

Datasheet Pressure Transmitter

EP300 Series

Introduction

As one of our most popular general-purpose pressure transmitters, the EP300 features a rugged and durable design that utilizes a silicon piezoresistive sensor to convert measured pressure into standard 4...20 mA or 0...5 V output signals. Offering various process connections and electrical outputs, it ensures easy installation and seamless integration into your existing system.



Characteristics

For general industrial applications

Measuring range up to 600 bar

Various output

Accuracy up to 0.1% of F.S.

Stainless steel wetted parts

Optional corrosive resistance model available

Applications

Hydraulics and pneumatics

Process automation

Pump and compressor

Test equipment

Machinery manufacturing

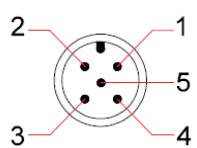
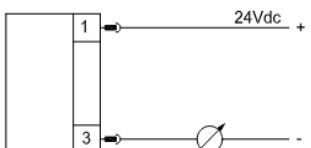
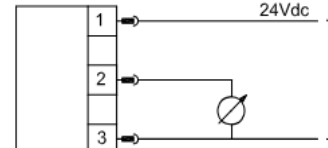
Specifications

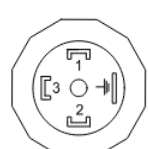
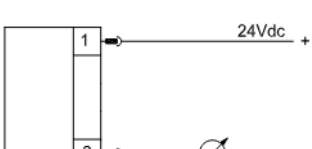
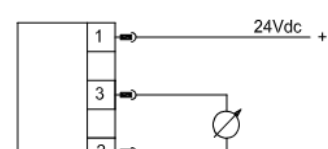
Measuring range	See measuring range for details
Output	2-wire 4...20mA 3-wire 0...5V
Material	Wetted parts: SS 304 / SS316L Housing: SS 304
Power supply	10...30 VDC for current output models 14...30 VDC for voltage output models
Current consumption	2-wire: Same as output (4...20mA) 3-wire: $\leq 22\text{mA}$
Load(Ω)	2-wire 4...20mA output: Load(Ω) $RA \leq (5-10)\text{V} / 0.02\text{A}$ 3-wire 0...5V output: Load(Ω) $RA \geq 5\text{K}$
Linearity	$\leq 0.25\%$ of F.S.
Accuracy	0.1% of F.S. 0.5% of F.S. 0.25% of F.S.
Stability(Drift/Year)	$\leq \pm 0.2\%$ of F.S.
Temperature	Medium: $-40...185^\circ\text{F}$ / $-40...85^\circ\text{C}$ Ambient: $-4...185^\circ\text{F}$ / $-20...85^\circ\text{C}$
Electrical connection	Solenoid valve plug M12 x 1 plug Cable outlet
Protection class	IP65 (Solenoid valve plug) IP67 (M12 x 1 plug) IP68 (Cable outlet)
Certification	ISO 9001; CE

Technical data

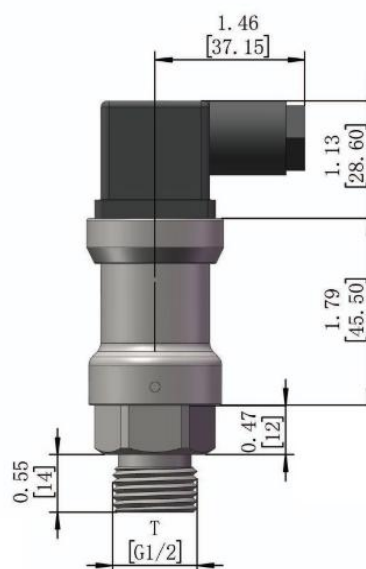
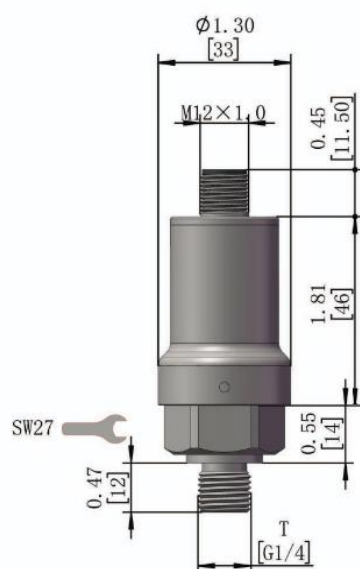
Measuring Range (psi)		Overload Pressure	Burst Pressure
psi	bar		
<1.5	<0.1	x2	x3
0...14.5	0...1	x5	x6
0...58	0...4		
0...87	0...6		
0...145	0...10	x3	x4
0...230	0...16		
0...360	0...25		
0...725	0...50		
0...870	0...60	x2	x3
0...1450	0...100		
0...2300	0...160		
0...3600	0...250	x1.5	x2
0...5800	0...400		
0...8700	0...600	x1.3	x1.6

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-		
Pin	Color	Signal													
1	Brown	U+													
2	White	Output *													
3	Blue	U-													

Solenoid valve plug	2-wire	3-wire									
	<table><tr><th>Pin</th><th>Signal</th></tr><tr><td>1</td><td>U+</td></tr><tr><td>3</td><td>Output *</td></tr><tr><td>2</td><td>U-</td></tr></table> * For 3-wire only	Pin	Signal	1	U+	3	Output *	2	U-		
Pin	Signal										
1	U+										
3	Output *										
2	U-										

Dimensions in mm



Measuring range code

Code	Gauge Pressure	
	psi	bar
NB1	-14.5...14.5	-1...1
NB4	-14.5...58	-1...4
NB6	-14.5...87	-1...6
NB10	-14.5...145	-1...10
NB16	-14.5...230	-1...16
NB25	-14.5...360	-1...25
GB0.25	0...3.6	0...0.25
GB0.5	0...7.2	0...0.5
GB1	0...14.5	0...1
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
GB50	0...725	0...50
GB60	0...870	0...60
GB100	0...1450	0...100
GB160	0...2300	0...160
GB250	0...3600	0...250
GB400	0...5800	0...400
GB600	0...8700	0...600

Code	Absolute Pressure	
	psi	bar
AB1	0...14.5	0...1
AB2	0...29	0...2
AB4	0...58	0...4
AB6	0...87	0...6
AB10	0...145	0...10
AB16	0...230	0...16
AB25	0...360	0...25
AB50	0...720	0...50

Note:

Customization on request for measuring range not listed above:

GB20 for gauge positive pressure 0...10 bar / 0...145 psi;

NB1 for gauge negative pressure -1...1 bar / -14.5...14.5 psi;

AB10 for absolute pressure 0...10 bar / 0...145 psi.

Order Code

Example: EP300-GB1A4CSN12M

1. Model

EP300- 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)

Other output on request

4. Accuracy

A 0.1%

B 0.25%

C 0.5%

5. Wetted part material

S Stainless steel 304

L Stainless steel 316L

Other material on request

6. Process connection

G12 G1/2" male thread (standard)

G14 G1/4" male thread

N12 NPT1/2" male thread

N14 NPT1/4" male thread

M20 M20 x 1.5" male thread

U716 7/16" - 20 UNF

U38 3/8" - 24 UNF

Other connection on request

7. Electrical connection

S Solenoid plug

M M12 x 1 plug

C Cable outlet

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

