

CS-PT300F Flush Diaphragm Pressure Transmitter

Product Features

- Diffused silicon oil sensing element
- Flush diaphragm
- Fully welded
- Multiple pressure connections and electrical connectors available
- Corrosion resistance, easy cleaning
- High stability

Applications

- Food and beverage manufacturing, pharmaceutical industry, biotechnology, sanitary applications
- Vacuum pressure monitoring, e.g. vacuum conveyors, pump monitoring
- Filling and packing machinery
- Dosing technology

Product Description

CS-PT300F pressure transmitter diaphragm connects the front end of the thread enabling large wetted area in the measuring medium. Through silicon oil, the pressure sensed is transmitted to the pressure chip to generate a pressure signal, which is then corrected to a linear pressure signal by the compensating circuit. It is easy to clean when there's residue or fouling on the pressure connection. Therefore, it ensures long service life of the pressure transmitter, without problems of scaling, clogging etc.

Performance Parameters

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

Pressure Range	-100Kpa...0~20Kpa...35MPa			
Output Signal	0.5 ~ 4.5V ratio voltage	0~10V voltage	0~5V voltage	4mA~20mA
Power Supply (U+)	5VDC	12~30VDC	10VDC~30VDC	
Output Load	≥10K Ω			≤ (U+ - 10) / 0.023 Ω
Over Voltage	16VDC	30VDC		
Reverse Voltage	-16VDC	-30VDC		
Accuracy at room temperature	Default: ±0.5%, Option: ±0.25% and ±1.0%			
Working temperature	-25°C~85°C			
Compensation Temperature	0°C~50°C			

Storage Temperature	-40°C~105°C
Long-term Stability	±0.25%FS/year
Settling Time	(10%~90%)≤10ms
Overload Pressure	≥150%F.S
Burst Pressure	≥300%F.S
Pressure Connection	G1/2, G3/4, M20×1.5, NPT1/2, 1.5" Clamp, 2" Clamp
Electrical Connection	DIN43650A, Packard, Cable outlet, M12x1
Sealings for Pressure Connection	Default: NBR, Option: FKM
Housing Material	wetted part: 316L, the rest part: 304
Insulation Resistance	≥100MΩ @100VDC
Insulation Strength	500VDC@60second
Vibration Resistance	10g, 5~2000Hz
Shock Resistance	20g, 11ms half sine
Ingress Protection	IP65

Structures and Dimensions

With DIN43650A connector	With Packard Metri-Pack connector


With cable outlet	With M12x1 (4-pin) connector

Pressure Connections

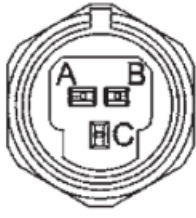
<p>G1/2</p>	<p>G3/4</p>	<p>M20x1.5</p>
<p>NPT1/2</p>		<p>1.5" clamp</p>
<p>2" clamp</p>		

Wiring Definition


DIN43650A 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 Metri-Pack 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	Shield	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

PT300F Pressure Transmitter

Code	Measuring Range
X	X stands for actual pressure measuring range

Code	Pressure Connection
G1/2	G1/2
G3/4	G3/4
M20×1.5	M20×1.5
NPT1/2	NPT1/2
1.5"	1.5"Clamp
2"	2"Clamp

Code	Electrical Connector
HSM1	DIN43650A
P	Packard
CW	Cable Outlet
M12	M12 x 1

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
03	±0.25%
05	±0.5%
10	±1.0%

PT300F -X - G1/2 -HSM1 - 420 - 09 -B 05

Notice:

- a. The pressure transmitter must be used in a medium that is non-corrosive to the seal material and the housing material.
- b. In case the pressure guiding hole of the transmitter is blocked, it is forbidden to use sharp tools to clear it. Instead, 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.
- c. It's prohibited to open the transmitter by users for calibration or repair.
- d. Please contact Chinastar if you're not sure whether the transmitter is suitable for the medium to be measured.
- e. The transmitter should be installed in a location that is not easily bumped or stepped on.
- f. Exceeding of the transmitter overload pressure may cause permanent damage.
- g. 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.
