

Pressure Level Sensor Series YW06 (for Sludge Water ONLY) User's Manual



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1 Product Features

- Wide measurement range: 0~10m~100m H₂O
- Multi output signal for choice
- Anti-interference, Surge protection
- Ceramic diaphragm, anti-corrosion
- Lightning protection, inline with IEC61000-4-5/Level-4 standard

2 Product Description

YW06 series of input type liquid level transmitter is based on the principle that the measured liquid static pressure is proportional to the height of the liquid. The product uses the piezoresistive effect of ceramic sensitive components to convert the static pressure into an electrical signal, and then cooperates with a dedicated digital circuit. After signal amplification, linear compensation, anti-interference, anti-surge protection and other signal processing, it is an integrated product that outputs industry standard signals.

2.1 Product Application

- Water plant, chemical plant
- Sewage treatment
- Deep well, Dam
- Flood control, irrigation

2.2 Measuring Range

Gauge Pressure								
H ₂ O	range	0...3	0...5	0...10	0...20	0...50	0...100	
	overload	5	10	25	50	100	200	
	range							
	overload							

Absolute Pressure								
H ₂ O	Range	0...20	0...50	0...100				
	Overload	40	100	200				

2.3 Output

Current(2 wire)	4...20mA
Voltage(3 wire)	DC 0...10V ; DC0...5V; DC1...5V
	DC 0.5...4.5V
Ratio of the voltage(3 wire)	DC 0.5...4.5V
Digital output	4...20mA+Hart
	4...20mA+RS485
	RS485; I2C

2.4 Load (Ω)

Current (2 wire) $\leq (VCC-8V)/0.02A$

Voltage (3 wire) Max output/1mA

Ratio of the voltage(3 wire)>10K

2.5 Power supply

Output Signal	Power Supply	
	Standard	Optional
4...20mA	DC8...30V	
DC0...10V	DC14...30V	
DC0...5V	DC8...30V	DC3...5V
DC1...5V	DC8...30V	DC3...5V
DC 0.5...4.5V	DC8...30V	DC3...5V
DC 0.5...4.5V(Ratio of the voltage)	DC 5V $\pm$ 10%	
4...20mA+Hart	DC12...30V	
4...20mA+RS485	DC8...30V	
RS485	DC8...30V	DC3...5V
I2C	DC3...5V	

2.6 Current consumption

current (2 wire) :max 25mA

voltage (3 wire) :2.5mA

Ratio of the voltage (3 wire) :2.5mA

2.7 Product Precision

Normal TemperatureAccuracy	Standard	Optional
JJG 860、JJ G882 JJG 860, JJ G882standard		
Range $\geq$ 10H ₂ O	0.5%FS	0.25%FS;0.1%FS
Range $\geq$ 30H ₂ O	0.5%FS	0.25%FS
Range $\geq$ 1H ₂ O	1%FS	0.5%FS

2.8 Temperature range

		Standard	Optional
Working Temperature		-20℃~85℃	-40℃~125℃
Compensation Temperature	10H ₂ O≥Range	0℃~50℃	
	10H ₂ O≤Range	0℃~70℃	-10℃~80℃
Storage temperature		-40℃~125℃	

2.9 Temperature drift

		Standard	Optional
Zerodrift	3H ₂ O≥range	±0.05%FS/℃	±0.02%FS/℃
	10H ₂ O≤range	±0.03%FS/℃	±0.02%FS/℃
Fullrange drift	3H ₂ O≥range	±0.05%FS/℃	±0.02%FS/℃
	10H ₂ O≤range	±0.03%FS/℃	±0.02%FS/℃

2.10 Long-term Stability

≤0.2%FS/Y@0.5%FS

2.11 Response Time

	range	standard	optional
boot time		100ms	10ms
response time		10ms	1ms
stable time	≥10H ₂ O	15s	
	≤10H ₂ O	1min	

2.12 Shock Resistant

10g (IEC 60068-2-6 standard, Resonancecondition)

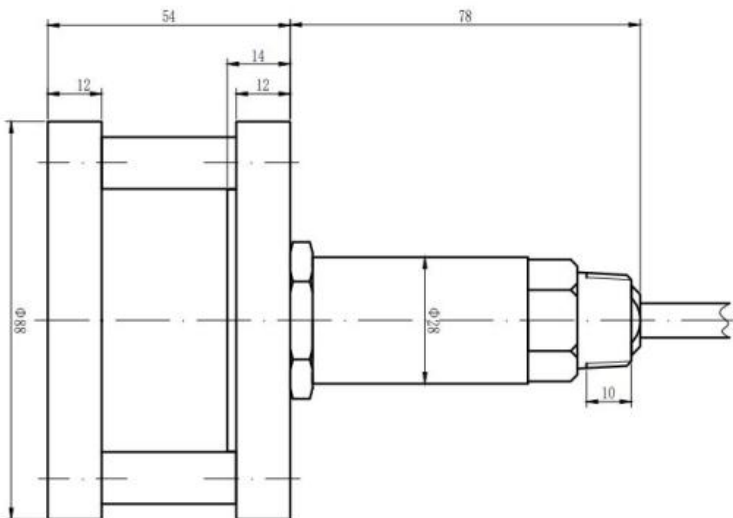
2.13 Impact Resistant

500g (IEC 60068-2-27 standard, Mechanical shock)

2.14 Service Life

1*10⁶ pressure cycle

3 Outside Drawing

Type		
YW06	For Muddy Water Only	

4 Shell material

	Standard	Optional
Diaphragm material	1.AL2O3	
Shell material	1.316L	2.304SS

5 Electrical connection

		2Wire	3Wire	4Wire
	V+	Red	Red	Red
	V-	Green	Green	Green
	S+(RS485A)		Yellow	Yellow
	(RS485B)			Blue
Cable material	Standard	Optional		
	1.PUR	2.PE 3.PTFE 4.PVC		