

## CS-PT1200 Series General Pressure Transmitter

### Product Features

- Ceramic piezo-resistive sensing element
- Measuring range: 0~50bar Gauge
- Accuracy: 0.5 %BFSL or 1%BFSL
- Output: 4 ... 20 mA, DC 0 ... 10 V, DC 0 ... 5 V etc.
- Electrical connection: DIN43650C, Packard, M12x1, Cable outlet with waterproof joint, Sheathed cable outlet etc.
- Pressure connection: G1/4, 7/16-20UNF-2B female, 7/16-20UNF-2A male, NPT1/4, G1/2 etc.
- High accuracy and high cost performance
- Suitable for mass production

### Applications

- General pressure measurement
- Machinery manufacturing
- Measurement and control technology
- Hydraulic and pneumatic technology
- Pumps and compressors

### Product Description

Designed for general industrial application, CS-PT1200 series pressure transmitters feature compact structure, stable quality and high cost performance.

CE and RoHS certification enables extensive use of CS-PT1200 series pressure transmitters all over the world. We can supply you in short term products with different pressure units and pressure connections to meet your specific applications.

### Performance Parameters

Temperature: 25°C, power: 5VDC or 12VDC, RH: 45%~75%, Atmospheric pressure: 86KPa ~ 106KPa

<b>Pressure Range</b>	0~50bar Gauge			
<b>Output Signal</b>	0.5~4.5V Ratio	0~10V Voltage	0~5V Voltage	4mA~20mA
<b>Power supply (U+)</b>	5VDC	12~30VDC	10VDC~30VDC	
<b>Output Load</b>	≥10KΩ			$\leq (U+ - 10) / 0.023\Omega$
<b>Over Voltage</b>	16VDC	30VDC		
<b>Reverse Voltage</b>	-16VDC	-30VDC		

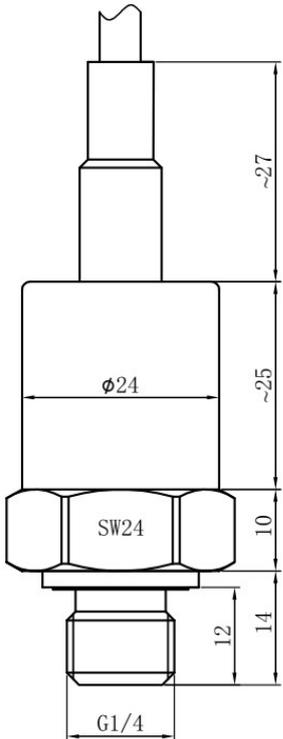
<b>Accuracy at Room Temperature</b>	Default: $\pm 0.5\%$ F.S., Option: $\pm 1.0\%$ F.S. (see Note 1)
<b>Medium Temperature</b>	$-30 \sim 120^{\circ}\text{C}$ (see Note 2)
<b>Working Temperature</b>	$-20 \sim 85^{\circ}\text{C}$
<b>Storage Temperature</b>	$-40^{\circ}\text{C} \sim 105^{\circ}\text{C}$
<b>Long-term Stability</b>	$\pm 0.5\%$ F.S / year
<b>Settling Time</b>	(10%~90%) $\leq 10\text{ms}$
<b>Overload Pressure</b>	$\geq 150\%$ F.S
<b>Burst Pressure</b>	$\geq 200\%$ F.S
<b>Pressure Connection</b>	G1/4, 7/16-20UNF-2B female, 7/16-20UNF-2A male, NPT1/4, G1/2
<b>Electrical Connection</b>	DIN43650C, Packard, M12x1, Cable outlet, Sheathed cable outlet
<b>Sealings Materials for Wetted Part</b>	Default: NBR, Option: FKM
<b>Housing Material</b>	Default: 304 stainless steel, Option: 316L stainless steel.
<b>Insulation Resistance</b>	$\geq 100\text{M}\Omega @ 100\text{VDC}$
<b>Vibration Resistance</b>	10g, 5~2000Hz
<b>Shock Resistance</b>	20g, 11ms half sine
<b>Ingress Protection</b>	$\geq \text{IP65}$

Note 1: For products with pressure range 0~5 bar (5bar included), only  $\pm 1.0\%$  F.S accuracy is available.

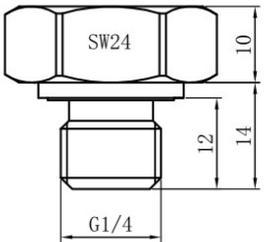
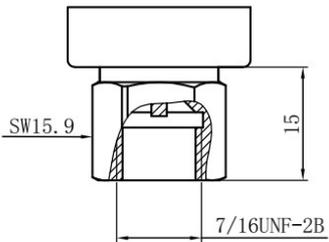
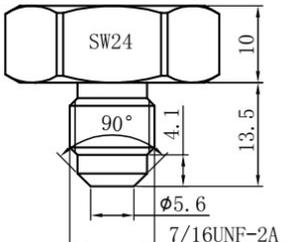
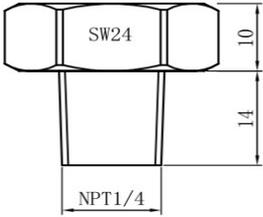
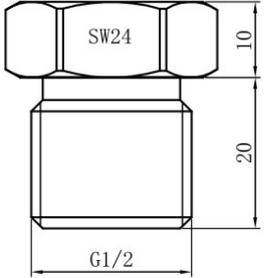
Note 2: The choice of seal materials mainly depends on the temperature of the medium to be measured. The default material is NBR, which is suitable for medium temperature of  $-30 \sim 120^{\circ}\text{C}$ . If one chooses FKM seal ring, the medium temperature should be somewhere between  $-20 \sim 125^{\circ}\text{C}$ . Please specify if the medium temperature exceeds  $85^{\circ}\text{C}$  for long.

**Structures and Dimensions**

<p>DIN43650C connector</p>	<p>Packard connector</p>
<p>M12x1 4-pin connector</p>	<p>Cable outlet</p>

<p>Sheathed cable outlet</p>	
	

**Pressure Connection**

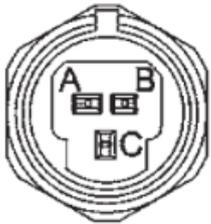
<p>G1/4</p>	<p>7/16-20UNF-2B</p>	<p>7/16-20UNF-2A</p>
		
<p>NPT1/4</p>		<p>G1/2</p>
		

## Wiring Definition

### DIN43650C Connector

	Pin	2-wire		3-wire	
		Definition	Wire Color	Definition	Wire Color
	1	Power	Red	Power	Red
	2	Output	Green / Blue	GND	Black
	3			Output	Green/ Blue
⊕	Shield	Black	Shield	Yellow	

### Packard Connector

	Pin	2-wire		3-wire	
		Definition	Wire Color	Definition	Wire Color
	A	Shield	Black	GND	Black
	B	Power	Red	Power	Red
	C	Output	Green / Blue	Output	Green / Blue
				Yellow (Shield)	

### M12x1 4-pin Connector

	Pin	2-wire		3-wire	
		Definition	Wire Color	Definition	Wire Color
	1	Power	Red	Power	Red
	2	Output	Green / Blue	Output	Green / Blue
	3			GND	Black
4	Shield	Black	Shield	Yellow	

### Cable Outlet

	Wire Color	Pin Definition	
		2-wire	3-wire
	Red	Power	Power
	Green / Blue	Output	Output
	Black	Shield	GND
Yellow		Shield	

## Ordering Guide

### PT1200 Series Pressure Transmitter

#### Code Measuring Range

**X** X stands for actual pressure measuring range

#### Code Pressure Connection

**G1/4** G1/4

**7/16U(F)** 7/16-20UNF-2B

**7/16U** 7/16-20UNF-2A

**NPT1/4** NPT1/4

**G1/2** G1/2

#### Code Electrical Connection

**HSM** DIN43650C connector

**P** Packard connector

**M12** M12 x 1 connector

**CW** Cable outlet

**C1** Sheathed cable outlet

#### Code Output

**420** 4~20mA

**0545R** 0.5~4.5V Ratio Voltage

**0050** 0~5V Voltage

**010** 0~10V Voltage

#### Code Power Supply

**09** 10~30VDC

**03** (5±0.25) VDC

**13** 12~30VDC

#### Code Seal Material

**B** NBR

**F** FKM

#### Code Accuracy

**05** ±0.5%

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							<b>10</b>	$\pm 1.0\%$
<b>PT1200</b>	<b>- X</b>	<b>- G1/4</b>	<b>-HSM</b>	<b>- 420</b>	<b>- 09</b>	<b>-B</b>	<b>05</b>	

**Notice:**

- The pressure transmitter must be used in a medium that is non-corrosive to the seal material and the housing material.
- In case the pressure guiding hole of the transmitter is blocked, it is forbidden to use sharp tools to clear it. Instead, one should remove the transmitter from the system, immerse the pressure guiding hole part in the liquid which can dissolve the blockage, and then the blockage will flow out easily.
- It's prohibited to open the transmitter by users for calibration or repair.
- Please contact Chinastar if you're not sure whether the transmitter is suitable for the medium to be measured.
- The transmitter should be installed in a location that is not easily bumped or stepped on.
- Exceeding of the transmitter overload pressure may cause permanent damage.
- Where lightning may occur, customers should consider lightning protection measures.

**Statement**

Chinastar Company reserves the right to modify the specifications and contents of this instruction. No further notice will be given if any changes are made. Due to product updates, the individual details of this document may not match the product. Please refer to the actual product. The right to interpret this document belongs to Chinastar Company.

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