

PC90E Differential Pressure Sensor with Dual Sensor

Features

- High performance, all solid state, high reliability
- High reliability imported pressure chip
- Static pressure error within $\pm 0.2\%FS/10MPa$
- Wide temperature compensation
- Constant current excitation
- 316L stainless steel all welded integrated structure
- Positive and negative pressure symmetrical, no O-ring inside

Applications

- Differential pressure transmitter core component
- Differential pressure flow transmitter core component

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

The PC90E differential pressure sensor with dual sensor is a type of differential pressure sensor with a large number of programs. The differential pressure sensitive core adopts a high-performance silicon piezoresistive differential pressure chip, which is assembled using a fully welded sealing structure and filled with silicone oil under high vacuum. Different materials of measuring membranes not only isolate the measured medium from the differential pressure chip, but also enable the sensor to reliably measure the differential pressure signals of various highly corrosive media for a long time. The differential pressure sensor converts the measured differential pressure signal into a linearly proportional millivolt voltage signal through external constant current power supply excitation.

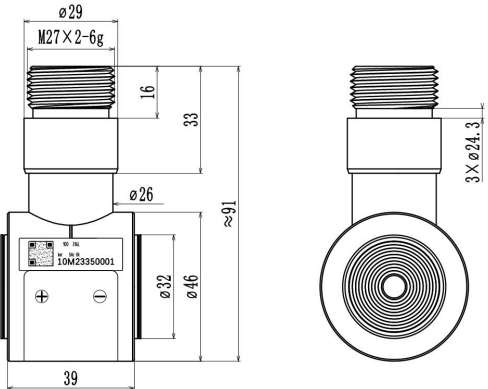
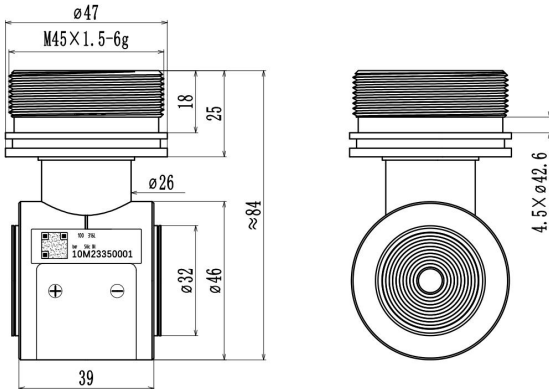
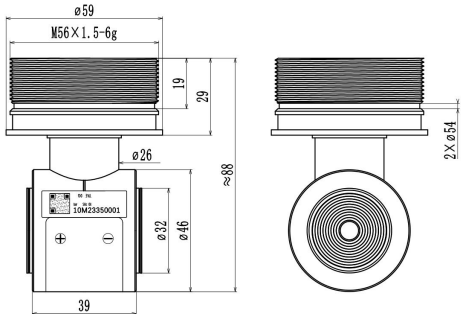
Notes:

- 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

Power Supply	Constant current 1.5mA
Operating temp.	-40~85°C
Storage temp.	-50~125°C
Output voltage	30~50mV
Zero temp. coefficient	±0.05%FS/°C
Temp. hysteresis	±0.1%FS
Pressure hysteresis	±0.025%FS
Long-term drift	±0.05%FS/year
Nonlinearity	±0.1%FS (typical)
Static pressure impact	±0.2%FS/10MPa
Diaphragm material	316L

Structure & dimensions

Thread code	Dimensional drawing	in mm
H2: M27×2		
H9: M45×1.5		
H10: M56×1.5		

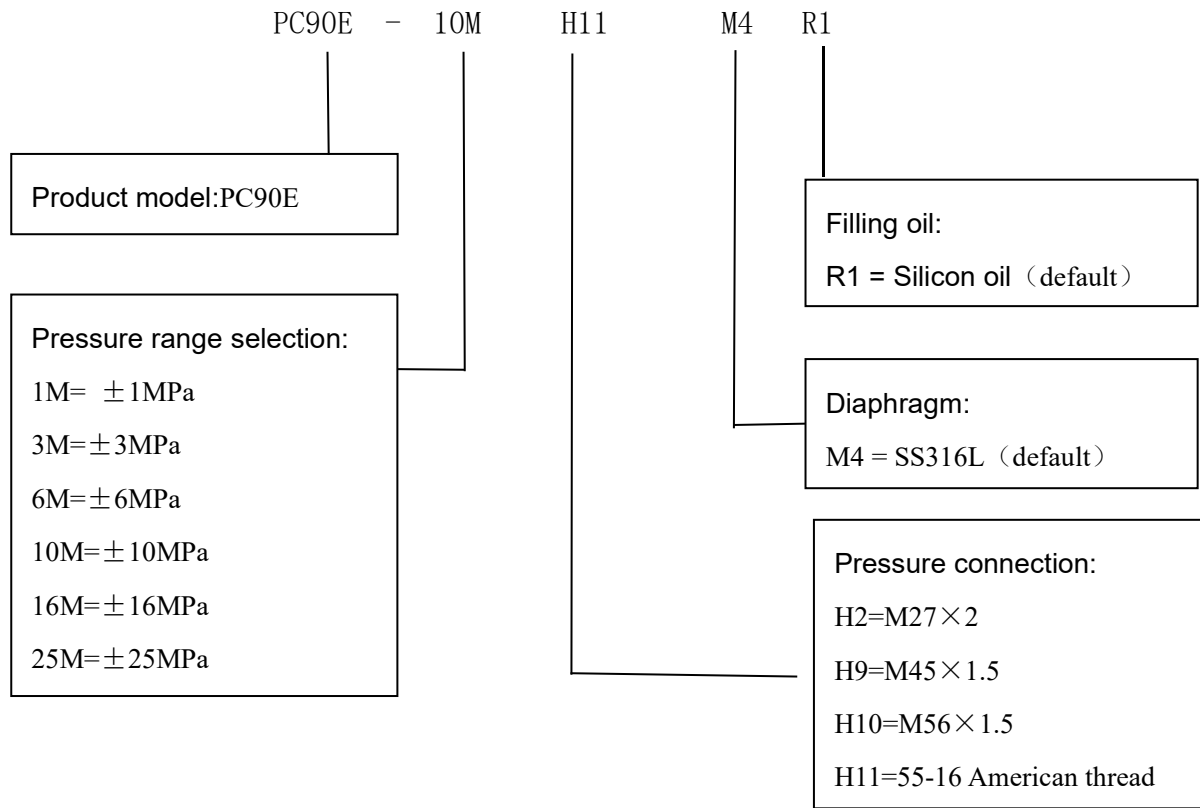
Thread code	Dimensional drawing	in mm
H11: 55-16 American thread		

How to order

Code	Pressure range	Unilateral overpressure	Static pressure
1M	± 1MPa	6MPa	6MPa
3M	± 3MPa	15MPa	15MPa
6M	± 6MPa	18MPa	18MPa
10M	± 10MPa	20MPa	20MPa
16M	± 16MPa	32MPa	32MPa
25M	± 25MPa	37.5MPa	37.5MPa

Electrical Connection

Wire color	Wire definition	Schematic Diagram
Red	Excitation+ (V+)	
Blue	Excitation - (V-)	
Yellow	Output+ (OUT+)	
White	Output- (OUT-)	
Green	Temperature+ (Diode+)	
Black	Temperature- (Diode-)	



Example: PC90E-10MH11M4R1

Refer to product model PC90E, with pressure range ±10MPa, pressure connection:55-16 American thread, diaphragm material is SS316L, filling oil is silicon oil and electrical connection is 110mm silica gel 6 wire .

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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