Level Transmitter for Specialized Areas Complex Environments

MPM426W



Applications

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

Features

- The top stainless steel cap is removable, preventing accidental damage to the diaphragm, facilitating regular cleaning
- Intrinsic safety type, Ex ia IIC T6 Ga
- CE, RoHS and CCS approved

Introduction

MPM426W level transmitter uses a good performance pressure sensor as a measuring element, through the pressure sensor, the liquid static pressure proportional to the liquid depth is accurately measured, and through the special signal conditioning circuit into a standard (current or voltage) signal output, to establish a linear correspondence between the output signal and the depth of the liquid, to achieve accurate measurement of the depth of the liquid. The product has high precision, small size, easy to use, directly into the liquid, you can measure the end of the transmitter to the liquid level of the liquid level height.

Specifications

RoHS

CE

Range	0mH ₂ O ~ 1mH ₂ O200mH ₂ O				
Overpressure	≤2 times FS				
Accuracy	see Accuracy on page 2				
Long-term Stability	Range> 10mH₂O, ≤ ±0.2% FS/ year				
	Range≤ 10mH₂O, ≤ 20mmH₂O/ year				
	-10°C ~ 60°C (intrinsic safety type)				
Application Temperature	-20°C ~ 70°C (B2 type, cable material: PE, PVC)				
	-20°C ~ 80°C (B2 type, cable material: PUR)				
Storage Temperature	-20°C ~ 85°C				
Vibration	10g, 55Hz ~ 2000Hz				
Shock	100g, 11ms				
Protection Rating	IP68				
Weight	≤150g				

PCEC

MICROSENSOR

Accuracy

Pressure Type	Range	Accuracy
	$0 \text{ mH}_2\text{O} \sim 1\text{mH}_2\text{O} \leq X < 2\text{mH}_2\text{O}$	±1%FS
Gauge (G)	$2mH_2O \le X \le 10mH_2O$	±0.5%FS
Gauge (G)	10mH₂O < X ≤ 200mH₂O	±0.25%FS
	101111 ₂ 0 < X ≤ 2001111 ₂ 0	±0.5%FS
Absolute (A)	$0mH_2O \sim 7mH_2O < X \le 10mH_2O$	±1%FS
Absolute (A)	$10\text{mH}_2\text{O} < X \le 200\text{mH}_2\text{O}$	±0.5%FS

Test standard: GB/T 17614.1-2015/IEC60770-1:2010; Environment temperature: 20°C $\pm 5^\circ$ C ; Relative humidity: 45% ~ 75%

Thermal Drift

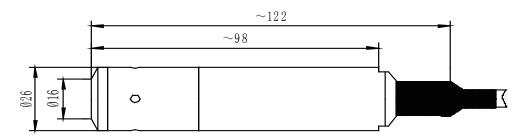
Zero Thermal Drift	$\le \pm 0.05\% \text{ FS/°C} (\le 10 \text{mH}_2\text{O})$
	$\leq \pm 0.02\%$ FS/°C (>10mH ₂ O)
Span Thermal Drift	$\leq \pm 0.05\%$ FS/°C ($\leq 10mH_2O$)
Span Thermal Drift	$\leq \pm 0.05\% \text{ FS/°C} (>10 \text{mH}_2\text{O})$

Output Signals

Output Signal	Power Supply	Output Format	Load Resistance	
4mA~20mA DC (E)		2-wire	≤(U-15)/0.02 (Ω)	
0mA~10mA DC (Q)		3-wire	≤250Ω	
0mA~20mA DC (U)	15V~28V DC		525002	
0V~5V DC (J)	(The intrinsic safe product is powered by a safety barrier)		>10 kΩ	
1V~5V DC (F)				
0V~10V DC(V)				

unit: mm

Outline Dimensions



Electrical Connection

Color	2-wire	3-wire
Red	+V	+V
White	null	+OUT
Black	0V/+OUT	GND

Sensor Sealing



Materials

Isolated Diaphragm: SS 316L/Tantalum Housing: SS 304/SS 316L Cable wire: PE/PUR/PVC

Ordering Guide

MPM426W	Level Transmit	ter								
	Range	Meas	Measurement Range $0mH_2O \sim 1mH_2O200mH_2O$							
	$[0 \sim \text{XmH}_2\text{O}]\text{L}$	X: actual measured range, L: cable length, recommended cable length L=X+(1~2)m								
		Code	Code Output Signal							
		Е	4mA~2	4mA~20mA DC						
		Q	0mA~1	mA~10mA DC						
		U	0mA~2	nA~20mA DC /~5V DC						
		J	0V~5V							
		F	1V~5V	DC						
		V	0V~10	V DC						
			Code					Materi	ial	
					I	solated		ragm		Housing
			22		SS 316L				SS 304	
			24				316L			SS 316L
			25	25 Tantalum						SS 304
					Junction Box					
					no juno					
				YbAluminum junction box without displayYcMS200 waterproof junction boxYdPD140 lightening-proof junction boxYejunction box (with or without display)						
								ntor ¹ (with Ye junction	n box only	()
					null no display indicator					
								near indicator		
								ligital indicator		
					M7	-		ligital indicator cation Requirement ^②)	
								tification requirement		
						i T		c safe Exia II CT6G	ia	
						Т	ship-u			
							null	process connection no special process of		2
							C1	M20×1.5 male, end		1
							C3	G1/2 male, end face		
							C5	M20×1.5 male,water		
							F1	fixed flange		
MPM426W	[0 ~ 5mH ₂ O]6	Е	22	Ye	M6	i	F1			Complete Type Specification

Ordering Notes

- 1. "①", digital display is available for Ye junction box , but can only used along with non-explosion-proof or non-marine products support 4mA~20mA signal.
- 2. "② " refers to certification requirements. For the intrinsically safety type, current output is available only. The product can be intrinsically safe and suitable for ship-use simultaneously.
- 3. When ordering the transmitter with M6 or M7 indicator, power supply should \geq 20V DC.
- 4. Environmental temperature should be -20°C ~ 70°C when ordering the transmitter with M6 indicator, environmental temperature should be -10°C ~ 60°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.
- 5. Cable material is available for 3 types: PE cable is provided by default; if other material is needed, please specify in the order.
- 6. The protection rating of junction boxes are IP65.
- 7. The measured media should be compatible with the wetted material and the measured media density needs to be specified (except water) on contract.
- 8. 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.
- 9. If metrology verification certificate is needed or there are other requirements, please contact us and specify it in the order.