

## LT10SR-426 Deep-water Level & Temperature Transmitter

### Introduction

LT10SR-426 Deep-water Level&Temperature Transmitter is a full welded, full sealed and submersible diffusion silicon instrument for level and temperature measurement. It uses a high stable and reliable piezo-resistive OEM pressure sensor and a PT1000 temperature sensor with a high-performance signal processing circuit mounted in stainless steel housing. Meanwhile, the product adopts double-way sealing with special rubber rings and the sealing and locking line are separated in order to improve the sealing degree. The cavity(the terminal is in it) is filled with high-vacuum water-resistance and mineral oil-resistance sealing silicone so that the leading-out terminal can be fully sealed and insulated. It is especially suitable for measurement of oil and gas in deep well. The advanced production technology and automated production line ensure the stability of products, and good adaptation makes your device able to copy with various complex environments.



### Features

- Level and temperature double output signal
- Reversed-polarity protection
- Suitable for deep-water level and temperature measurement
- IP68 protection
- Automatic production line for quality guarantee, stable and reliable

### Specification

- Span(FS): 350, 500, 1000, 1500, 2000mH<sub>2</sub>O;  
-20℃...0℃~10℃...80℃
- Overpressure: 1.5 times FS
- Accuracy: ±0.5%FS(pressure); ±2℃(temperature)
- Stability: ±0.2%FS/year
- Zero Drift: ±0.02%FS/℃
- Span Drift: ±0.05%FS/℃
- Operation Temperature Range: -20℃~80℃
- Storage Temperature Range: -40℃~100℃

Transmission Type: 3-wire(pressure and temperature output signal)

Power Supply: 12V~30VDC

Output Signal: 4mA~20mADC(pressure); 4mA~20mADC(temperature)

Load(Ω):  $<(U-12V)/0.02A$

### Construction Material

Housing: Stainless steel 1Cr18Ni9Ti

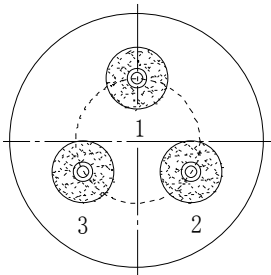
Sealed ring: Viton

Cable:  $\phi$  7.2mm polyethylene or polyurethane cables

Diaphragm: Stainless steel 316L

### Electric Connection

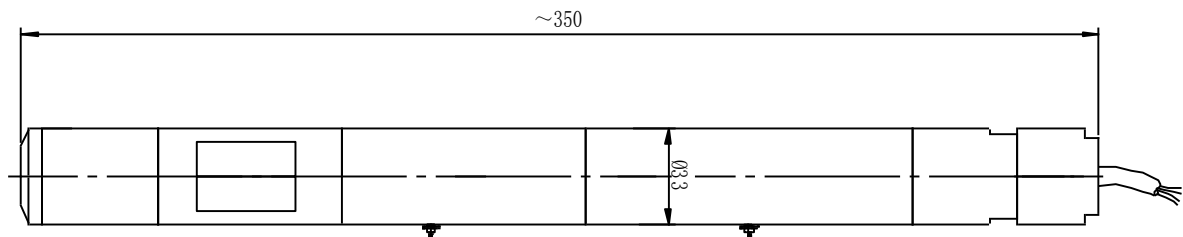
The transmitter is connected with cable through sintered parts.



Pin	Wire Color	Electric Definition
1	Black	V+
2	Red	Pressure Output
3	Blue	Temperature Output

### Outline Dimension

(unit: mm)



**Order Guide**

LT10SR-426	Deep-water Level&Temperature Transmitter						
	Range	350, 500, 1000, 1500, 2000mH <sub>2</sub> O					
		-20℃...0℃~10℃...80℃					
	[0~XmH <sub>2</sub> O][0~T℃]L	X:actual measured pressure T:actual measured temp. L:cable length(optional)					
		Code	Output Signal				
		E	4mA~20mADC				
			Construction Material				
		Code	Diaphragm	Pressure Port	Housing		
		22	S.S. 316L	S.S.	S.S.		
		25	Tantalum	S.S.	S.S.		
			Code	Others			
			Y <sub>a</sub>	Aluminum connection box with display			
			Y <sub>c</sub>	MS200 water-proof connection box(suggested)			
			Y <sub>d</sub>	PD140 lightning-proof protection device			
LT10SR-426	[0~350mH <sub>2</sub> O]	[0~60℃]	360	E	22	Y <sub>c</sub>	the whole spec.

**Notes:**

1. Please be sure the measured media is compatible with contacting material; please also note the media density in the measurement (except water);
2. We provide two kinds of cables --PVC and polyurethane for option, charged based on materials and length.
3. If the product is installed in “lightning and thunder” area, we suggest to use lightning-proof protection device to protect transmitter. Please be sure good grounding as well;
4. Under standard conditions 1mH<sub>2</sub>O (4℃, g=9.80665 m/s<sup>2</sup>), the corresponding relationship between 1mH<sub>2</sub>O and pressure is showed as follows:

$$1\text{mH}_2\text{O} = 0.1\text{kgf/cm}^2 = 9.80665\text{kPa};$$

5. If the user has special requirement, please feel free to contact our company.