

Datasheet

Compact Pressure Transmitter EP100

Introduction

The EP100 features a silicon piezoresistive sensor that converts measured pressure into a standard industrial electrical output. Engineered with a space-saving, compact design and a durable stainless steel housing, it offers various analog outputs and process connections for diverse industrial uses.



Characteristics

Compact design - height 55mm

Measuring range 0...725 psi (0...50 bar)

Accuracy up to 0.5% of FS

Output: 4...20mA / 0...5V

Low cost

Applications

Hydraulics and pneumatics

Process automation

Pump and compressor

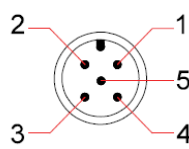
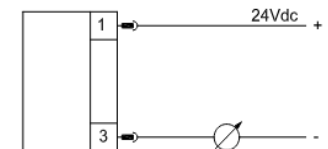
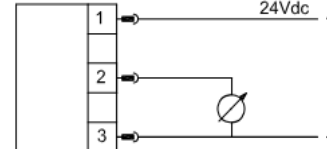
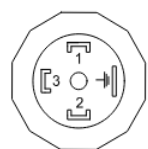
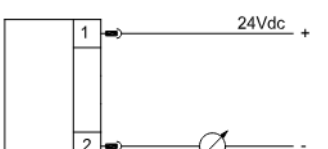
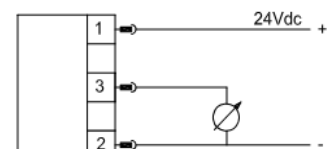
Test equipment

Machinery manufacturing

Specifications

Power supply	10...30 VDC
Current consumption	2-wire: Same as output (4...20mA) 3-wire: $\leq 3\text{mA}$
Current output	Output: 2-wire 4...20mA Load $R_A(\Omega)$: $(U_s - 10)\text{V}/0.02\text{A}$ Linearity: $< 0.5\%$ of span Response time: $\leq 10\text{ms}$ Repeatability: $\leq 0.1\%$ of span
Voltage output	Output: 3-wire 0...5V Load $R_A(\Omega)$: $R_A > 5\text{K}$ Linearity: $< 0.5\%$ of span Response time: $\leq 1\text{ms}$ Repeatability: $\leq 0.1\%$ of span
Accuracy	0.5% of FS
Stability(Drift/Year)	$\leq \pm 0.3\%$ of FS
Temperature	Medium: $-4...185^\circ\text{F}$ / $-20...85^\circ\text{C}$ Ambient: $-4...185^\circ\text{F}$ / $-20...85^\circ\text{C}$
Material	Wetted parts: SS 304 Housing: SS 304 Other material on request
Electrical connection	Solenoid valve plug M12 x 1 plug Cable outlet
Protection class	IP65 (Solenoid valve plug) IP67 (M12 x 1 plug)
Process connection	N1/4", G1/4" male thread, ED sealing

Wiring

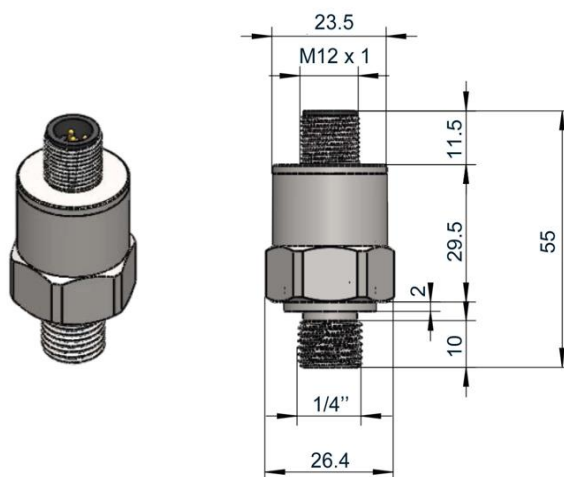
M12 plug	2-wire	3-wire												
 <table><tr><th>Pin</th><th>Color</th><th>Signal</th></tr><tr><td>1</td><td>Brown</td><td>U+</td></tr><tr><td>2</td><td>White</td><td>Output *</td></tr><tr><td>3</td><td>Blue</td><td>U-</td></tr></table> * For 3-wire only	Pin	Color	Signal	1	Brown	U+	2	White	Output *	3	Blue	U-		
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Solenoid valve plug	2-wire	3-wire												
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Measuring range code

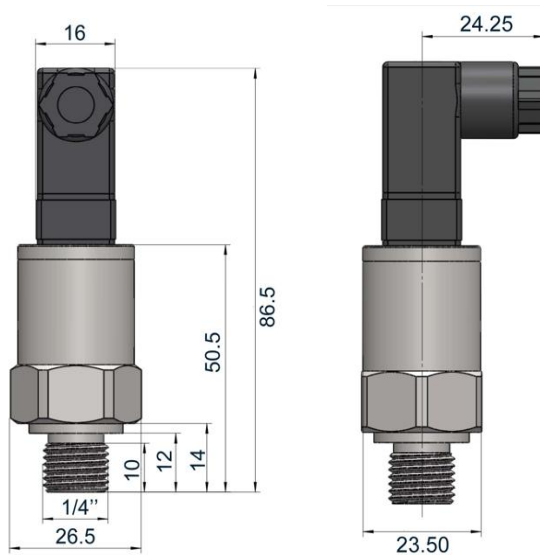
Code	Measuring Range (psi)		Overload Pressure	Burst Pressure
	psi	bar		
GB1	0...14.5	0...1	Measuring Range x 2	Measuring Range x 3
GB4	0...58	0...4		
GB6	0...87	0...6		
GB10	0...145	0...10		
GB16	0...230	0...16		
GB25	0...360	0...25		
GB40	0...580	0...40		
GB50	0...725	0...50		

Dimensions in mm

M12 x 1 plug



Solenoid valve plug



Order Code

Example: EP100-GB1A4CN14M

1. Model

EP100- Compact Pressure Transmitter

2. Measuring range

GB1 Gauge pressure 0...14.5 psi / 0...1bar
Please select a code from measuring range table above

3 Output

A4 4...20mA (2-wire)
V5 0...5V (3-wire)

4. Accuracy

C 0.5%

5. Process connection

N14 NPT1/4" male thread
G14 G1/4" male thread
Other connection on request

6. Electrical connection

S Solenoid plug
M M12 x 1 plug

Accessory - power/signal cable with socket

1. Connecting cable with socket

ET05- 5-pin M12 x 1 connecting cable with socket

2. Material

PU Material: PUR

3. Length

02 6.5ft / 2m (default)
05 16.5ft / 5m

4. Type

R Regular cable
S Shielded cable

5. Connector

G Straight socket
W Angled socket



Accessory - wirable plug

1. Wirable plug

ST05 5-pin M12 x 1 wirable plug

