



MPM489 Pressure Transmitter

Features

- Reliable performance, easy application
- Short protection and reverse polarity protection
- Measure gauge, absolute and sealed gauge
- Intrinsic safe version, conforming to Standard Exia II CT6Ga of GB3836.4
- Exd product conforms to Standard GB3836.2, and Exd certificate is approved.
- Ship-use product conforming to CCS Rules of Classification of Sea-going Steel Ships (2006)
- CE、RoHS and ATEX approved



Introduction

MPM489 product is a pressure transmitter with zero and span adjustable. It uses high stable and reliable pressure sensor and special circuit board to produce transmitter, and performance is good and reliable. MPM489 pressure transmitter is used for measure and control of petroleum, chemi-industry, electric power, hydrology and flow pressure measure, etc.

Specification

Pressure range: -100kPa...0kPa~10kPa...100MPa

Overpressure: ≤ 1.5 times FS or 110MPa (min. value is valid)

Pressure type: gauge/ absolute / sealed gauge

Process connection: M20×1.5 male waterline seal (or on your demand)

Accuracy: $\leq \pm 0.5\%$ FS

Long term stability: $\leq \pm 0.3\%$ FS/year

Zero thermal drift: $\leq \pm 0.05\%$ FS/°C (≤ 100 kPa); $\leq \pm 0.03\%$ FS/°C (> 100 kPa)

Span thermal drift: $\leq \pm 0.05\%$ FS/°C (≤ 100 kPa); $\leq \pm 0.03\%$ FS/°C (< 100 kPa)

Compensation temp. : 0°C~50°C

Application temp. : -30°C~80°C -10°C~60°C (Exia) -20°C~60°C (Exd) -10°C~70°C (Cable)

Storage temp. : -40°C~120°C -20°C~85°C (Cable)

Power supply: 11V~28VDC 11V~28VDC 3.3V/5V DC

Output signal: 4mA~20mA DC(2-wire) 0/1~5/10V DC(3-wire) 0.5V~2.5V/4.5V DC(3-wire)

Load: $\leq (U-11)/0.02\Omega$ (2-wire) $\geq 10k$ (3-wire) $\geq 10k$ (3-wire))

Housing protection: IP65

Electric connection: DIN43650 plug or cable (1.5m)

<http://www.microsensor.cn>

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Construction and Outline Dimension

Construction material:

Housing: stainless steel 1Cr18Ni9Ti

Sensor housing: stainless steel 1Cr18Ni9Ti

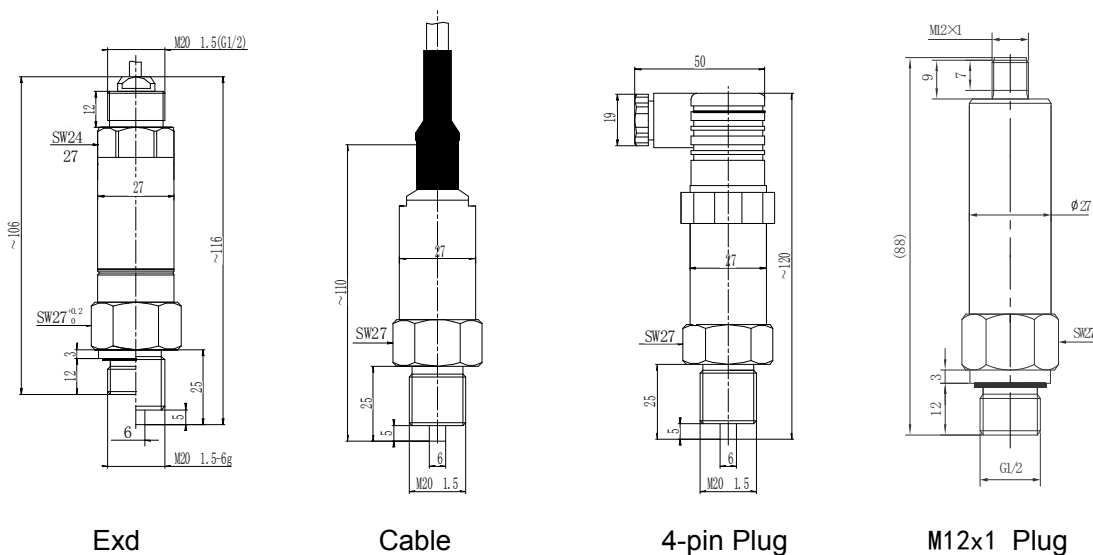
Diaphragm: stainless steel 316L

Sealed-ring: Viton

Plug housing: plastic

Cable: $\Phi 7.5\text{mm}$ Polyethylene Special Cable

Outline dimension: (Unit: mm)



Exd

Cable

4-pin Plug

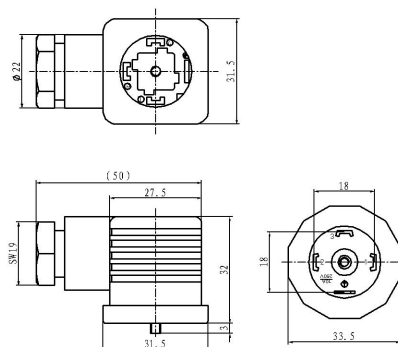
M12x1 Plug

Electric Connection

Transmitter connects with the outer circuit through DIN43650 plug. Terminal definition as below:

Pin	2-wire	3-wire
1	+V	+V
2	Signal: +OUT	GND
3	Null	Signal: +OUT

Plug Connection Wiring:



Cable Connection Wiring:

Wire color	2-wire	3-wire
Black	+V	+V
Red	0V	+OUT
White	Null	GND

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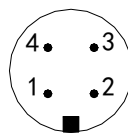
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M12x1 Plug Connection Wiring:

Pin	2-wire	3-wire
1	+V	+V
2	Null	GND
3	Signal: +OUT	Signal: +OUT



Order Guide

MPM489	Pressure Transmitter		
	Range	Pressure range: -100kPa...0kPa~10kPa...100MPa	
	[0~X]kPa or MPa	X: the actual measured pressure	
		Code	Power
		V ₁	24V DC
		V ₆	5V DC
		V ₇	3.3V DC
		Code	Output signal
		E	4mA~20mA DC
		F	1V~5V DC
		J	0V~5V DC
		V	0V~10V DC
		W	0.5V~2.5V DC
		K	0.5V~4.5V DC
		Code	Construction material
			Diaphragm Pressure port Housing
		22	SS 316L SS SS
		24	SS 316L SS 316L SS 316L
		25	Tantalum SS SS
		35	Tantalum Hastelloy SS
		Code	Others
		B ₁	4-pin Plug connection
		B ₂	Cable connection
		B ₄	M12×1 Plug connection
		PC ₁	Flush diaphragm, M20×1.5 male
		PC ₂	Flush diaphragm, R1/2 male
		PC ₃	Flush diaphragm, G1/2 male
		PD ₁	DN25 clamp connection(Large diaphragm)
		P ₃	DN25 clamp connection(Welding type)
		M ₆	4digits LED digital indicator(only for 4~20mA)
		M ₇	4digits LCD digital indicator(only for 4~20mA)
		i	Intrinsic safe version: Exia II CT6Ga
		T	Ship-use
		y	ATEX
		d	Exd II CT6 Gb
		C ₁	M20×1.5 male, face type seal
		C ₃	G1/2 male (used for flush diaphragm type)

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					C ₅	M20×1.5 male, waterline seal
					G	Gauge
					S	Sealed gauge
					A	Absolute
MPM489	[0~100kPa]	V ₅	E	22	B ₁ C ₅ G	the whole spec

Notes

1. Please pay attention that the media should be compatible with the contacted parts;
2. Flush diaphragm transmitter's pressure range: 0kPa~100kPa...35MPa; PD₁ transmitter's pressure range: 0kPa~100kPa...3.5MPa; P₃ transmitter's pressure range:-100kPa...0kPa~20kPa...2MPa;
3. If any special requirements on function or specification, please contact with us freely;
4. Please pay attention that the intrinsic safe version and ship-use product do not include digital indicator M6 or M7; Transmitter with M6 or M7, the power supply of the transmitter shall be no less than 20V DC;
5. 24V DC power supply (V₁), see "Specification" for detail about Power supply range;
6. When ordering, please pay attention to 3.3V/5V DC power supply. If the cable is connected out of line, the cable length should be less than 10m; When the order output is 0V to 10V DC product, the power supply is 15V to 28V DC;
7. 3.3V DC power supply (V₇), output can only select W(0.5V~2.5V DC); 5V DC power supply (V₆), output can only select W(0.5V~2.5V DC) or K(0.5V~4.5V DC), generally recommended K.