

ESL042 Geothermal Water Liquid Level Transmitter

- ✓ Pressure type: Gauge Pressure
- ✓ Range: From 0~1...500mH2O
- ✓ Accuracy: $\pm 0.25\%F.S.$, $\pm 0.5\%F.S.$
- ✓ Stability 0.15%F.S/Year (typical), 0.25%F.S/Year (maximum)
- ✓ Customized working temperature: $-20^{\circ}C \sim 120^{\circ}C$
- ✓ Signal Output: 4~20mA, 0/1~5V, 0~10V
- ✓ Power supply: 10/11~30V, 8~24V
- ✓ Diffused silicon-oil fill system
- ✓ Ingress Protection: IP68
- ✓ OEM: Available



Applications

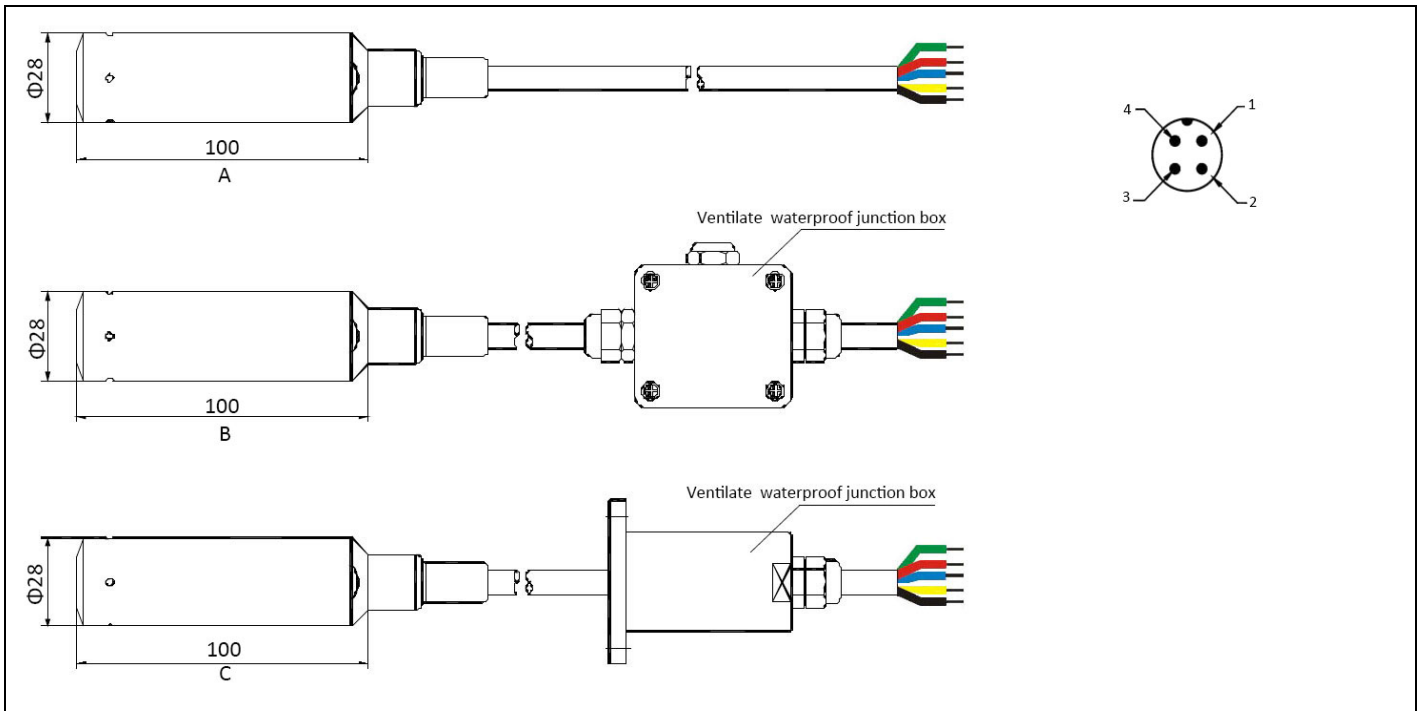
Geothermal water measurement | Geothermal water intaking | Cooling water detection of thermal power plant | Thermal boiler | Hydrology detection | Power units | Hydropower

Product Introduction

ESL042 line is heat-resistant liquid level transmitter. Featuring high reliability, stability and accuracy, the product is mainly used for the measurement of high-temperature liquid. This product line adopts 1Cr18Ni9Ti stainless steel construction, active sensing element of international brands, and the specially designed V/I converting 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 available.

Electrical Connections and Dimensional drawings

Electrical connection			
Cable	Two wire	Three wire	GX16-7
Red	Power Supply	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		



Application-based Classification

Type A	Used where the receiving instrument is close
Type B	Used where the receiving instrument is far away
Type C	Used when the installation occurs at the mouth of the well

Specifications

Measuring Range	0~1...500mH2O		Insulation	>100M Ω @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	$\pm 0.25\%F.S$; $\pm 0.5\%F.S$ (choose air line for higher accuracy)		Response time	10ms
Stability	0.15%F.S/Y, 0.25%F.S/Ymax		Vibration/Shock	10g/5~2000Hz, axes X/Y/Z20g sine 11ms;
Working temperature	-20~100 $^{\circ}C$, (-20~120 $^{\circ}C$ Customize)		Safety Level	Intrinsically Safe E; Explosion-proof D;
Compensation temperature	-10~70 $^{\circ}C$; (Customizable within full temperature range)		Electromagnetic compatibility	Electromagnetic radiation: EN50081-1/-2; Electromagnetic Sensitivity: EN50082-2
Medium compatibility	All corrosive mediums compatible with 1Cr18Ni9Ti and 316L			
Electrical parameters	Two wire	Three wire		
Output Signal	4~20mA	0~5Vdc	1~5Vdc	0~10Vdc
Power supply	10~30Vdc	8~24Vdc/ac		11~30Vdc/ac
Load resistance	(U-10)/0.02(Ω)	>100k Ω		
Electrical Connections	Waterproof wire jacket + Rectangular seals + O-rings + Sealant + Glues pouring (Ingress Protection IP68)			
Pressure connection	Immersed; Split			

1mH2O ≈ 9.81KPa

Ordering Procedure

EST	Geothermal Water Transmitter	
	Code	Model
	042G	Universal
	042E	Intrinsically safe and explosion-proof
	042D	Explosion-proof
	042A	Outdoor wiring split Model
	042B	Well-mouth wiring split Model
	Cod	Span
	1	0~1...500mH2O;
	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
	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
EST	042A	1 A 0.25 DC24 S 1.5m Bb