

# MPM489WZ4 Submersible Level Transmitter

## Introduction

MPM489WZ4 is a  $\Phi 17\text{mm}$  diameter fully sealed submersible level transmitter based on diffused-silicone principle. It consists of a high stable and reliable piezoresistive pressure sensing element and the special PCB component as well as the stainless steel housing. Its integrated construction and standardized signal output greatly facilitate the operation and automation control at work sites. The special vented cable being hermetically connected with the transmitter housing allows the transmitter for long term use in the liquids that are compatible with the transmitter construction material.

MPM489WZ4 Level Transmitter is with compact size, light weight and good long term stability. It is suitable for liquid level measurement and control for fields of medicine, metallurgy, power plants, mining, urban water supply and drainage, hydrology exploration etc.



## Features

- Integrated structure and adjustment free;
- IP68 Protection (sensor housing), and IP65 for connection box casing;
- Cost-effective, reliable and high long-term stability;
- Compact size:  $\Phi 17$  diameter.

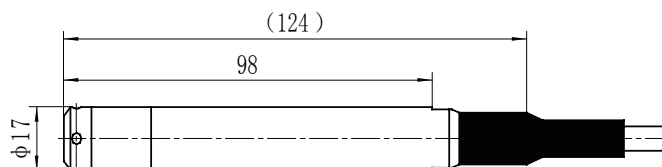
## Specification

Pressure Range	10m, 20m, 50m, 100m, 200m H <sub>2</sub> O	
Overpressure	1.5 times FS	
Accuracy	$\pm 0.5\%$ FS	
Stability error	Range $>20\text{mH}_2\text{O}$ , $\pm 0.2\%$ FS/year; Range $\leq 20\text{mH}_2\text{O}$ , 20mmH <sub>2</sub> O	
Temperature error	$\pm 0.02\%$ FS/ $^{\circ}\text{C}$ (Zero) $\pm 0.05\%$ FS/ $^{\circ}\text{C}$ (Span)	
Operation temp.	$-10^{\circ}\text{C} \sim 70^{\circ}\text{C}$	
Storage Temp.	$-20^{\circ}\text{C} \sim 85^{\circ}\text{C}$	
Power Supply	11V~28V DC	
Output Signal	4mA~20mA DC (2-wire)	
Load ( $\Omega$ )	$< (U-11)/0.02$	
Protection	IP68 (sensor part) IP65 (connection box)	
Wetted material	Housing: stainless steel 304	Sealing O-ring: Viton
	Diaphragm: SS 316L	Cable: $\Phi 7.5\text{mm}$ PE cable with vented tube
	Cap: Black nylon	Rubber casing: Chloroprene Rubber

## Electrical Connection

Wire Color	Electrical definition
Black	+V
Red	0V/+OUT

## Outline Construction (Unit: mm)



## Order Guide

MPM489WZ4		Level Transmitter								
		Range	0m~10m...200m H <sub>2</sub> O							
		[0~XmH <sub>2</sub> O]L	X: actual measured range L: cable length; suggested L-X=(1~2)m							
		Code	Output Signal							
		E	4mA~20mA DC							
					Code	Construction Material				
						Diaphragm	Pressure port	Housing		
						22	SS 316L	SS	SS	
						24	SS 316L	SS 316L	SS 316L	
						25	Tantalum	SS	SS	
							Code	Others		
							M <sub>1</sub>	0%~100% hand pointer indicator		
							Y <sub>b</sub>	Aluminum connection box without display		
							Y <sub>c</sub>	MS200 water-proof connection box (Recommended options)		
							Y <sub>d</sub>	PD140 lightning-proof protection device		
							Y <sub>e</sub>	connection box(with display or without display)		
							F <sub>1</sub>	Fixed flange		
MPM489WZ4		[0~10mH <sub>2</sub> O]12	E	22	Y <sub>C</sub>	the whole spec				

## Notes

1. Please be sure the measured media is compatible with contacting material; please note the media density in the measurement (except water);
2. If the product is installed in the thunderstorm area, we suggest to install the lightning-proof protection device to protect the transmitter. Please be sure good grounding as well;
3. If the user has special requirement, please feel free to contact our company.