

BT8006

General Digital Water Level Transmitter



Shaanxi Besteetech Importing&Exporting Co. Ltd

E-mail: roxy@besteetech.com

1. Overview

The BT8006 universal digital water level gauge is an input-type water level measuring instrument with a stainless steel fully 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, at about 4mA at full speed. This feature is very useful in situations where battery power is required.

2. Features

- ☑ Widely used in freshwater drinking water treatment, wastewater and sewage treatment, seawater measurement, surface water or groundwater monitoring in the hydrology and water industry.
- ☑ High-stability liquid level measuring sensor element, good long-term stability
- ☑ RS485 standard MODBUS-RTU protocol, can be used in DCS or PLC system
- ☑ The product also has reverse power protection and surge protection
- ☑ Optional unique air filter to prevent condensation and blockage in the atmosphere compensation capillary
- ☑ Low power consumption: when operating at full speed, power consumption is about 4 mA, which is outstanding when powered by an external battery.

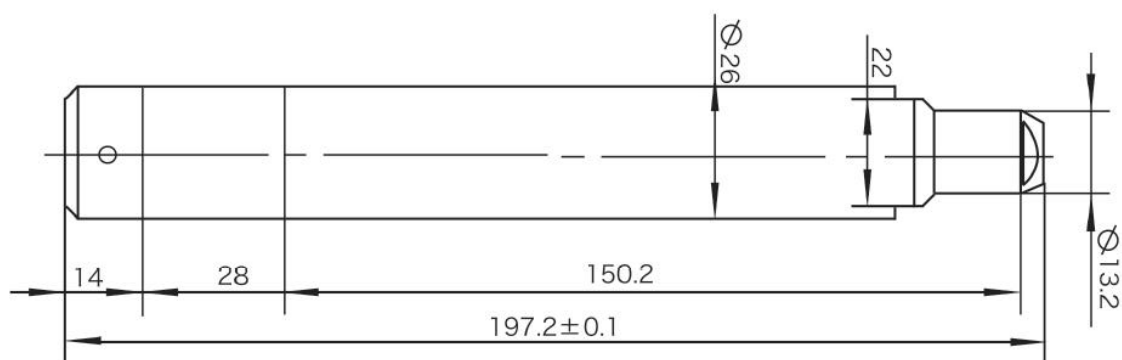
3. Technical Parameters

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

F.S temperature coefficient	0.005% F·S/°C
Compensation temp.	0～50°C
Operating temp.	-20～85°C
Storage temp.	-40～125°C
Electrical characteristics	
Supply voltage	24VDC (9～30V)
Communication interface protection	(2KV) surge voltage
Load capacity	128 transmitter nodes
Output method	RS485 interface, MODBUS-RTU protocol
Insulation	100MΩ @50V
Mechanical properties	
Sensor life	107 times full scale pressure cycles
Material in contact with liquid	Alumina ceramic gold plating
Seal material	Fluororubber
Housing material	316L Stainless Steel (optional titanium alloy)
Cable material	Polyammon
Weight	About 300 grams
Environmental characteristics	
Vibration	20 g 20～5000Hz
Shock	20g 11ms

Protection level	IP68
Explosion-proof grade	Exia IIC T6
Air filter protection rating	IP67

4. Overall Dimensions



5. Selection Guide

BT8006	Intelligent Digital Water Level Meter				
	Measuring Range	0 ~ 300 mH ₂ O			
	[0~X] mH ₂ O L	X-Liquid Level Range, L-Cable Length			
		Code	Output signal		
		E	RS485		
			Code	Structural Material	
			Housing	Diaphragm	Process Connection
			S1	Stainless Steel	316L
			S2	316L	316L
			S3	316L	钽
			Code	Other parameters	
			PU	Polyurethane Cable	
			PV	Polyvinyl Chloride Cable	
BT8006	[0 ~ 10] mH ₂ O 6	E	S2	PV	Complete Model Example