PCM391 Pressure Transmitter

Features

- Compact structure
- Digital circuit compensation
- Strong anti-interference and excellent long-term stability
- Small diameter, small size, easy to install and use
- Available for measurement of absolute pressure, gauge pressure, and sealed gauge pressure
- Multiple electrical connection options
- SS316L Diaphragm
- Suitable for mass production

Applications

- Air compressor
- Hydraulic and pneumatic equipment
- Servo valve and transmission
- Air-conditioning system
- Pipeline system

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.

Overview

The PCM391 pressure transmitter is specially designed for small and medium-sized equipment applications, such as booster pumps, air compressors, and air conditioning systems. It is also applicable to a wide range of industrial applications, with various structural forms, output forms, and pressure connections to meet the requirements of most applications. The PCM390 is designed with a compact structure, especially suitable for installation in narrow spaces.

Notes:

1 Do not misuse documentation.

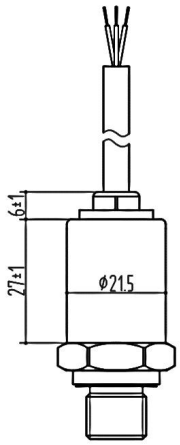
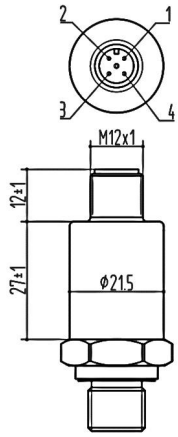
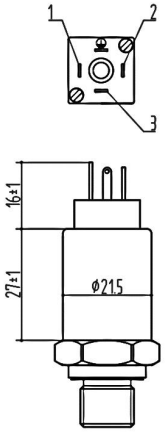
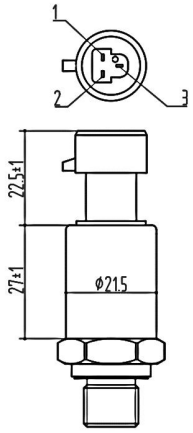
2 The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.

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	0~100kPa…5MPa
Pressure reference	Gauge pressure, Absolute pressure, Sealed gauge pressure
Accuracy	±0.5%FS(@25±5℃)
Hysteresis & repeatability	±0.1%FS
Temperature drift	±1.5%FS(-20℃~85℃)
Response time	<100ms
Durability	≥10^6 pressure cycles
Ambient temp.	-20℃~85℃
Medium temp.	-30℃~105℃
Storage temp.	-40℃~120℃
EMC-interference	IEC 61000-6-3
EMC-immunity	IEC 61000-6-2
Insulation resistance	≥100MΩ/250VDC
Vibration resistance	Sine curve: 20g, 25Hz~2kHz; IEC 60068-2-6 Random: 7.5grms, 5Hz~1kHz; IEC 60068-2-64
Shock resistance	Shock: 10g/11ms; IEC 60068-2-27 Free fall: 1m; IEC 60068-2-32
Protection	IP65
Medium compatibility	All the media compatible with stainless steel 316L
Net weight	50g~90g
Withstand voltage	1800V AC/1min

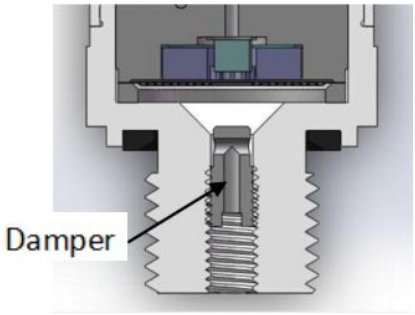
Output signal and power supply				
Code	**B1**	**B6**	**B7**	**-**
Output signal	4~20mA	0.5~4.5V R/M	0~10V	Special power supply & output signal
Power supply	9~30VDC	5VDC	12~30VDC	Customized

Electrical connection & wiring mode		
Connector code	**J3: Cable outlet**	**J4: M12**
Dimension In mm		
Wring method (2-wire current)	Red wire: Power supply+ Green wire: Current output	Pin 1: Power supply+ Pin 2: Current output
Wring method (3-wire voltage)	Red wire: Power supply+ Green wire: Common-ground Yellow wire: Voltage output	Pin 1: Power supply+ Pin 2: Voltage output Pin 3: Common-ground
Connector code	**J6: Mini Din**	**J7: Packard**
Dimension In mm		
Wring method (2-wire current)	Pin 1: Power supply+ Pin 2: Current output	Pin 1: Power supply+ Pin 2: Current output
Wring method (3-wire voltage)	Pin 1: Power supply+ Pin 2: Common-ground Pin 3: Voltage output	Pin 1: Power supply+ Pin 2: Common-ground Pin 3: Voltage output

Application of damper

Application

Cavitation, liquid hammer, and the pressure peak may occur in air or hydraulic systems with varying flow rates, such as the rapid closing of a valve or the start and stop of a pump.

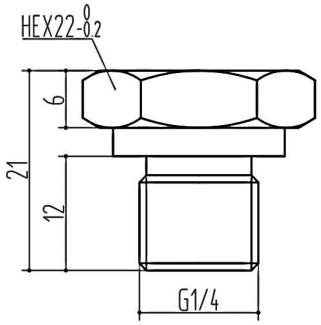
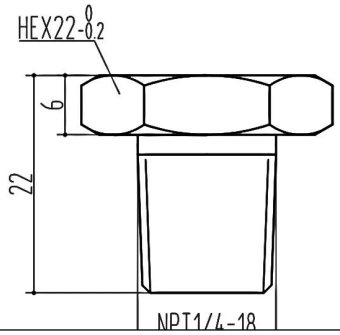
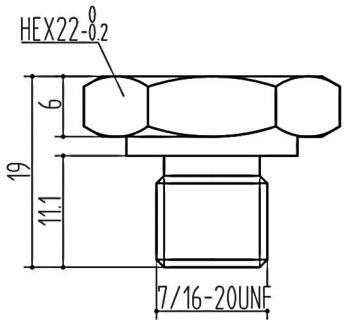
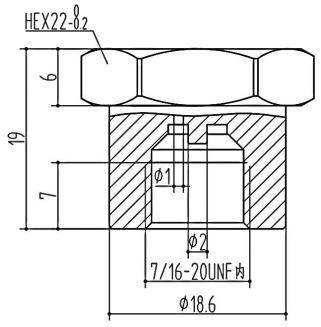
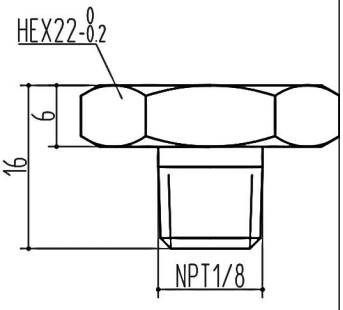


Even at relatively low operating pressures, these problems may occur at the entrance and exit.

Installation method

In the liquid containing particles, nozzle clogging may occur. The vertical mounting of the pressure transmitter minimizes the risk of clogging.

Pressure connection

Thread code	**C3: G1/4**	**C5: NPT1/4-18**	**C11: 7/16-20UNF**
Dimension In mm			
Recommended torque	15~25 N·m	15~25 N·m	15~25 N·m
Thread code	**C11F: 7/16-20UNF Female**	**C18: NPT1/8-27**	-
Dimension In mm			-
Recommended torque	15~25 N·m	15~25 N·m	-

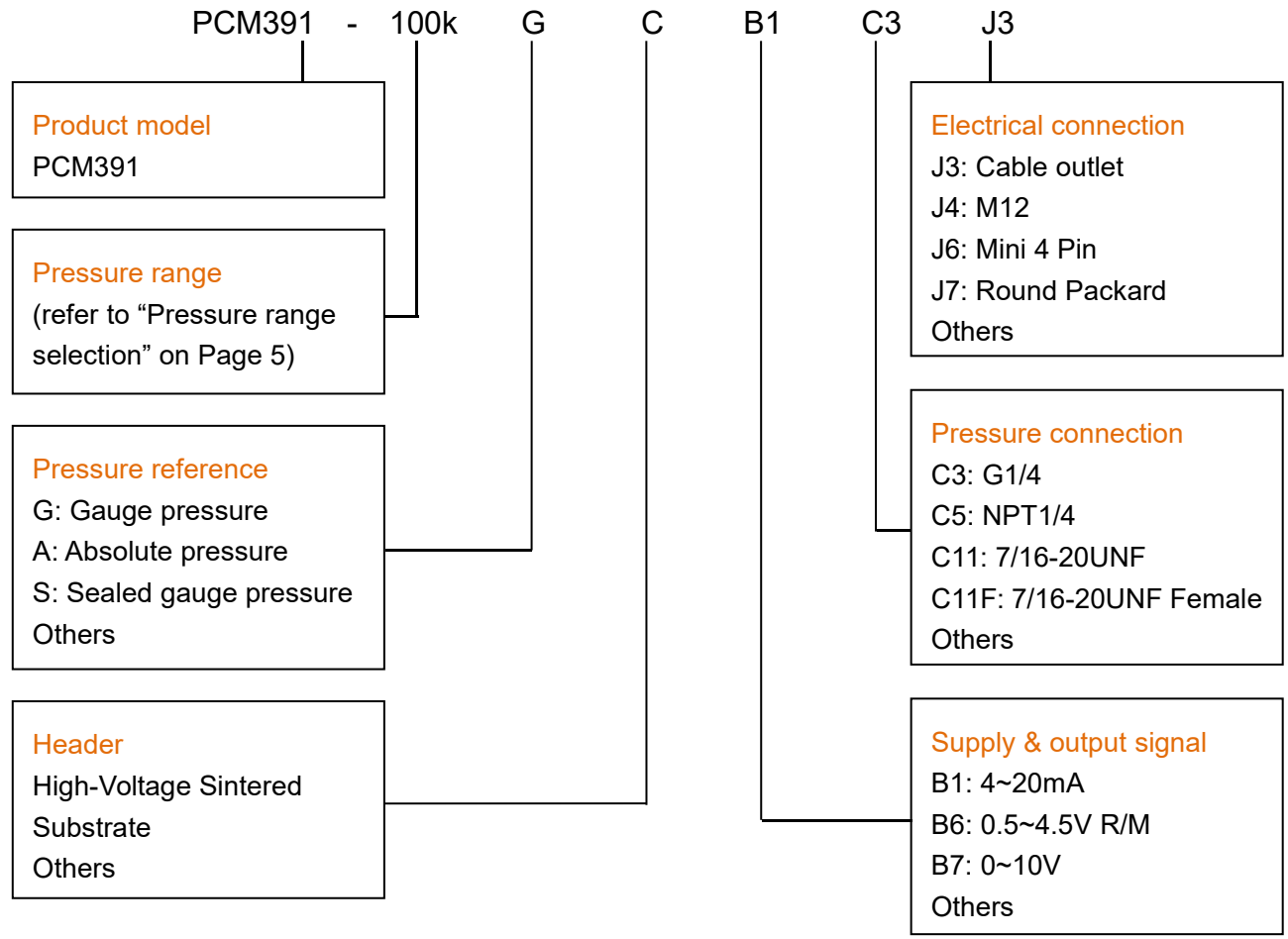
Note: Recommended torque depends on a number of factors, such as gasket material, supporting material, thread lubrication, and pressure.

Pressure range selection

Pressure range code	Pressure reference	Pressure range	Overpressure	Burst pressure	Notes
100k	G, A	0~100kPa	200%FS	500%FS	
160k	G	0~160kPa	200%FS	500%FS	
250k	G, A	0~250kPa	200%FS	500%FS	
400k	G	0~400kPa	200%FS	500%FS	
600k	G, A	0~600kPa	200%FS	500%FS	
1M	G, A	0~1MPa	200%FS	500%FS	
1.6M	G, S	0~1.6MPa	200%FS	500%FS	
2.5M	S	0~2.5MPa	200%FS	500%FS	
4M	S	0~4MPa	200%FS	400%FS	
5M	S	0~5MPa	200%FS	300%FS	

Note: G-Gauge pressure, A-Absolute pressure, S-Sealed gauge pressure.

How to order



Example: PCM391-100kGCB1C3J3

Refer to product model PCM391, with pressure range 0~100kPa, gauge pressure, high-voltage sintered substrate, 0output signal 4~20mA, pressure port G1/4, electrical connection cable outlet.

Ordering tips

1 Ensure the measured medium is compatible with the contacting part of the product.
2 For special requirements on the appearance and performance parameters, customization is available.

Contact us

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