

# MPM4809TD Level Transmitter

## Introduction

MPM4809TD Level Transmitter is a submersible piezoresistive level measuring instrument with all seal construction. High stable and reliable piezoresistive pressure sensor and high-precision circuit chosen. Whole temperature range of digital temperature compensation is done. Specialized cable is sealed with the housing. The air vented tube is inside of the cable. MPM4809TD can be used for a long time in the liquid that is compatible with transmitter housing material.

MPM4809TD Level Transmitter is small in size, light in weight, good stability in long term use. Customers do not need to adjust themselves. It can be used for level measurement and control in oil, chemical industry, medicine, metallurgy, power plant, mine, city water drainage and hydrology.



## Features

- Integrated construction, without outer adjustment
- Reversed polarity protection
- Protection grade of sensor housing is IP68, protection grade of PD140 protection device is IP65.
- High reliable, stable in long term use

## Specification

Measuring range	0~2m Diesel Oil(proportion: 0.84~0.86)
Overpressure	2 times of FS(variation <0.3%)
Power supply	8~28V DC
Output	4~20mA DC(2-wire)
Accuracy <sup>①</sup>	0.5%FS
Total error <sup>②</sup>	1%(-10~80°C )
Stability error	0.5%FS/Year
Working Temperature range	-10~80°C
Storage Temperature range	-20~80°C
Load resistance	$\leq(U-8)/0.02\Omega$
Response time	$\leq 3s$
Insulation	$\geq 100M\Omega/100V$
Protection	IP68
Relative Humidity	10%~95%RH
Vibration effect	3g(0~150Hz)
Life	$10 \times 10^6$ times full scale
Intrinsic Explosion proof	Exia II BT6 Ga

Note:

① Testing is under normal temperature (refer to  $20^\circ\text{C} \pm 5^\circ\text{C}$ ); non-linearity. Accuracy is rms root-mean-square of non-linearity, repeatability, hysteresis.

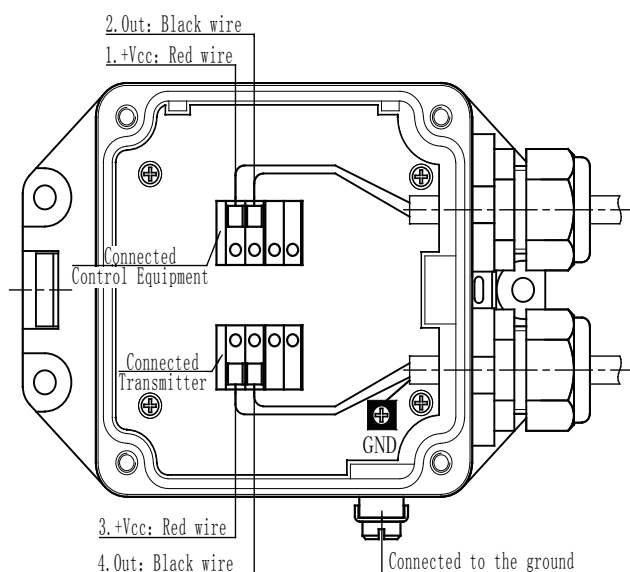
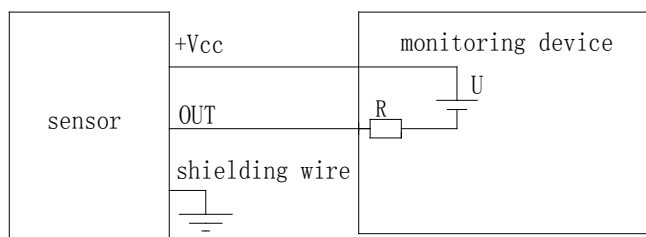
② Within the temperature range, it includes total index of non-linearity, repeatability, hysteresis, zero drift, sensitivity drift, zero short-term stability etc.

### Construction material

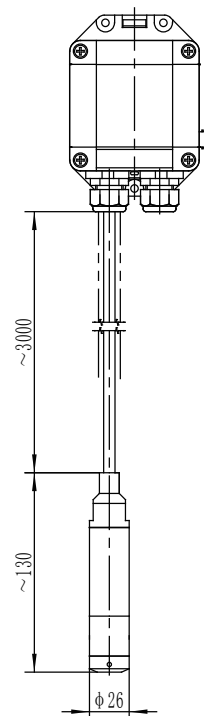
- Housing: Stainless Steel 316L
- Cable: Polyurethane cable with air vented tube
- Diaphragm: Stainless Steel 316L
- Connection Device: PBT Engineering Plastics PBT

### Electrical Connection

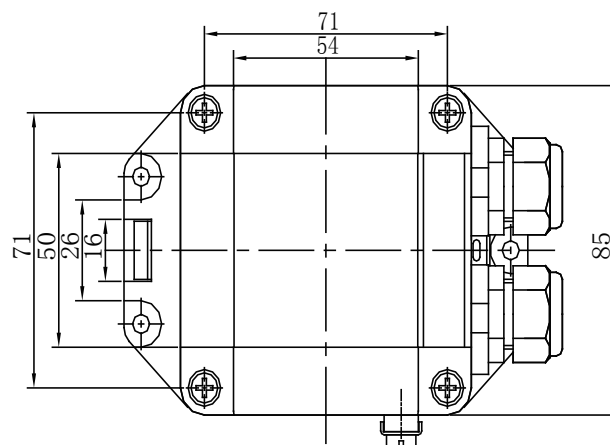
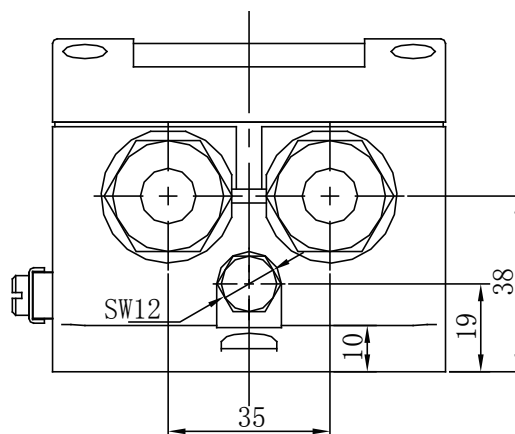
Wire Color	Electrical definition
Red	+VCC
Black	OUT



### Outline Construction (Unit: mm)



MPM4809TD Level Transmitter



PD140 Lightning Protection Device

## Order Guide

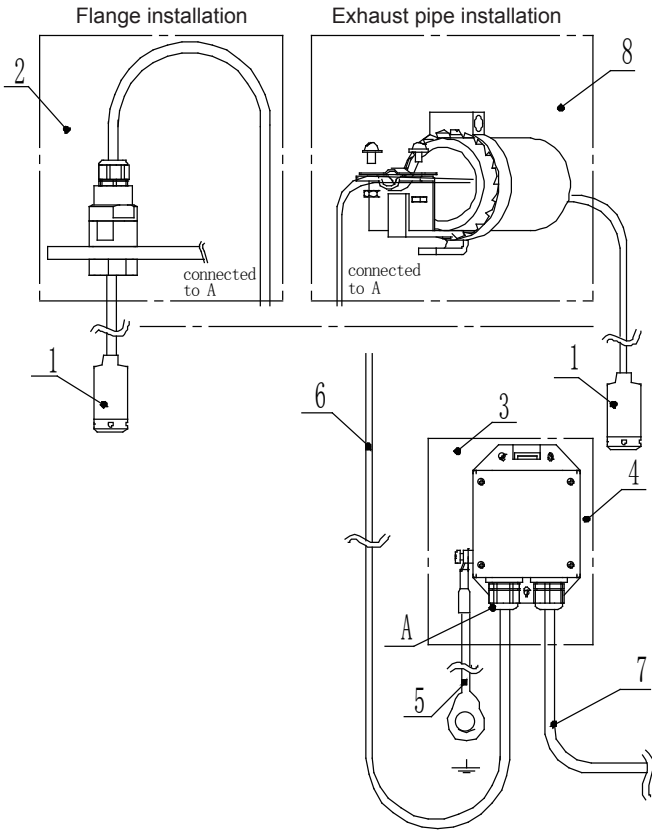
MPM4809TD		Lever transmitter				
	range	[0~2 m Diesel] L L: cable length, when choosing, suggest L - X = (1 ~ 2) m				
	Code	Output signal				
	E	4~20mADC				
	Code	Structure material				
		Diaphragm	Connection	Housing		
	24	316L SS	316L SS	316LSS		
	Code	Others				
	Yd	PD140 Lightning Protection device				
	F	*Flange installation assembly				
	FB	*Flange plate installation				
	ZH	*Rack installation assembly				
	W	*Bent pipe installation components				
MPM4809TD [0~2m diesel] 3 E 24 YdFB whole spec.						

### Notes

1. Measured media should be compatible with transmitter material, and the density of the measured media should be clearly indicated (except water).
2. It uses Polyurethane cable.
3. Cable length is as per the requirement of clients.
4. If clients has special requirement, please contact us.

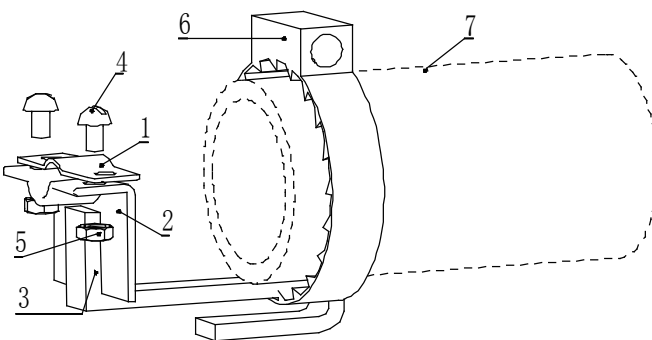
**Appendix**

Flange installation assembly diagram:



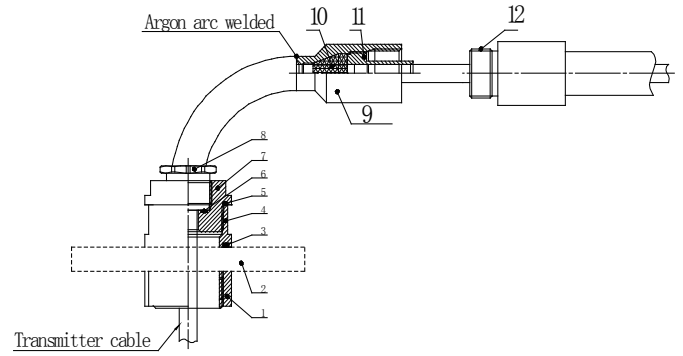
1	MPM4809TD Level Transmitter
2	Flange mounting kit
3	PD140 Lightning Protection Device
4	Permanent magnet absorbing installation
5	Grounding cable assembly
6	Transmitter specialized cable
7	15m signal cable
8	Bracket mounting kit

Rack installation assembly diagram:



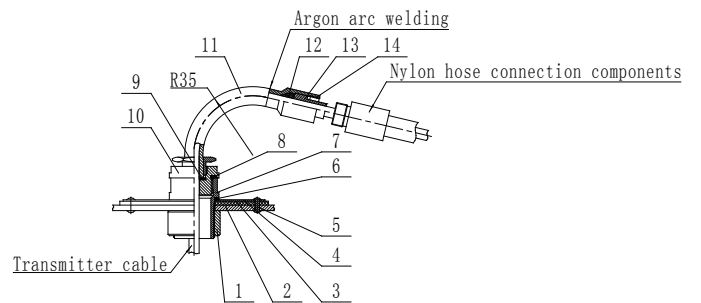
1	Stainless steel clip
2	Bracket cable saddle
3	Rack support arm
4	M3 bolt
5	M3 nut
6	Steel cable
7	Air-vented tube

Bent pipe installation components:



1	M30x1nut
2	Tank flange
3	Type O ring ( 28x2.65)
4	Flange set
5	Type O ring ( 28x1.8) $\varnothing$
6	Gasket (cylindrical 16.5mm, inner circle 13mm, thickness 1.4mm)
7	Flange bushing
8	Welding bend component
9	Lock line seat
10	Rubber ring
11	Locking ring
12	Nylon hose connection components

installation:



1	M30x1 nut
2	fuel tank
3	Sealed gasket
4	flange plate
5	Enclosed tonsil loose core rivet
6	O ring( $\varnothing$ 28x2.65)
7	Flange cover
8	O ring ( $\varnothing$ 28x1.8)
9	Sealed gasket (External circle $\varnothing$ 16.5, internal circle $\varnothing$ 13, thickness 1.4
10	Flange center tube
11	Welded bent pipe components
12	Cable locker base
13	Rubber ring
14	Lines seat