

HR8005 Submersible High-temperature Level Transmitter

Overview

HR8005 Submersible High-temperature Level Transmitter is used to measure high temperature well level and temperature. With the features of full temperature digital temperature compensation, compensation data stored in nonvolatile memory.

With its high reliability in performance, it is mainly used for measuring and controlling high temperature conditions, such as in hot spring and under-ground hot water.

Features

- Full welded stainless steel construction, protection IP68 .
- Titanium alloy sapphire sensor, dry measuring.
- Digital temperature compensation and non-linearity correction techniques;
- Water-proof connection box is suggested for electric connection,
- Anti-surge, electromagnetic interference
- Cap on the transmitter probe is removable; prevent diaphragm from damaging, easy for regular cleaning.

Specification

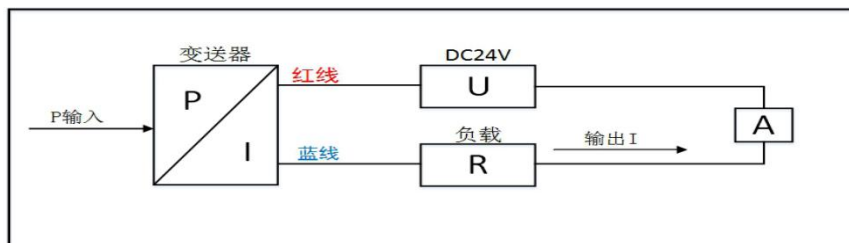
Main performance specification	
Accuracy	$< \pm 0.25\% \text{ F}\cdot\text{S}$
Range	0~10 mH ₂ O...100 mH ₂ O
Long-term stability	0.2%F·S/year (>20m)
	0.1%F·S/year ($\leq 20\text{m}$)
Overload capability	2X F·S
Load	(U-12)/0.02 (Ω)
Temperature characteristics	
Compensation temp.	0~70℃
Operating temp.	-20~85℃
Drift of temp.	Zero: 0.05%F.S/℃
	F.S: 0.05%F.S/℃
Storage temp.	-40~125℃
Electrical characteristics	
Power Supply	DC12 ~ 24V (typ.24V)
Power Protection	Anti-reverse connection, over voltage protection
Output method	Two-wire 4 ~ 20mA
Structural characteristics	
Measuring medium	Compatible with stainless steel, teflon and fluoro rubber
Pressure interface	stainless steel cap or G1/2, M20*1.5 male

Housing material	SS 1Cr18Ni9Ti and 316L optional
Cable material	Teflon, double wire or gas shield four - core cable
Environmental characteristics	
Protection level	IP68
Explosive-proof grade	ExiaⅡC T6
Insulation	100MΩ@50V
Vibration	20g, 20 ~ 5000Hz
Shock	20g, 11ms

Electrical connections

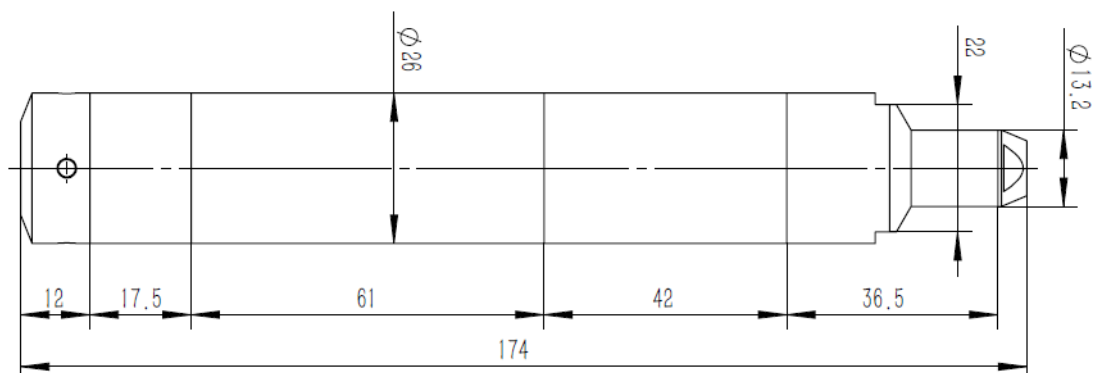
NO.	Color	Definition
1	Red	DC24V+
2	Blue	4 ~ 20mAoutput (GND)

Typical application

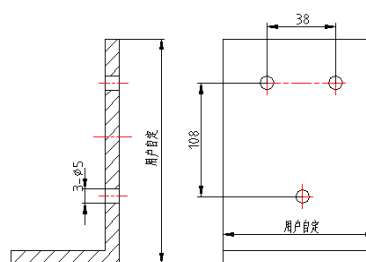
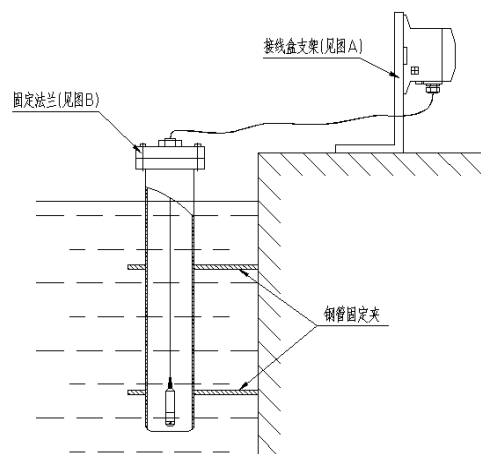


4-20mA application

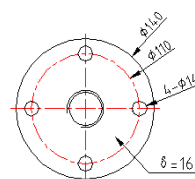
(尺寸单位:mm) Construction outline (Unit:mm)



Installation



图A(用户自配)



图B(用户自配)

Order guide

HR8005	Submersible High-temperature Level Transmitter				
	Range	0 ~ 100 mH ₂ O			
	[0~X] mH ₂ O L	x-water level range, L-cable length			
		Code	Output signal		
		E	4 ~ 20mA		
			Code	Construction Material	
				Housing	Diaphragm
			S1	SS	316L
			S2	316L	316L
			S3	316L	Ta
				Code	Others
				C1	M20*1.5 male, face type seal
				C2	M20*1.5 male, waterline seal
				C3	G1/2 male
				FL	Fixed flange
				LM	Limit current protection
HR8005	[0 ~ 10] mH ₂ O 6	E	S2	FL	Full model example

Order Note

1. Please be sure the measured media shall be compatible with contacting material; please pay attention to media density in the measurement;
2. Polyurethane cable is recommended for its softness and good wear-resisting.
3. If the user has special requirement, please feel free to contact our company.