CS-PT300S

Applications

- General industrial applications
- Simple thus reliable measurement in development and research
- Distributors, resellers, and wholesalers in various industries

Description

The model 300 pressure transmitter for general purpose is the ideal solution for general industrial applications.

These measuring ranges can be combined in almost any way with all the standard industry output signals, the most common international process connections and a wide number of electrical connections.

Furthermore, it offers three options for the accuracy, 0.5 % F.S, and 1 %F.S.

All variants described in this data sheet are available on very short lead times. For particularly urgent demands, there is a sizeable stock available.

Features

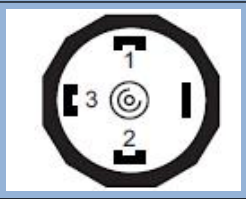
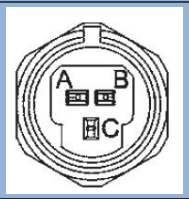
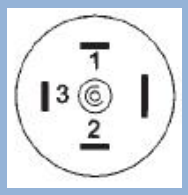
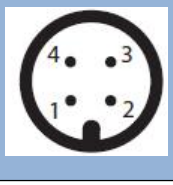
- Silicon oil sensor
- Standard Range from 0 ... 0.07 to 0 ... 1000bar
- Output 4 ... 20 mA, DC 0 ... 10 V, DC 0 ... 5 V and others
- Electrical connection includes DIN43650 A/C, M12 x 1, Packard Metri-Pack, Cable and others
- Pressure connection includes G1/2, G1/4, M20*1.5, NPT1/2, NPT1/4 and others
- Over voltage and Reverse voltage
- High accuracy

Performance Specifications

Temperature: 25℃; power supply: 5VDC for ratio voltage output, and 12VDC for others; relative humidity: 45%~75%; ambient atmospheric pressure: 86KPa～106KPa

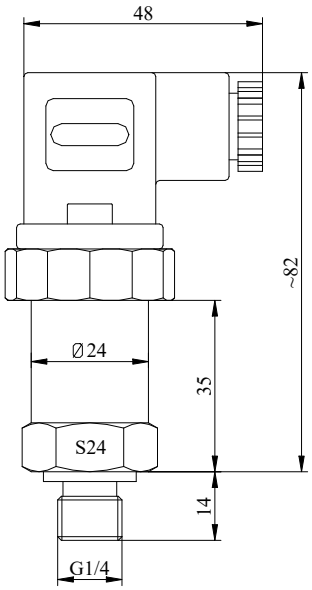
Pressure range	0 ... 0.07 to 0 ... 1000bar				
Proof pressure	≥150%F.S				
Accuracy at 25℃	±0.5%F.S standard, ±1%F.S optional, include no-linearity, hysteresis, repeatability, and calibration error				
Long-term stability.	±0.25％FS/year				
Response Time	≤10ms				
Operating Temperature	-40℃ ～ 85℃, but can't beyond the temperature of seal material				
Compensated Temperature	0℃～50℃				
Storage Temperature	-40℃～105℃				
Output Signal note 1	4～20mA	0～5VDC	1～5VDC	1～6VDC	0～10V
Supply Voltage	8～30 VDC				13～28 V
Current without Load	—	≤ 8 mA			
Output Load	≤ (U－8) / 0.023Ω	≥10KΩ			
Overvoltage	30VDC				
Reverse Voltage	-30VDC				
Insulate Resistance	≥100MΩ@100VDC				
IP Rating	IP65				
Random Vibration	10g，5～2000Hz				
Shock	X/Y/Z, 20g, sine 11ms				
Drop (any Axis)	1m				
Pressure connector	G1/2, G1/4, M20*1.5, NPT1/2, NPT1/4 and others				
connector material	304 stain steel default, 316L stain steel and Titanium optional				
Electrical connection	DIN 43650 A/C or M12 x 1 or Packard or Cable outlet or others				
Seal material	NBR O-Ring default (-20°C ～ +100℃), FKM optional (-15ºC～+135℃) or others				

Electrical Connection

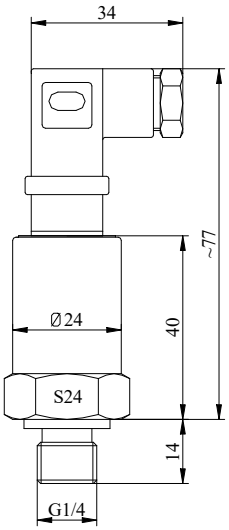
<table>
<tr><td colspan="2">DIN 43650 A</td><td colspan="2">Packard Metri-Pack</td></tr>
<tr><td rowspan="4"> 
</td><td>U+ / I+ = 1</td><td rowspan="4"> 
</td><td>U+ / I+ = B</td></tr>
<tr><td>U- / I- = 2</td><td>U- / I- = A</td></tr>
<tr><td>S+ = 3</td><td>S+ = C</td></tr>
<tr><td>Shield = 4 / Housing</td><td>Shield = Housing</td></tr>
<tr><td colspan="2">DIN 43650 C</td><td colspan="2">Cable outlet</td></tr>
<tr><td rowspan="4"> 
</td><td>U+ / I+ = 1</td><td rowspan="4">  </td><td>U+ / I+ = Red</td></tr>
<tr><td>U- / I- = 2</td><td>U- / I- = Black</td></tr>
<tr><td>S+ = 3</td><td>S+ = Green / Blue</td></tr>
<tr><td>Shield = 4 / Housing</td><td>Shield = Housing / Yellow</td></tr>
<tr><td colspan="2">M12 x 1(4 Pin)</td><td colspan="2" rowspan="5"></td></tr>
<tr><td rowspan="4"> 
</td><td>U+ / I+ = 1</td></tr>
<tr><td>U- / I- = 3</td></tr>
<tr><td>S+ = 4</td></tr>
<tr><td>Shield = 2 / Housing</td></tr>
</table>

Structure and Dimension (mm)

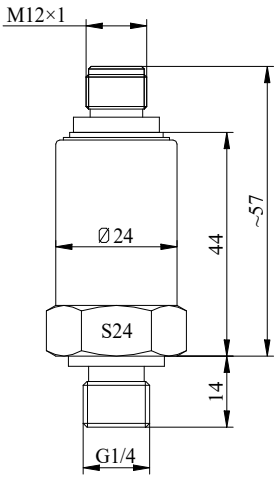
DIN43650 A



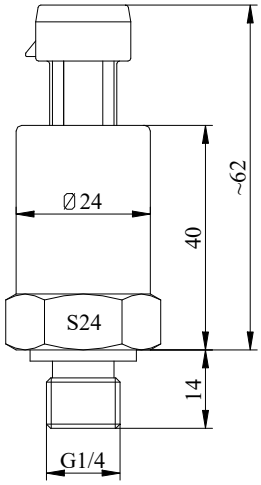
DIN43650 C



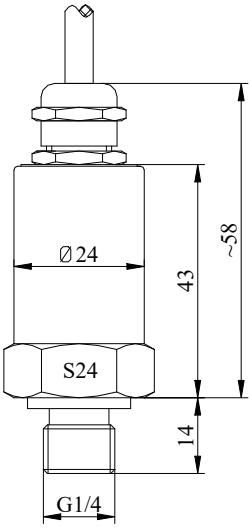
M12 x 1 (4-pin)



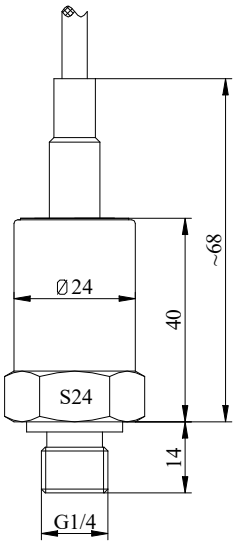
Packard Metri-Pack

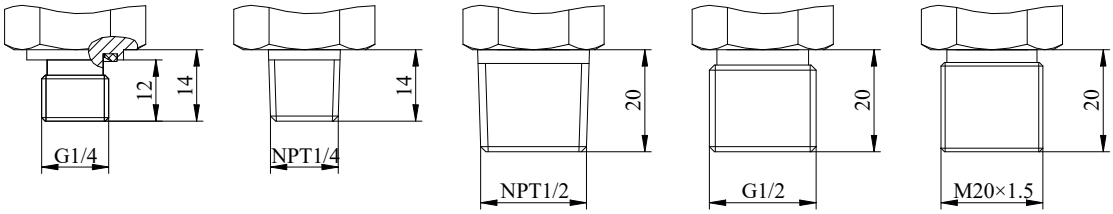


Cable outlet A



Cable outlet B





Model Selection Tips

PT300S Pressure Transmitter

Code	Measuring Range
X	X stands for actual pressure measuring range

Code	Pressure Connection
G1/2	G1/2
G1/4	G1/4
M20×1.5	M20×1.5
NPT1/2	NPT1/2
NPT1/4	NPT1/4

Code	Electrical Connector
HSM1	DIN43650A
HSM	DIN43650C
P	Packard
CW	Cable Outlet A
CW1	Cable Outlet B
M12	M12 x 1

Code	Output
420	4～20mA
0050	0～5V Voltage
0150	1～5V Voltage
0160	1～6V Voltage
010	0～10V Voltage

Code	Power Supply
21	8～30VDC
13	12～30VDC

Code	Seal Material
B	NBR
F	FKM

Code	Accuracy
05	±0.5%
10	±1.0%

PT300S -X - G1/2 -HSM1 - 420 -21 -B 05

Notes

1. For 0～5VDC and 0～10VDC output, the 0 is not real zero output, and the minimum output voltage is 50mVDC.
2. Only use the pressure sensor to test the medium which have no corrosion to its housing and seal material.
3. Can not use sharp tools to clean the pressure hole when the hole of the pressure sensor is blocked. The pressure sensor shall be removed from system and put the pressure hole part into the fluid which can dissolve the blocking substance.
4. In order to protect the transmitter used at areas with many lightning, suggest adding a lightning protection device and reliably connecting the shield line to EARTH.
5. For other need contact factory.