

# Submersible Level Transmitter

## MPM436W



### Applications

- Petroleum industry
- Chemical engineering
- Power plant
- Urban water supply and drainage
- Hydrological exploration

### Features

- The submersible part is a fully sealed stainless steel structure, the sensor and amplification circuit are in a stainless steel fully sealed housing, and the protection class is IP68
- The top stainless steel cap is removable, preventing accidental damage to the diaphragm and facilitating regular cleaning
- The measuring range can be as low as 0.5mH<sub>2</sub>O and can resist strong pressure shocks

### Introduction

The product uses high performance pressure sensor as sensing element, which could measure liquid static pressure that is positive proportional to level depth precisely, and transform pressure signal into standard current/voltage signal output by amplifier circuit to measure accurate level depth. The product has high accuracy, compact size, easy installation, can be submersible into the liquid directly to measure level from transmitter bottom to the liquid surface

### Specifications

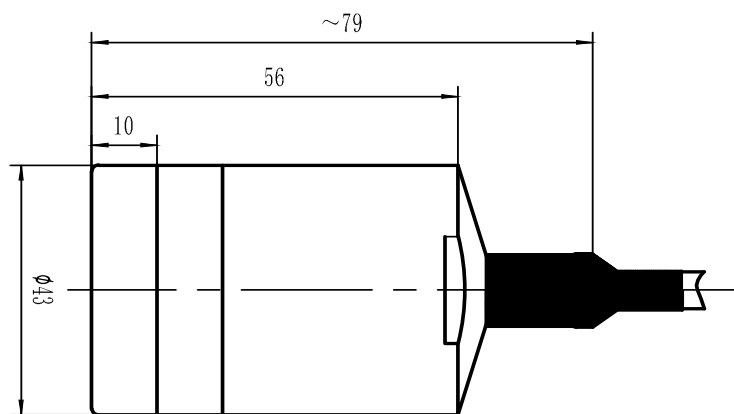
Range	0mH <sub>2</sub> O ~ 0.5mH <sub>2</sub> O /2mH <sub>2</sub> O
Overpressure	≤10 times FS
Accuracy	±1%FS (0mH <sub>2</sub> O ~ 0.5mH <sub>2</sub> O)
	±0.5%FS (0mH <sub>2</sub> O ~ 2mH <sub>2</sub> O)
Long-term Stability	±5mmH <sub>2</sub> O/year
Thermal Drift	≤ ±0.15%FS/10°C
Application Temperature	-20°C ~ 70°C (cable material: PE, PVC)
	-20°C ~ 80°C (cable material: PUR)
Storage Temperature	-20°C ~ 85°C
Protection Rating	IP68
Weight	≤150g

## Output Signals

Output Signal	Power Supply	Output Format	Load Resistance
4mA~20mA DC(E)	15V~28V DC	2-wire	$\leq(U-15)/0.02 \ (\Omega)$

## Outline Dimensions

unit: mm



## Electrical Connection

Color	2-wire
Red	+V
Black	0V/+OUT

## Materials

Isolated Diaphragm: 96% Alumina ceramics

Housing: SS 304

Cable: PE/PUR/PVC

## Ordering Guide

MPM436W	Level Transmitter		
	Range	measurement range 0mH <sub>2</sub> O ~ 0.5mH <sub>2</sub> O /2mH <sub>2</sub> O	
	[0 ~ XmH <sub>2</sub> O]L	X: actual measured range, L: cable length, recommended cable length L=X+(1~2)m	
	Code	Output Signal	
	E	4mA~20mA DC	
	Code	Junction Box	
	null	no junction box	
	Yb	Aluminum junction box without display	
	Yc	MS200 waterproof junction box	
	Yd	PD140 lightening-proof junction box	
	Ye	junction box (with or without display)	
	Code	Display Indicator <sup>①</sup> (with Ye junction box only)	
	null	no display indicator	
	M1	0% ~ 100% linear indicator	
	M6	4 digits LED digital indicator	
	M7	4 digits LCD digital indicator	
	Code	Preprocess Connection	
	F1	fixed flange	
MPM436W	[0 ~ 2mH <sub>2</sub> O]3	E Ye M6 F1	Complete Type Specification

## Ordering Notes

1. "①", only 4mA~20mA DC output product is available when ordering Ye junction box with display indicator.
2. When ordering the transmitter with M6 or M7 indicator, power supply should  $\geq 20V$  DC.
3. Environmental temperature should be  $-20^{\circ}C \sim 70^{\circ}C$  when ordering the transmitter with M6 indicator, environmental temperature should be  $-10^{\circ}C \sim 60^{\circ}C$  when ordering the transmitter with M7 indicator, indicator setting can refer to our indicator lectotype, which can be found on our company's website.
4. Cable material is available for 3 types: PE cable is provided as default; if other material is needed, please specify in the order.
5. The protection rating of junction boxes are IP65.
6. The measured media should be compatible with the wetted material and the measured media density except water needs to be specified on contract.
7. If the product is installed in a thunderstorm area, a lightning protection device is required and be sure that the product and the power are reliably earthed, which can efficiently prevent the level sensor from lightning damage.
8. If metrology verification certificate is needed or there are other requirements, please contact us and specify it in the order.