

PCM450 Flush Pressure Transmitter with Flange

Features

- Flange mounting
- Double-wire mode, 4~20mA analog output, HART® protocol data communication
- Intelligent LCD display with backlight
- Diaphragm with large size, all-welded sealing, reliable and durable
- Used for the pressure measurement for gas, liquid, steam
- Optional anti-corrosion diaphragm (Tantalum, Hastelloy C, 316L, 316L sprayed with PTFE)
- Especially suitable for high temperature viscous liquid
- The price is cheaper than that of similar imported instruments

Applications and industries

- Process control fields for the industries such as petroleum, chemical industry, metallurgy, electricity, food, papermaking, medicine, machine manufacturing, scientific experiment and military aviation etc.

Notes:

- 1 Do not touch the diaphragm with hard objects, which may cause damage to the diaphragm.
- 2 Please read the Instruction Manual of the product carefully before installation and check the relevant information of the product.
- 3 Strictly follow the wiring method for wiring, otherwise it may cause product damage or other potential faults.
- 4 Misuse of the product may cause danger or personal injury.



Product overview

PCM450 Flush Pressure Transmitter with Flange is a type of flush product in order to meet the flange mounting requirement of the customer. This product adopts the imported diffuse silicon pressure sensitive element, and after the long-term aging and stability selecting, the product performance is stable and reliable.

PCM450 Flush Pressure Transmitter with Flange takes the international standard flange plate as the connection standard, and can realize the on-site flange mounting mode for the user. Because the stress diaphragm is exposed and senses the pressure directly, convenient for cleaning, and able to meet the moisture proof, waterproof, ex-proof and other severe working condition requirements. The products of this series are widely applied for the viscous media with particles in the fields such as industrial process control, petroleum, chemical industry, metallurgy etc.

Notes:

- 1 Do not misuse documentation.
- 2 The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- 3 Complete installation, operation, and maintenance information is provided in the instructions of the product.
- 4 Misuse of the product may cause danger or personal injury.

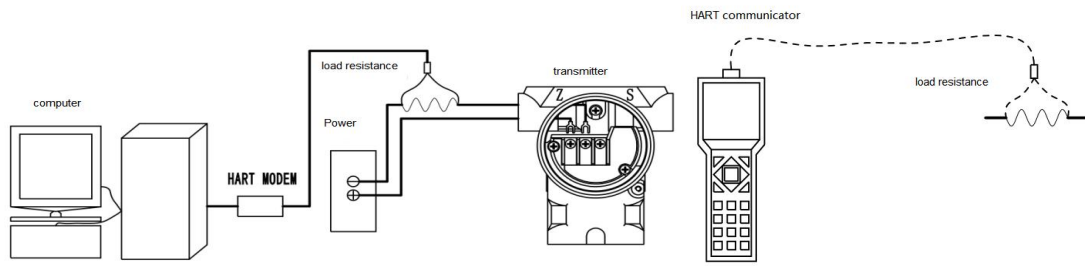
Performance parameters

Pressure range	-100kPa...0~10kPa...10MPa
Pressure reference	Gauge pressure Sealed gauge pressure
Supply & output	4~20mA, 4~20mA+HART® protocol (24V power supply)
Accuracy	±0.5%F.S. (@25±5°C)
Temperature drift	≤35kPa: ±3%F.S. (0°C~60°C) Other ranges: ±2%F.S. (-10°C~70°C)
Operating temp.	-30°C~80°C; with LCD gauge outfit -30°C~70°C
Medium temp.	-40°C~100°C
Storage temp.	-40°C~85°C
Insulation resistance	≥100MΩ/500VDC (200MΩ/250VDC)
Protection grade	IP65
Ex-proof grade	Exd II BT6 Gb
Overload pressure	150%FS
Long-term stability	±0.2%FS/year
Diaphragm material	316L , 316L sprayed with PTFE, Hastelloy C, tantalum
Filling liquid	Silicon oil
Housing material	Die-casting aluminum epoxy resin coating
Electrical connection	M20×1.5
Pressure connection	DN25, DN50, DN80
Weight	3.5kg (DN50)

Pressure range selection

Code	Definition	Ranges (X as measured pressure value)
10kG	10kPa Gauge pressure	0kPa < X ≤ 10kPa
35kG	35kPa Gauge pressure	10kPa < X ≤ 35kPa
70kG	70kPa Gauge pressure	35kPa < X ≤ 70kPa
100kG	100kPa Gauge pressure	70kPa < X ≤ 100kPa
250kG	250kPa Gauge pressure	100kPa < X ≤ 250kPa
500kG	500kPa Gauge pressure	250kPa < X ≤ 500kPa
1MG	1MPa Gauge pressure	500kPa < X ≤ 1MPa
1.6MG	1.6MPa Gauge pressure	1MPa < X ≤ 1.6MPa
1MS	1MPa Seal gauge pressure	1MPa < X ≤ 2.5MPa
2.5MS	2.5MPa Seal gauge pressure	2.5MPa < X ≤ 4MPa
10MS	10MPa Seal gauge pressure	4MPa < X ≤ 10MPa

HART communication connection diagram

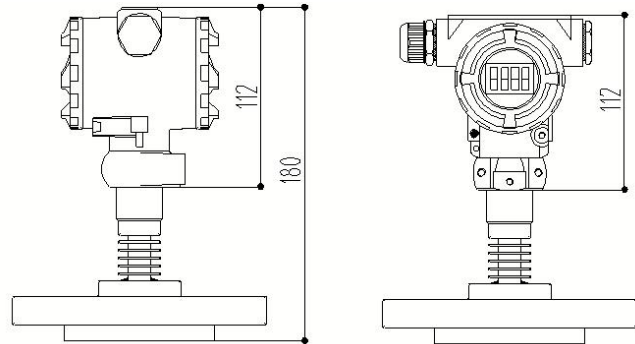
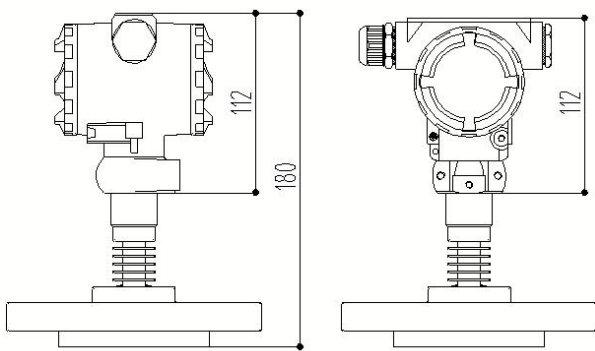


Structure dimension

in mm

J1: 2088 housing

J1X: 2088 housing with display

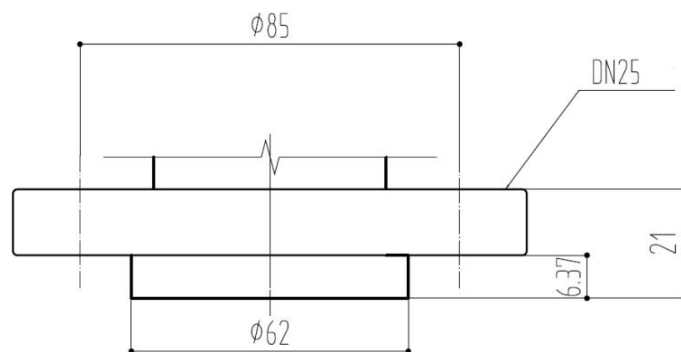


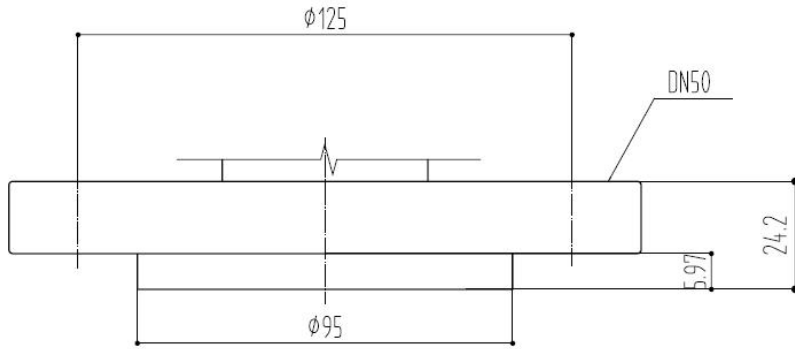
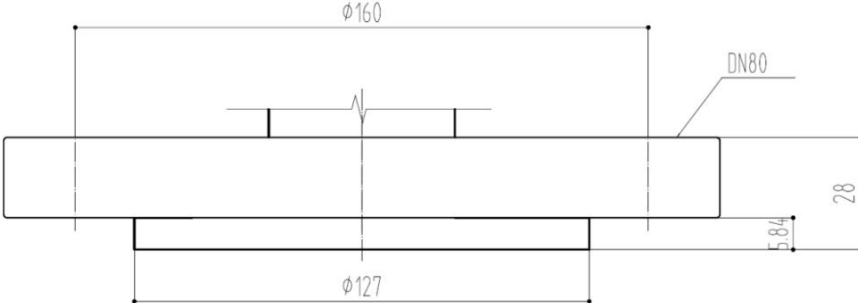
Pressure connection

Flange model

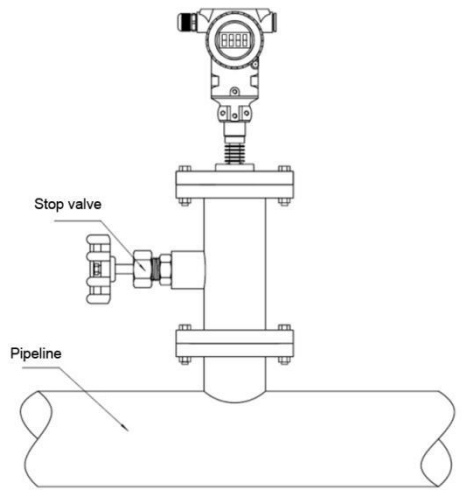
Dimension drawing in mm

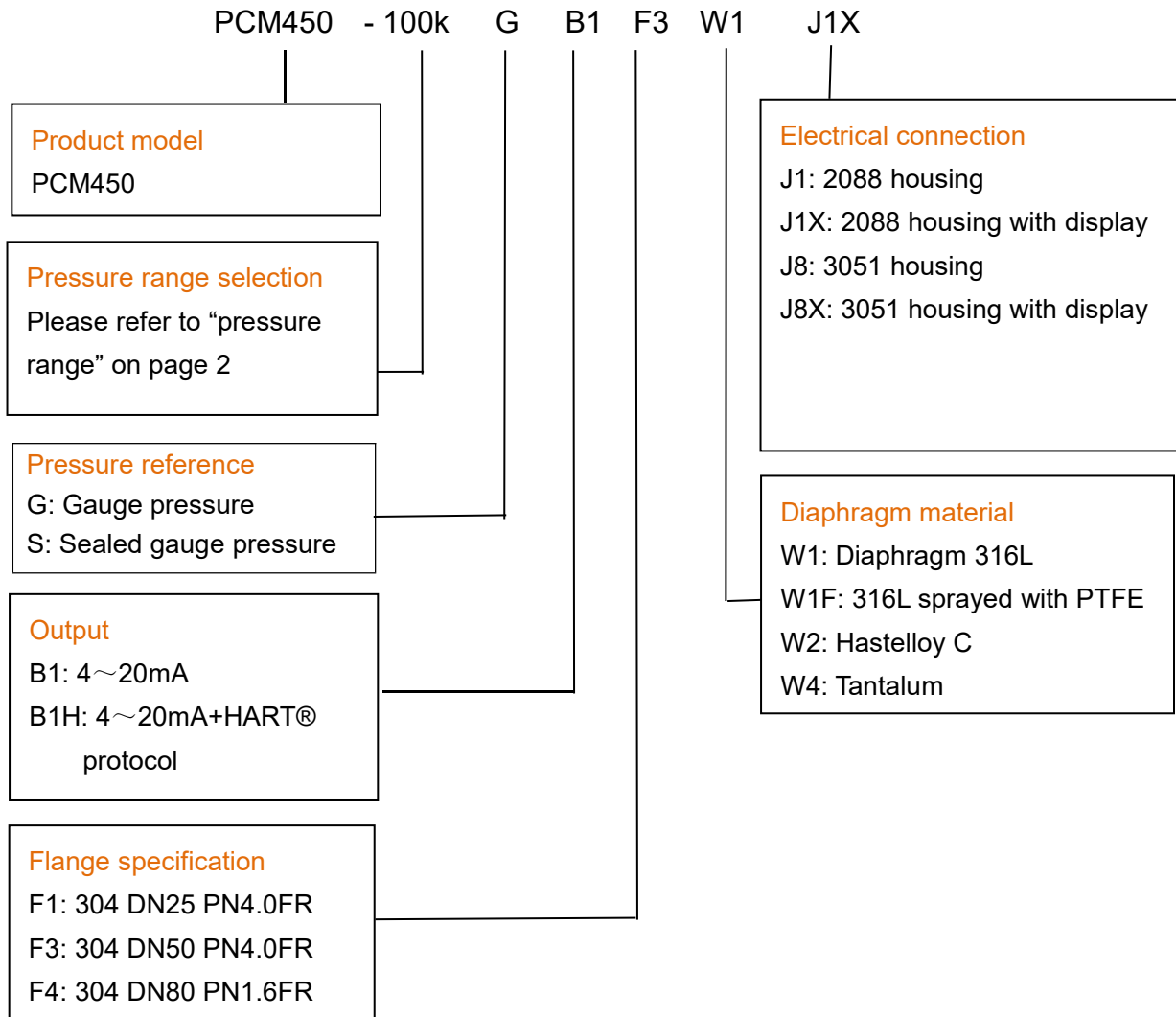
DN25



<p>DN50</p>	 <p>Technical drawing of the DN50 sensor. It shows a cylindrical body with a diameter of $\phi 125$ and a length of 125. The sensor is mounted on a pipe with a diameter of $\phi 95$. The sensor's diameter is labeled as DN50. The distance from the pipe end to the sensor's center is 5.97. The total length of the sensor assembly is 24.2.</p>
<p>DN80</p>	 <p>Technical drawing of the DN80 sensor. It shows a cylindrical body with a diameter of $\phi 160$ and a length of 160. The sensor is mounted on a pipe with a diameter of $\phi 127$. The sensor's diameter is labeled as DN80. The distance from the pipe end to the sensor's center is 5.84. The total length of the sensor assembly is 28.</p>

Installation diagram

Outline drawing	Installation instruction
 <p>Outline drawing showing the sensor installed on a pipeline. The sensor is connected to the pipeline via a stop valve. Labels include 'Stop valve' and 'Pipeline'.</p>	<ul style="list-style-type: none"> ▲ Integrated pressure transmitter, direct installation with the process connector; ▲ The gasket is selected according to the medium characteristic and temperature range, and the balanced locking for various bolts should be ensured.



Example: PCM450-100kGB1F3W1J1X

The product model is PCM450. 100K: pressure range 100kPa, G: Gauge pressure, B1: output 4~20mA, F3: flange specification 304 DN50 PN4.0FR, W1: diaphragm material 316L, J1X: electrical connection 3051 housing with display.

Ordering tips

1. Please ensure the compatibility between the measured medium and the contacting part of the product when placing an order.
2. If there are special requirements for the product appearance or performance parameter, our company can provide customization.
3. Product selection code can not be arbitrarily combined, please consult before ordering.



Wotian reserves the right to make any change in this publication without notice. The information provided is believed to be accurate and reliable as of this product sheet.

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