

MPM489W Liquid Level Transmitter



Features

- Integrated construction, unnecessary to do outer adjustment
- Sensor housing protection IP68, connection box protection IP65;
- Cost-efficient, high reliability and stability;
- RoHS and ATEX approved
- Explosion-proof product conforms to ExialICT6 Ga of Standard

Construction Material

- Housing: stainless steel 304
- O-ring: Viton
- Rubber casing: NBR
- Cable: $\phi 7.5\text{mm}$ polyethylene cable
- Diaphragm: stainless steel 316L

Introduction

MPM489W is full sealed submersible level transmitter. It is made by building in high stable and reliable OEM pressure sensor and high accurate circuit board into the stainless steel housing. Integrated construction and standard signal provide the user easy and convenient application in the local working place. The special cable connects with housing, can be immersed into the media for a long time.

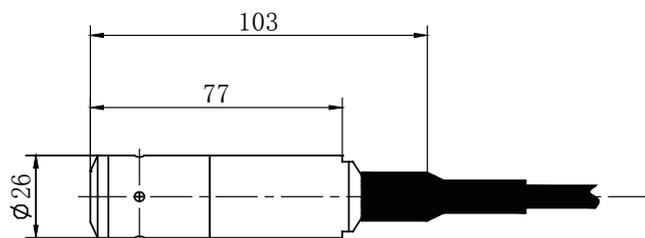
MPM489W level transmitter has compact size, light weight and good stability; it can be used for water or liquid measure and control of medicine, metallurgy, electricity, mine, city water supply and drainage and hydrology, etc.

Specification

- Range(FS): 1, 2, 5, 10, 20, 50, 100, 200mH₂O
- Overpressure: 1.5 times FS
- Accuracy: $\pm 0.5\%$ FS
- Stability: range $>10\text{mH}_2\text{O}$, $\pm 0.2\%$ FS/year
- range $\leq 10\text{mH}_2\text{O}$, 20mmH₂O/year
- Thermal drift:

| | zero | span |
|------------------------------------|-------------------------------------|-------------------------------------|
| range $>10\text{mH}_2\text{O}$ | $\pm 0.02\%$ FS/ $^{\circ}\text{C}$ | $\pm 0.05\%$ FS/ $^{\circ}\text{C}$ |
| range $\leq 10\text{mH}_2\text{O}$ | $\pm 0.05\%$ FS/ $^{\circ}\text{C}$ | $\pm 0.05\%$ FS/ $^{\circ}\text{C}$ |
- Application temp. range: $-10^{\circ}\text{C} \sim 70^{\circ}\text{C}$; $-10^{\circ}\text{C} \sim 60^{\circ}\text{C}$ (Exia)
- Storage temp. range: $-20^{\circ}\text{C} \sim 85^{\circ}\text{C}$
- Power supply: 11V~28VDC; 11V~28VDC; 5V DC
- Output signal: 4mA~20mADC(2-wire); 0~5/10VDC(3-wire); 0.5V~4.5V DC(3-wire)
- Load: $\leq (U-11)/0.02\Omega$ (2-wire); $\geq 10\text{k}$ (3-wire); $\geq 10\text{k}$ (3-wire)

Outline Construction (Unit: mm)



Electrical Connection

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

Order Guide

| MPM489W | | Level Transmitter | | | | | |
|--------------------------|-------------------------|--|---|---------|----------------|-----------------|--|
| Range | | Pressure range: 0m~1...200mH ₂ O | | | | | |
| [0~XmH ₂ O] L | | X: actual measurement range L: cable length suggested L-X=(1~2)m | | | | | |
| | | Code | Power | | | | |
| | | V ₁ | 24V DC | | | | |
| | | V ₆ | 5V DC | | | | |
| | | Code | Output signal | | | | |
| | | E | 4 mA~20mA DC | | | | |
| | | F | 1V~5V DC | | | | |
| | | J | 0V~5V DC | | | | |
| | | V | 0V~10V DC | | | | |
| | | K | 0.5V~4.5V DC | | | | |
| | | Code | Construction material | | | | |
| | | | Diaphragm | Port | Housing | | |
| | | 22 | SS 316L | SS | SS | | |
| | | 24 | SS 316L | SS 316L | SS 316L | | |
| | | 25 | Tantalum | SS | SS | | |
| | | Code | Others | | | | |
| | | M ₁ | 0~100% indicator(Only 4mA~20mA DC) | | | | |
| | | Y _b | Aluminum connection box without display | | | | |
| | | Y _c | MS200 water-proof connection box (default) | | | | |
| | | Y _d | PD140 lightning-proof protection device | | | | |
| | | Y _e | Connection box(with display or without display) | | | | |
| | | i | Intrinsic safe version Exia II CT6 Ga | | | | |
| | | y | ATEX | | | | |
| | | C ₁ | M20×1.5 male | | | | |
| | | C ₃ | G1/2 male | | | | |
| | | F ₁ | Fixed flange | | | | |
| MPM489W | [0~2mH ₂ O]5 | V ₅ | E | 22 | Y _c | the whole spec. | |

Notes

1. Please pay attention that the media should be compatible with the contacted parts; please inform the density of the media (except water);
2. Two kinds of cable are optional, polyurethane and polyethylene. The default is polyethylene. Polyurethane cable is more flexible and durable; it can be selected due to the requirement;
3. When the product is used in thunder storm area, we suggest the user to use protection device to protect the product and power grounding reliably;
4. For special requirement, please feel free to contact us;
5. When ordering, please pay attention to 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;
6. 24V DC power supply (V1), see "Specification" for detail about Power supply range.