#### **HR8006 General Digital Water Level Transmitter**

### Overview

The HR8006 universal digital water level gauge is an input type water level measuring instrument with a stainless steel full-sealed structure, which greatly improves the reliability of the whole machine and can be put into the water for a long time. Since the circuit uses low-power devices, the overall power consumption is very low, about 4mA at full speed. This feature is very useful in situations where battery power is required.

Widely used in freshwater drinking water treatment, waste water and sewage treatment, seawater measurement, surface water or groundwater monitoring in the hydrology and water industry.

## **Features**

 High stability liquid level measuring sensor element, good long-term stability

- RS485 standard MODBUS-RTU protocol, can be used in DCS or PLC system
- Low power consumption, when operating at full speed, the power consumption is about 4mA, which is outstanding when it is powered by an external battery.
- The product also has reverse power protection and surge protection
- Optional unique air filter to prevent condensation and blockage in the atmosphere compensation capillary

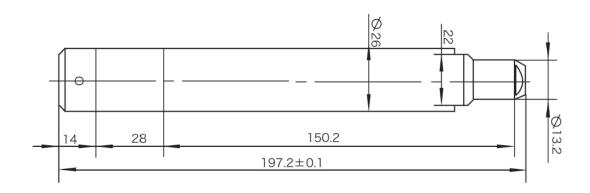
## Specification

Main performance indicators				
Range	0∼10、20、50、100mH <sub>2</sub> O			
	User specified range, factory calibration			
Measurement	0.05 % F.S (Optional) , 0.1 % F.S			
Accuracy	(typical)			
Resolution	0.005%F.S			
Long-term stability	0.1%F.S/year			
Overload capability	5X F.S			
Temperature characteristics				
Zero				
temperature	0.005% F·S/℃			
coefficient				
F.S temperature coefficient	0.005% F·S/℃			

Compensation	0~50℃			
temp.				
Operating temp.	-20∼85℃			
Storage temp.	-40∼125°C			
Electrical characteristics				
Supply voltage	24VDC (9~30V)			
Communication				
interface	(2KV) surge voltage			
protection				
Load capacity	128 transmitter node			
0.4	RS485 interface, MODBUS-RTU			
Output method	protocol			
Insulation	100MΩ @50V			
Mechanical properties				
Sensor life	10 <sup>7</sup> times full scale pressure cycles			
Material in contact with liquid	Alumina ceramic gold plating			
Seal material	fluororubber			
Housing	316L stainless steel (optional titanium alloy)			
material				
Cable material	Polyammon			
Weight	About 300 grams			
Environmental characteristics				
Vibration	20g 20~5000Hz			
Shock	20g 11ms			
Protection level	IP68			
Explosion-proof	ExiaIIC T6			

grade	
Air filter	ID67
protection rating	1707

Outline Construction: (Unit:mm)



# **Electrical connections**

No.	Wire colour	Definition
1	Red	24V+
2	Blue	RS485+
3	Green	RS485-
4	Yellow	GND