

# Submersible Level Transmitter

## MPM436W



### Applications

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

### Features

- Fully sealed stainless steel wetted parts, sensor and amplifier in IP68 housing
- Removable stainless steel cap, diaphragm protection, easy cleaning
- Measurement range: 0.2 mH<sub>2</sub>O, high pressure and shock resistance

### Introduction

Submersible Level Transmitter uses a high-performance pressure sensor to measure the liquid static pressure, proportional to the liquid level. The pressure is converted into a standard output signal through a dedicated signal conditioning circuit, providing a linear relationship between the output signal and liquid depth. With high accuracy and compact size, the transmitter can be directly immersed to measure the distance from the sensor tip to the liquid surface.

### Specifications

Range	Refer to Measuring Range & Accuracy
Overpressure	
Accuracy	
Long-term stability	±5mmH <sub>2</sub> O/ year
Thermal error	≤ ±0.15%FS/10°C
Operating temperature	-20°C~ 70°C (cable material: PE, PVC)
	-20°C~ 80°C (cable material: PUR)
Storage temperature	-20°C~ 85°C
IP rating	IP68
Weight	≤150g

Measuring Range & Accuracy

Unit	Measuring Range	Overpressure	Code	Accuracy
mH <sub>2</sub> O	0 - 0.2	1	H0D2	±1%FS
	0 - 0.3	1	H0D3	
	0 - 0.4	1	H0D4	
	0 - 0.5	1	H0D5	
	0 - 0.6	2	H0D6	±0.5%FS
	0 - 0.8	2	H0D8	
	0 - 1	2	H001	
	0 - 2	4	H002	
	0 - 3	7	H003	
	0 - 4	14	H004	
	0 - 5	20	H005	
	0 - 6	20	H006	
	0 - 7	20	H007	
	0 - 8	20	H008	
	0 - 9	20	H009	
	0 - 10	20	H010	

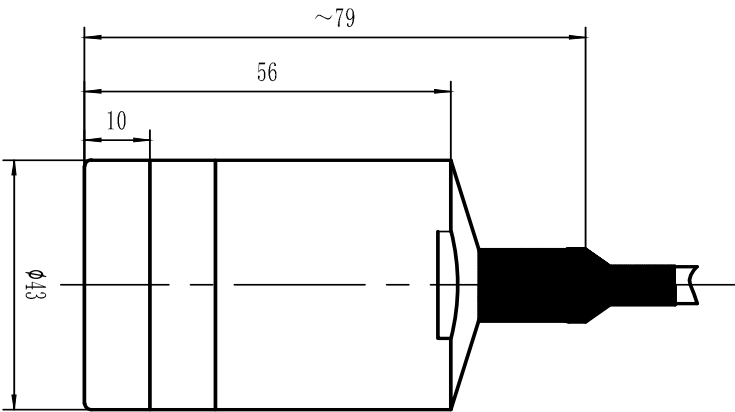
Test standard: GB/T 17614.1-2015/IEC60770-1:2010  
Ambient temperature: 20°C ± 5°C  
Relative humidity: 45%~75%

Output Signals

Output signal	Supply voltage	Output type	Load resistance
4mA~20mA DC(E)	15V~28V DC	2-wire	$\leq(U-15)/0.02\ (\Omega)$

Outline Construction

Unit: mm



Electrical Connection

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

Construction Materials

Isolated diaphragm: 96% Alumina ceramic  
Housing: SS 304  
Cable: PE/PUR/PVC

Order Guide

MPM436W Level Transmitter									
Range		Measuring range 0mH <sub>2</sub> O ~ 0.2mH <sub>2</sub> O...10mH <sub>2</sub> O							
HXXX		Range-specific code							
Code		Output signal							
E		4mA ~ 20mA DC							
Code		Power supply							
V13		15V ~ 28V DC							
Code		Accuracy							
A2		±0.5%FS							
A3		±1%FS							
Code		Construction material							
		Isolated diaphragm						Housing	
29		Ceramic						SS 304	
Code		Cable material							
P1		PE (standard)							
P2		PUR (optional for special media based on compatibility)							
P3		PVC (optional for special media based on compatibility)							
Code		Cable length (unit: m)							
L001		1							
L002		2							
L003		3							
L004		4							
L005		5							
L006		6							
L007		7							
L008		8							
L009		9							
L010		10							
L012		12							
L015		15							
L017		17							
L020		20							
L025		25							
L030		30							
Code		Accessory							
N		None							
Yd		PD140							
Yb3		Yb junction box (3-core terminals)							
Yc3		MS200 (3-core terminals)							
Ye		Ye (without indicator)							
YeM6		Ye (M6)							
YeM7		Ye (M7)							
MPM436W	H0D5	E	V13	A3	29	P1	L005	N	The complete spec.

## Notes

1. When selecting the YeM6 or YeM7, only 4mA~20mA DC output is available, and requiring a power supply of  $\geq 15\text{VDC}$ .
2. The ambient temperature of transmitter should be  $-20^{\circ}\text{C} \sim 70^{\circ}\text{C}$  with YeM6 option, while  $-10^{\circ}\text{C} \sim 60^{\circ}\text{C}$  with YeM7 option.
3. The IP rating of junction box is IP65.
4. The measured medium shall be compatible with the wetted parts materials, and the medium's density (excluding water) under measurement conditions must be specified.
5. In areas prone to thunderstorms, it is advisable to install lightning protection devices and ensure proper grounding of the product and power supply to minimize the risk of lightning damage to the transmitter.
6. If a metrology verification certificate is required, or there are any other special requirements, please consult with the MICROSENSOR and specify them in the order.