# **MPM426WS** Deep-water Level & Temperature Transmitter



#### **Features**

- Level and temperature double output signal
- Reversed-polarity protection
- Suitable for deep-water level and temperature measurement
- IP68 protection
- Automatic production line for quality guarantee, stable and reliable

#### Introduction

MPM426WS Deep-water Level&Temperature Transmitter is a full welded, full sealed and submersible diffusion silicon instrument for level and temperature measurement. It uses a high stable and reliable piezo-resistive OEM pressure sensor and a PT1000 temperature sensor with a high-performance signal processing circuit mounted in stainless steel housing. Meanwhile, the product adopts double-way sealing with special rubber rings and the sealing and locking line are separated in order to improve the sealing degree. The cavity(the terminal is in it) is filled with highvacuum water-resistance and mineral oil-resistance sealing silicone so that the leading-out terminal can be fully sealed and insulated. It is especially suitable for measurement of oil and gas in deep well. The advanced production technology and automated production line ensure the stability of products, and good adaptation makes your device able to copy with various complex environments.

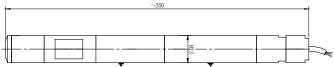
#### Specifications

|                   | 1   |  |  |  |  |
|-------------------|---|--|--|--|--|
| Span(FS)          | 350, 500, 1000, 1500, 2000mH₂O;<br>-20℃ …0℃ ~10℃ …80℃ |  |  |  |  |
| Overpressure      | 1.5 times FS  |  |  |  |  |
| Accuracy          | ±0.5%FS(pressure); ±2°C (temperature)                 |  |  |  |  |
| Stability         | ±0.2%FS/year  |  |  |  |  |
| Zero Drift        | ±0.02%FS/°C   |  |  |  |  |
| Span Drift        | ±0.05%FS/°C   |  |  |  |  |
| Operation Temp.   | -20°C ~80°C   |  |  |  |  |
| Storage Temp.     | -40°C ~100°C  |  |  |  |  |
| Transmission Type | 3-wire<br>(pressure and temperature output signal)    |  |  |  |  |
| Power Supply      | 12V~30VDC   |  |  |  |  |
| Output Signal     | 4mA~20mADC(pressure);<br>4mA~20mADC(temperature)      |  |  |  |  |
| Load              | <(U-12V)/0.02A(Ω)                                     |  |  |  |  |

## **Construction Material**

- Housing: Stainless steel 1Cr18Ni9Ti •
- Sealed ring: Viton •
- Cable:  $\phi$ 7.2mm polyethylene or polyurethane cables
- Diaphragm: Stainless steel 316L .

#### Outline Construction (Unit: mm)



## **Order Guide**

| MPI  | M426WS     | Deep-water Level&Temperature Transmitter |                   |  |  |                |        |                     |                       |  |  |
|------|------------|--|-------------------|--|--|----------------|--------|---------------------|-----------------------|--|--|
|      |            | P  | ange              |  |  |                |        |                     |                       |  |  |
|      |            |  | ange              | -20°C0°C ~ 10°C80°C  |  |                |        |                     |                       |  |  |
|      |            | (~0]<br>~0]                              | (mH₂O]<br>∕T°C ]L | X:actual measured pressure T:actual measured temp.<br>L:cable length(optional) |  |                |        |                     |                       |  |  |
|      |            |  |                   | Code   | Output \$                                | put Signal     |        |                     |                       |  |  |
|      |            |  |                   | E  | E 4mA~20mA DC                            |                |        |                     |                       |  |  |
|      |            |  |                   | Code   | Construction Material                    |                |        |                     |                       |  |  |
|      |            |  |                   |  | Code                                     | Diaph          | ragm   | Pressure Port       | Housing               |  |  |
|      |            |  |                   |  | 22                                       | S.S. 316       | 6L     | S.S.                | S.S.                  |  |  |
|      |            |  |                   |  | 25                                       | Tantalur       | n      | S.S.                | S.S.                  |  |  |
|      |            |  |                   |  |  |                |        | Othe                | rs                    |  |  |
|      |            |  |                   |  |  | Y <sub>a</sub> | Alumin | um connection box   | x with display        |  |  |
|      |            |  |                   |  |  | Y <sub>c</sub> | MS200  | ) water-proof conne | ection box(suggested) |  |  |
|      |            |  |                   | Y <sub>d</sub>   | PD140 lightening-proof protection device |                |        |                     |                       |  |  |
|      |            |  |                   |  |  |                |        |                     |                       |  |  |
| MPM4 | 126WS [0~3 | 350mH <sub>2</sub> 0                     | D] [0~60°C ]      | 360 E  | 22                                       | Y <sub>c</sub> | the    | whole spec.         |                       |  |  |

#### Notes

1. Please be sure the measured media is compatible with contacting material; please also note the media density in the measurement (except water);

2. We provide two kinds of cables --PVC and polyurethane for option, charged based on materials and length.

3. If the product is installed in "lightning and thunder" area, we suggest to use lightning-proof protection device to protect transmitter. Please be sure good grounding as well;

4. Under standard conditions  $1mH_2O$  (4 °C , g=9.80665  $m/s^2$ ), the corresponding relationship between  $1mH_2O$ and pressure is showed as follows:

 $1mH_2O = 0.1kgf/cm^2 = 9.80665kPa;$ 

5. If the user has special requirement, please feel free to contact our company.

# MICROSENSOR

#### **Electrical Connection**

The transmitter is connected with cable through sintered parts.

| Pin | Wire Color | Electrical Definition |
|-----|------------|-----------------------|
| 1   | Black      | V+                    |
| 2   | Red        | Pressure Output       |
| 3   | Blue       | Temperature Output    |