

PCM460 Pressure Transmitter

Features

- Adopts high-performance diffusion silicon piezoresistive pressure sensors
- For gas, liquid, and other media pressure measurement
- Wide pressure ranges
- Digital displays option
- Multiple output signals

Applications

- Industrial site control
- Oil field
- Heavy industry
- Chemical industry
- Gas pipeline network
- Water supply pipeline network

Notes:

- 1 Do not touch the diaphragm with hard objects, which may cause damage to the isolation 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.



Overview

The PCM460 pressure transmitter uses a high-performance, high-stability OEM pressure sensor as the signal measuring element. The sensor signal is converted to a standard signal through special signal processing. This product, with stable and reliable performance, has passed long-term aging and stability screening and can be used in harsh outdoor environments. It also ensures the on-site pressure display, with zero and span transferable.

The connection interface of PCM460 can be compatible with other brands' transmitters or can be customized to meet users' requirements. The products of this series are widely applied to industrial process control, petroleum, chemical, metallurgy, and other industries.

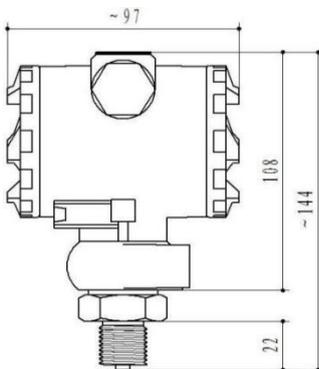
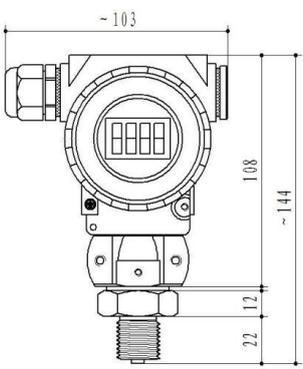
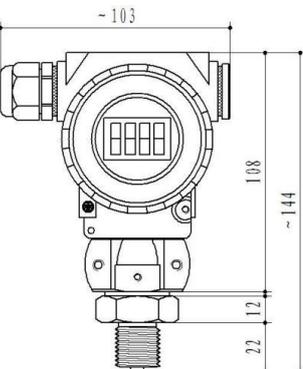
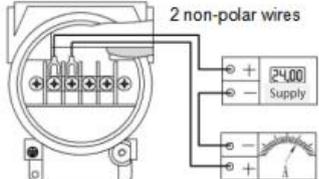
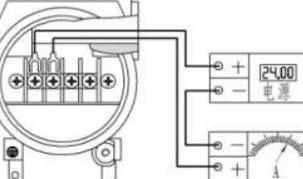
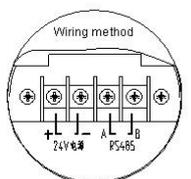
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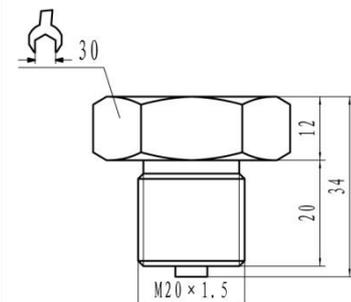
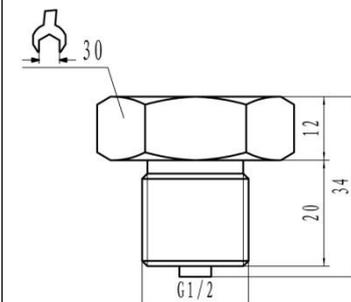
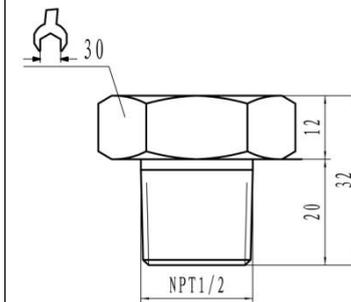
- 1 Do not misuse documentation.
- 2 The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- 3 Complete installation, operation, and maintenance information is provided in the instructions of the product.
- 4 Misuse of the product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

Performance parameters

Pressure Range	-100kPa...0~20kPa...100MPa
Pressure Type	Gauge pressure, Absolute pressure, Sealed gauge Pressure
Supply & Output signal	4~20mA+HART without display (18~36V)
	4~20mA+Hart/RS485 with display (12~36V)
Operating temperature	-20°C~85°C
Medium temperature	-20°C~85°C
Storage temperature	-40°C~125°C
Temp.effect on offset	Range>35kPa: ±1.5%FS (@-10°C~70°C)
	Range≤35kPa: ±3%FS (@0°C~60°C)
Sensitivity temp. drift	Range>35kPa: ±1.5%FS (@-10°C~70°C)
	Range≤35kPa: ±3%FS (@0°C~60°C)
Overload pressure	150%FS~300%FS
Mechanical vibration	20g (20~5000Hz)
Shock	100g (11ms)
Accuracy	0.5 Level
Insulation	100MΩ/250VDC
Response time	HART: ≤2s (Up to 90%FS)
	RS485: ≤1000ms (Up to 90%FS)
Long-term stability	±0.2%FS/year
EMC surging	(IEC61000-4-5) 2kV
EMC static electricity	(IEC61000-4-2) Contact discharge 8kV; Air discharge 15kV
Protection grade	IP65
Ex-proof grade	Intrinsic safety explosion-proof Exia II CT6
Material	Housing: low copper aluminum alloy; Isolation diaphragm: 316L
Media compatible	Various media compatible with 316L stainless steel

Electrical connection and wiring method

Type	J1: 4~20mA+Hart without display	J1X: 4~20mA+Hart with display	J8X: 4~20mA+RS485 with display
Dimension Unit: mm			
Wiring method			

Pressure connection			
Type	C1: M20×1.5	C2: G1/2	C7: NPT1/2
Dimension Unit: mm			

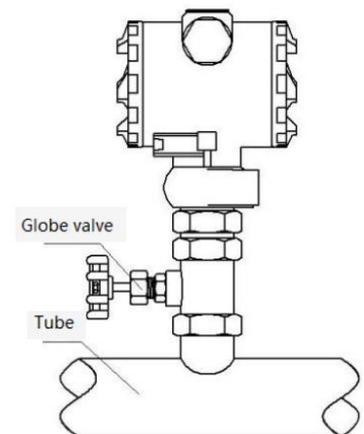
Installation diagram (Only for reference)

Installation tips:

- (1) The product is installed vertically on the field pressure connection.
- (2) When installing outdoors, the transmitter should be placed in a ventilated and dry place, avoiding direct exposure to strong light and rain; otherwise, it will cause performance degradation or malfunction.
- (3) When installing the product in a lightning-prone area, "lightning protection" should be indicated when ordering; meanwhile, it is highly recommended to install lightning protection devices on site, and ensure both the product and power supply are reliably grounded. These measures will reduce the probability of lightning damage to the transmitter.

(4) If no output or abnormal output after installation, please check:

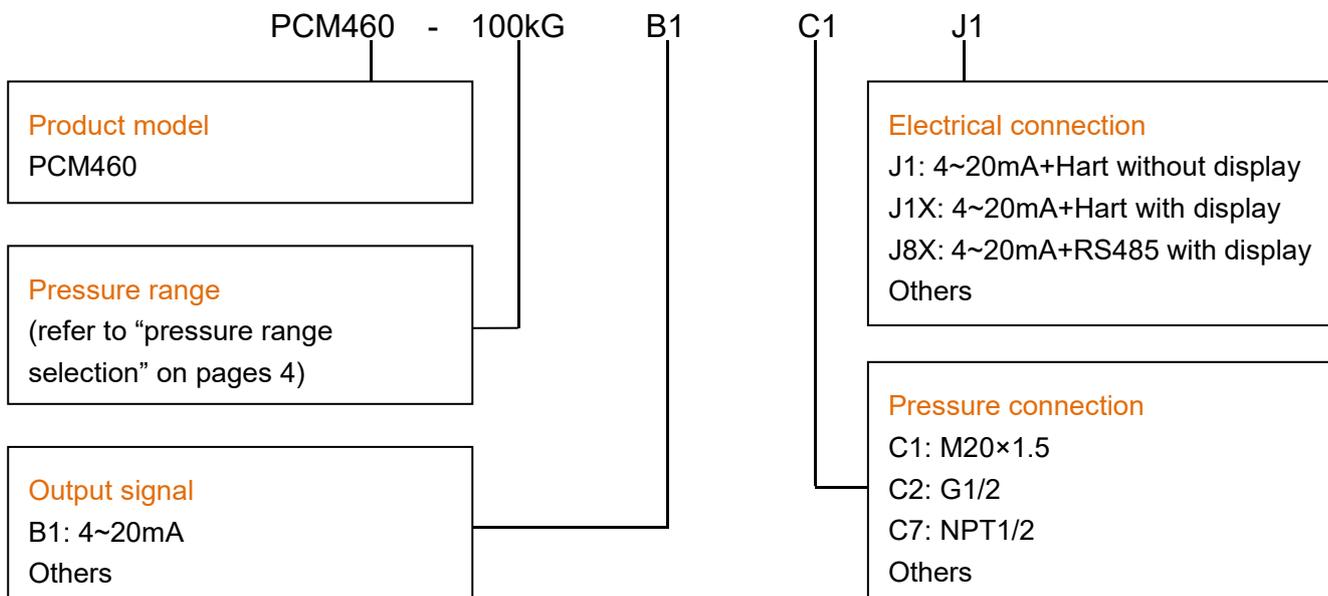
- ① Whether the electrical connection is accurate and firm;
- ② Whether the supply voltage is too low and whether the load resistance is too high.



Pressure range selection					
Range code	Pressure reference	Pressure range	Overload pressure	Burst pressure	Note
10kG	G	0~10kPa	300%FS	600%FS	
20kG	G	0~20kPa	300%FS	600%FS	
35kG	G	0~35kPa	300%FS	600%FS	
70kG	G	0~70kPa	300%FS	600%FS	
100kG	G	0~100kPa	200%FS	500%FS	
160kG	G	0~160kPa	200%FS	500%FS	
250kG	G	0~250kPa	200%FS	500%FS	
400kG	G	0~400kPa	200%FS	500%FS	
600kG	G	0~600kPa	200%FS	500%FS	
1MG	G	0~1MPa	200%FS	500%FS	
100kA	A	0~100kPa	200%FS	500%FS	
160kA	A	0~160kPa	200%FS	500%FS	
250kA	A	0~250kPa	200%FS	500%FS	
400kA	A	0~400kPa	200%FS	500%FS	
600kA	A	0~600kPa	200%FS	500%FS	
1MA	A	0~1MPa	200%FS	500%FS	
1.6MS	S	0~1.6MPa	200%FS	500%FS	
2.5MS	S	0~2.5MPa	200%FS	500%FS	
6MS	S	0~6MPa	200%FS	400%FS	
10MS	S	0~10MPa	200%FS	400%FS	
16MS	S	0~16MPa	200%FS	400%FS	
25MS	S	0~25MPa	150%FS	400%FS	
40MS	S	0~40MPa	150%FS	300%FS	
60MS	S	0~60MPa	150%FS	300%FS	
100MS	S	0~100MPa	150%FS	300%FS	

Note: G gauge pressure, A absolute pressure, S shell sealed pressure

How to order



Example: PCM460-100kGB1C1J1

Product model: PCM460, pressure range 0~100kPa, gauge pressure, output signal: 4~20mA+Hart, pressure connection: M20×1.5, J1: 2088 housing without display.

Optional accessories

Standard accessories: white plastic tense wires and end caps; Metal tense wires and end caps are available as optional extras at an additional cost. Please specify this in the order.

Ordering tips

Please ask us whether the unit you require can be displayed before placing an order.

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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