Pressure Transmitter MPM489

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.

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 (2018)
- CE, RoHS and ATEX approved

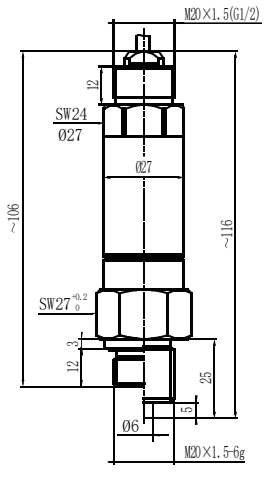
Specification

- Pressure range: -1bar…0bar~0.1bar…1000bar
- Overpressure: ≤1.5 times FS or 1100bar (min. value is valid)
- Pressure type: gauge/ absolute / sealed gauge
- Process connection: M20×1.5 male waterline seal (or on your demand)
- Accuracy: ≤±0.5%FS
- Long term stability: ≤ ±0.3%FS/year
- Zero thermal drift: ≤±0.05%FS/℃ (≤1bar); ≤±0.03%FS/℃ (>1bar)
- Span thermal drift: ≤±0.05%FS/℃ (≤1bar); ≤±0.03%FS/℃ (>1bar)
- Compensation temp. : 0℃ ~50℃
- Application temp. : -30℃ ~80℃ ; -10℃ ~60℃ (Exia); -20℃ ~60℃ (Exd); -10℃ ~70℃ (Cable)
- Storage temp. : -40℃ ~120℃ ; -20℃ ~85℃（Cable）
- Power supply: 11V~28VDC; 11V~28VDC; 3.3/5V DC
- Output signal: 4mA~20mA DC(2-wire);
- 0/1V~5/10V DC(3-wire);
- 0.5V~2.5/4.5V DC(3-wire)
- Load: ≤(U-11)/0.02Ω(2-wire); ≥10k(3-wire); ≥10k(3-wire)
- Housing protection: IP65
- Electrical connection: DIN43650 plug or cable(1.5m)

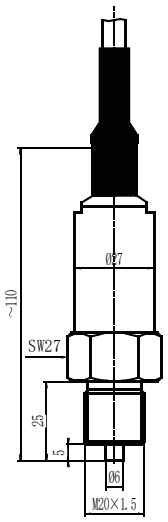
Construction Material

- Housing: stainless steel 304
- Sensor housing: stainless steel 304
- Diaphragm: stainless steel 316L
- Sealed-ring: Viton
- Plug housing: plastic
- Cable: Φ7.5mm Polyethylene Special Cable

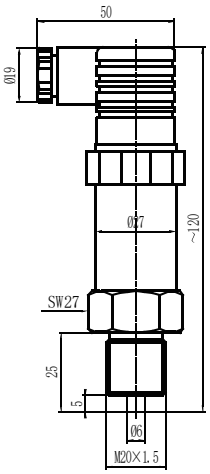
Outline Construction (Unit: mm)



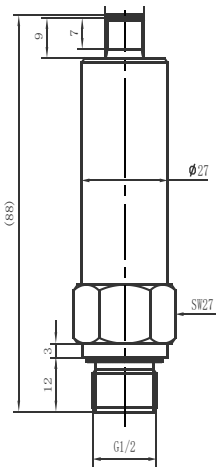
Exd



Cable



4-pin Plug



M12x1 Plug

Electrical Connection

Transmitter connects with the outer circuit through DIN43650 plug.

Plug Connection

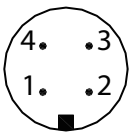
Pin	2-wire	3-wire
1	+V	+V
2	+OUT	GND
3	Null	+OUT

Cable Connection

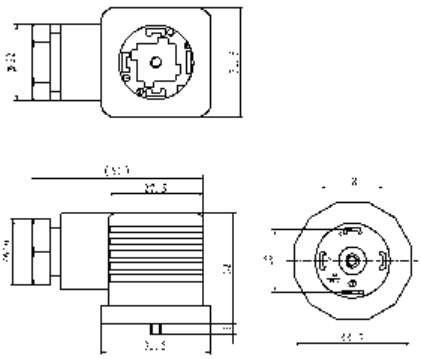
Wire color	2-wire	3-wire
Black	+V	+V
Red	0V	+OUT
White	Null	GND

M12x1 4-pin Plug Connection

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



M12x1 4-pin Plug Connection



4-pin Plug Connection

Order Guide

MPM489	Pressure Transmitter
Range	Pressure range: -1bar…0bar~0.1bar…1000bar
[0~X]bar	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 4-pin 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 4mA~20mA DC)
M_7	4digits LCD digital indicator(only for 4mA~20mA DC)
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)
C_5	M20×1.5 male, waterline seal
G	Gauge
S	Sealed gauge
A	Absolute

MPM489	[0~1bar]	V_5	E	22	B_1C_5G	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: 0bar~1bar…350bar; PD1 transmitter's pressure range: 0bar~1bar…35bar; P3 transmitter's pressure range: -1bar…0bar~0.2bar…20bar;

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.