

ESL044/45 High-corrosiveness Resistant Liquid Level Transmitter

- ✓ Pressure type: Gauge Pressure
- ✓ High-corrosiveness resistant liquid level transmitter
- ✓ Range: 0~0.5...50m waterpout (Customize small range)
- ✓ Accuracy: $\pm 0.25\%F.S$, $\pm 0.5\%F.S$, $\pm 1.0\%F.S$
- ✓ Stability $0.25\%F.S/Year$ (typical), $0.5\%F.S/Year$ (maximum)
- ✓ Customized working temperature: $-20^{\circ}C \sim 120^{\circ}C$
- ✓ Signal Output: $4\sim 20mA$, $0/1\sim 5V$, $0\sim 10V$
- ✓ Power supply: $10/11\sim 30V$, $6\sim 24V$
- ✓ Ingress Protection: IP68
- ✓ OEM: Available



Applications

High-corrosiveness resistant liquid level measurements | Corrosive mediums | Chemistry experiments | High-temperature Site | Flammable mediums | Explosion-proof site

Product Introduction

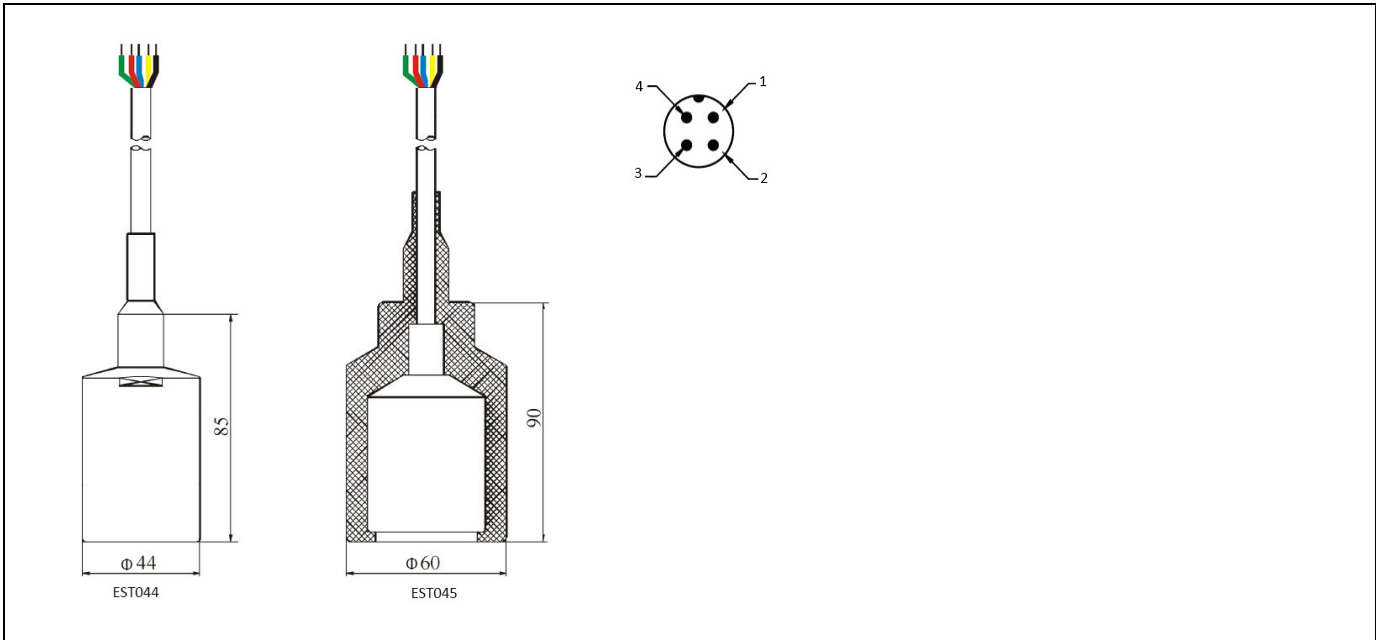
ESL044/45 line is liquid level transmitter of high accuracy, reliability and stability. With the sensing element of ceramics, the product is used for the measurements of corrosive liquid and gas. This product line features the housing of titanium alloy and Teflon, ceramics sensing element of international brands, and the specially designed V/I converting amplifier circuit. It is easy to perform zero/span trim. Based on the locations, different high-strength breathable cables featuring wear-proof, acid/alkali resistance and oil resistance can be configured. non-polarized two-wire output and DC-AC three-wire output.

Electrical Connections and Dimensional drawings

Electrical connection			
Cable	Two wire	Three wire	GX16-7
Red	Power	Power Supply	1
Blue/Green	Output	Output	2
Black	Shield	GND	3
Yellow		Shield	4
Signal output			
Two wire	4~20Ma		
Three wire	0/1~5V, 0~10V		

Two wire 4~20mA

Three wire 0/1~5V, 0~10V



Sensor-based Classification

ESL044	Piezoresistive ceramic sensor with of Titanium alloy housing for weak causticity medium measuring (sea water)
ESL045	Piezoresistive ceramic sensor with Teflon housing for strong causticity medium measuring

Note

1. To measure the level of dynamic liquid, mount the transmitter to the location free from pressure shock.
2. To measure the level of turbid liquid, keep the transmitter away from the bottom of the vessel

Specifications

Measuring Range	0~0.5...50mwater spout		Insulation	>100MΩ@50V
Overload pressure	1.5 times of rated pressure		Electric Strength	500V@60second
Burst Pressure	3 times of rated pressure		Lightening protection	Withstand Voltage in Air: 8000V, Withstand Voltage of Housing and Cable: 4000V
Accuracy:	±0.25%F.S ; ±0.5%F.S; ±1.0%F.S		Response time:	10ms
Stability	0.25%F.S/Y, 0.5%F.S/Ymax		Pressure type	GP (G)
Working temperature	-20~80℃, (-20~120℃ Customize)		Vibration/Shock	10g/5~2000Hz, axes X/Y/Z20g sine 11ms
Compensation temperature	-10~70℃, (Customizable for full temperature range)		Safety Level	Intrinsically Safe E; Explosion-proof D;
Medium compatibility	All corrosive mediums compatible with ceramics and PTFE		Electromagnetic compatibility	Electromagnetic radiation: EN50081-1/-2; Electromagnetic Sensitivity: EN50082-2
Electrical parameters	Two wire	Three wire		
Output Signal	4~20mA	0~5Vdc	1~5Vdc	0~10Vdc
Power supply	10~30Vdc	6~24Vdc/ac		11~30Vdc/ac
Load resistance	(U-10)/0.02(Ω)	>100kΩ		
Electrical Connections	Waterproof wire jacket + Rectangular seals + O-rings + Sealant + Glues pouring (Ingress Protection IP68)			
Pressure connection	Immersed			

1mH2O ≈ 9.81KPa

Ordering Procedure

EST	High-corrosiveness resistant liquid level transmitter									
	Code	Model								
	044	Titanium alloy housing for weak causticity								
	045	Teflon housing for strong causticity								
	Cod	Span								
	1	0~0.5...50m								
	Code	Output Type								
	A	4~20mA								
	V	0~5Vdc								
	V1	1~5Vdc								
	V2	0~10Vdc								
	Code	Precision								
	0.25	±0.25%F.S								
	0.5	±0.5%F.S								
	1.0	±1.0%F.S								
	Code	Power Supply								
	DC24	24 Vdc								
	DC11	11~30 Vdc								
	Code	Pressure connections								
	I	Immersed								
	S	Split								
	Code	Cable length XXm=... m								
		Code	Packing							
		Bb	Bubble bag							
		Foa	Plastics foam							
ESL	044	1	A	0.25	DC24	I	1.5m	Bb		