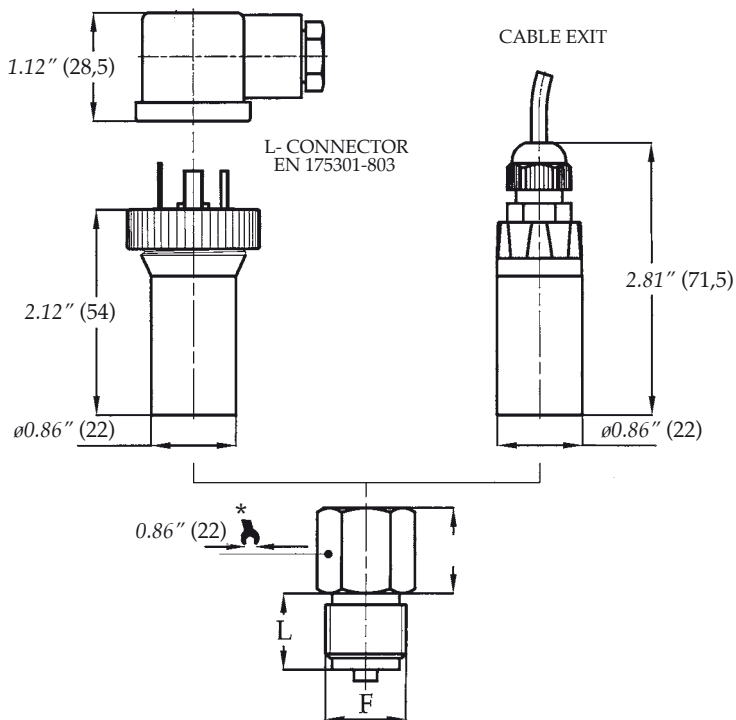
(\*)Ex DIN 43650

Ranges relative (1)	Overpressure psi, relative
0...40/0...240 IN WC	29
0...15 psi	43
0...25 psi	72
0...30 psi	72
0...60 psi	290
0...100 psi	290
0...160 psi	435
0...300 psi	725
0...600 psi	1740
0...1000 psi	2610

(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

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



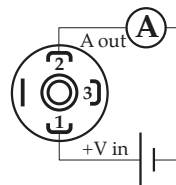
F	L
41M - G 1/2 A	0.78" (20)
21M - G 1/4 A	0.51" (13)

dimensions : inches (mm)

Pn (bar)	H
≤ 100	1.08" (27,5)
> 100	1.24" (31,5)

Output signals	4...20 mA 1
N. wires	2
Load (Ohm)	$R_L \leq (V_{in}-10)/0,02$
Supply: +Vin	10...30
Ground	(pls. refer to Installation Manual)

4...20 mA



## OPTIONS

<b>CRP</b> - CR gasket, process fluid temperature: -40...+176 °F (-40...+85°C)
<b>EPD</b> - EPDM gasket, process fluid temperature: -40...+212 °F (-40...+100°C)
<b>NBR</b> - NBR gasket; process fluid temperature: -13...+176 °F (-25...+85°C)
<b>FPM</b> - VITON gasket; process fluid temperature: -4...+212 °F (-15...+100°C)
<b>C01</b> - Calibration certificate
<b>PVC</b> - Cable exit, with PVC cable (1)

(1) Zero calibration not available

## "HOW TO ORDER" SEQUENCE

Section / Model / Range / Process connection / Output signal / Gasket / Options  
 8 S09 41M 1 FPM C01, PVC  
 21M CRP  
 EPD  
 NBR