

Product model: HPM47W anti-corrosive level transmitter

Manufacturer: Nanjing Hangjia Electronic Technology Co., LTD

Product category: liquid level transmitter

Application: Chemical industry; Water treatment industry; Environmental protection industry; Pharmaceutical industry; Industrial process control

Overview

HPM47W Anti-corrosive Level Transmitter is all sealed submerged structure and uses an anti-corrosion ceramic piezoresistive pressure sensor. The probe is made of corrosion-resistant materials such as PP, PVC, PVDF or PTFE. The gas conductive cable is also with PTFE or PU jacket. It is suitable for level measurement of corrosive media such as acids and alkalis.

This product has multiple designs for reliable sealing in probe, wires, etc., and uses a full potting process internally to ensure that the product has a long service life. It could be widely used in chemical industry, environmental protection, medicine, and industrial processes. control and many other situations.

Features

- High purity ceramic (99.99% Al2O3) sensor, with strong corrosion resistance
- Fluoro rubber ring as waterproof seal
- Corrosion resistant design of probe and cable
- Full potting process, with Waterproof breathable plug to prevent condensation
- Multiple protection structure design, high protection ability
- Built-in counterweight design

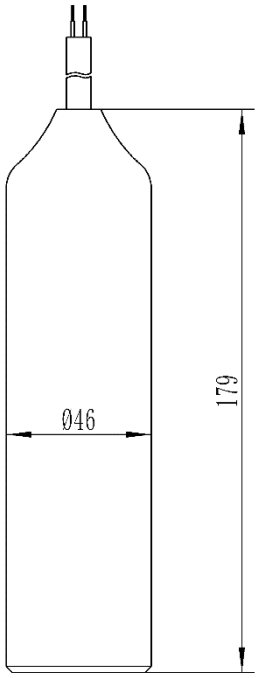
Technical Parameters

Pressure Range	0 ~ 0.5...200mH2O
Overload	1.5 times pressure range of full scale
Measuring Medium	various liquid compatibles with ceramic and housing material
Power Supply	24VDC
Output Signal	two-wire 4 ~ 20mADC， three-wire 0 ~ 5VDC, etc.
Accuracy	±0.2%FS(typical); ±0.5%FS(max)
Long-term Stability	±0.2%FS/year
Temperature Coefficient of Zero	±0.02%FS/℃ (Reference 25℃)
Temperature Coefficient of Full Scale	±0.02%FS/℃ (Reference 25℃)
Operation Temperature	-10 ~ 70℃
Protection Grade	IP68(for probe)

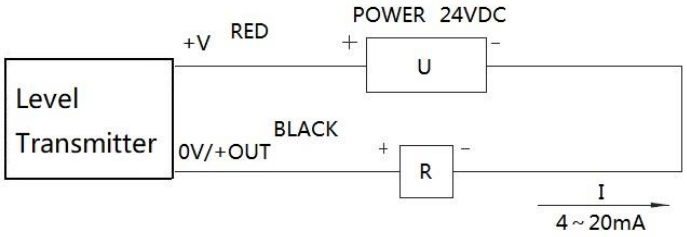
Structure Material

Probe shell	PP, PTFE, PVC and other	**Sensor Diaphragm**	Al2O3 96%
Cable	Φ7.2 mm PU (or PTFE) jacket with airway	**Sensor O ring**	fluoro rubber

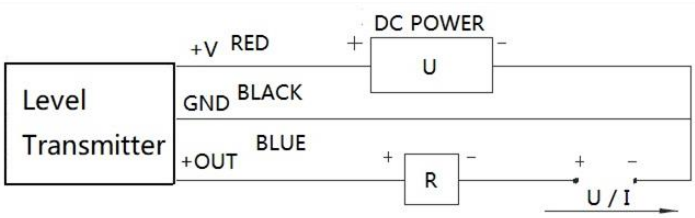
Structure Drawings



Electrical Connection



Electrical wiring diagram of two wire 4-20mADC output transmitter



Electrical wiring diagram of three-wire voltage output transmitter

Ordering Guide

Item NO.	Type						
HPM47W	Anti-corrosive Level Transmitter						
	Pressure Range	Measuring Range					
	[0~X]mH$_2$O (L)	X is measuring range L is the length of cable					
		Code	Output Signal				
		B1	(4~20)mA				
		B4	(0~5)V				
		B5	(1~5)V				
			Code	Thread Spec			
			P1	M20×1.5, bottom fixed			
			P4	G1/2, bottom fixed			
			P20	M30×1.5, top fixed			
			N	NA			
				Code	Electrical Connection		
				C2	Cable Outlet		
					Code	Structure&Material	
						Sensor	Shell Material
					M6	Ceramic AL$_2$O$_3$	Customization
						Code	Additional Functions
						F	Fixed flange
						Y1	Water-proof junction box
						Y2	2088 shell（split type）
						Y5	delicate protecting jacket（one-piece type）
						PP	material of throw-in probe --PP
						FE	material of throw-in probe --PTFE
						HC	material of throw-in probe--Hastelloy C
						TI	material of throw-in prob--titanium alloy
						S6	material of throw-in prob--316L
						material of cable according to customer's requirements	
HPM47W	[0~1]mH$_2$O (2)	B1	N	C2	M6	Y5 PP	

Tips for Type Selection

1. When selecting the type, please note that the tested medium should be compatible with the part in contact with the product and the medium, and the specific gravity of the tested medium should be noted.
2. The input part of the cable has polyethylene, ptfe and other optional, according to different use of the site with wear-resistant, oil-resistant, acid-alkali resistance, high strength special breathable cable.
3. The cable length L of the input part is recommended to be one to two meters longer than the measuring range, that is, L-X= (1 ~ 2) m
4. Waterproof and breathable junction box is recommended to be selected to ensure safe and reliable operation of the transmitter.