

ESL040 Universal Liquid Level Transmitter

- ✓ Pressure type: Gauge Pressure
- ✓ Range: From 0~1...300mH₂O
- ✓ Accuracy: ±0.25%F.S, ±0.5%F.S, ±1.0%F.S
- ✓ Stability: 0.25%F.S/Year(typical), 0.5%F.S/Year(maximum)
- ✓ Customized working temperature: -40℃~125℃
- ✓ Signal Output: 4~20mA, 0/1~5V, 0~10V, RS485, I2C
- ✓ Power supply: 8/10/11~30V
- ✓ Diffused silicon-oil fill system
- ✓ Lightning protection
- ✓ Degrees of Protection: IP68



Applications

Deep water level monitoring | River hydrologic monitoring | Wastewater treatment | Turbidity level measurement | Liquid level of storage tank | Water-saving irrigation | Diversion Project | Circulating fluid consumption monitoring

Product Introduction

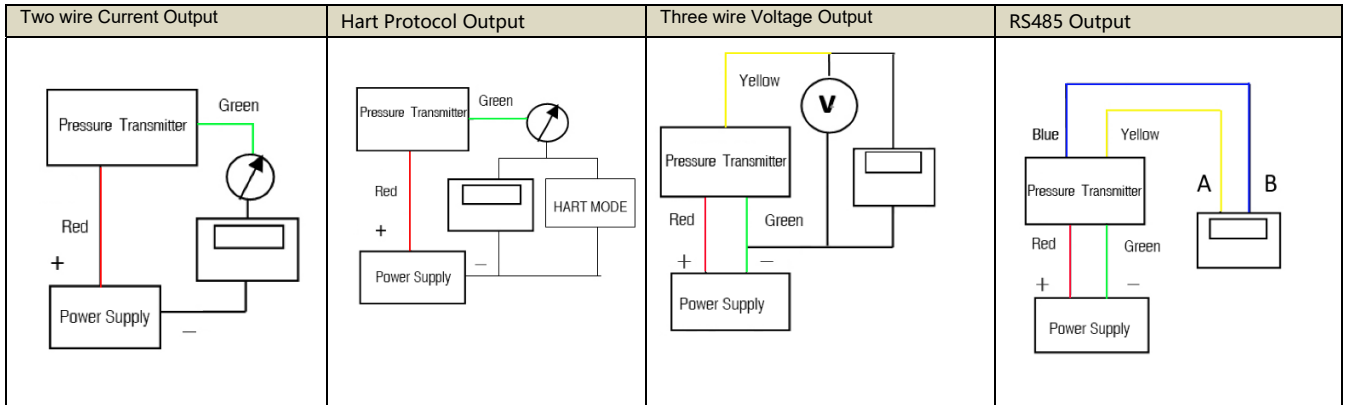
ESL040 line is for the measurement of liquid levels. Featuring high accuracy and stability, and high-strength cables that are wear-proof, acid/alkali resistant and oil resistant, this product can meet various demands for field measurement of liquid levels. The ESL040 line is designed with special construction and for particularly challenging applications. It is widely used for the treatment of wastewater and river water, and for hydrologic monitoring in ditches, reservoirs, rivers, coast and etc. non-polarized two-wire output and DC-AC three-wire output.

Electrical Connections and Dimensional Drawings

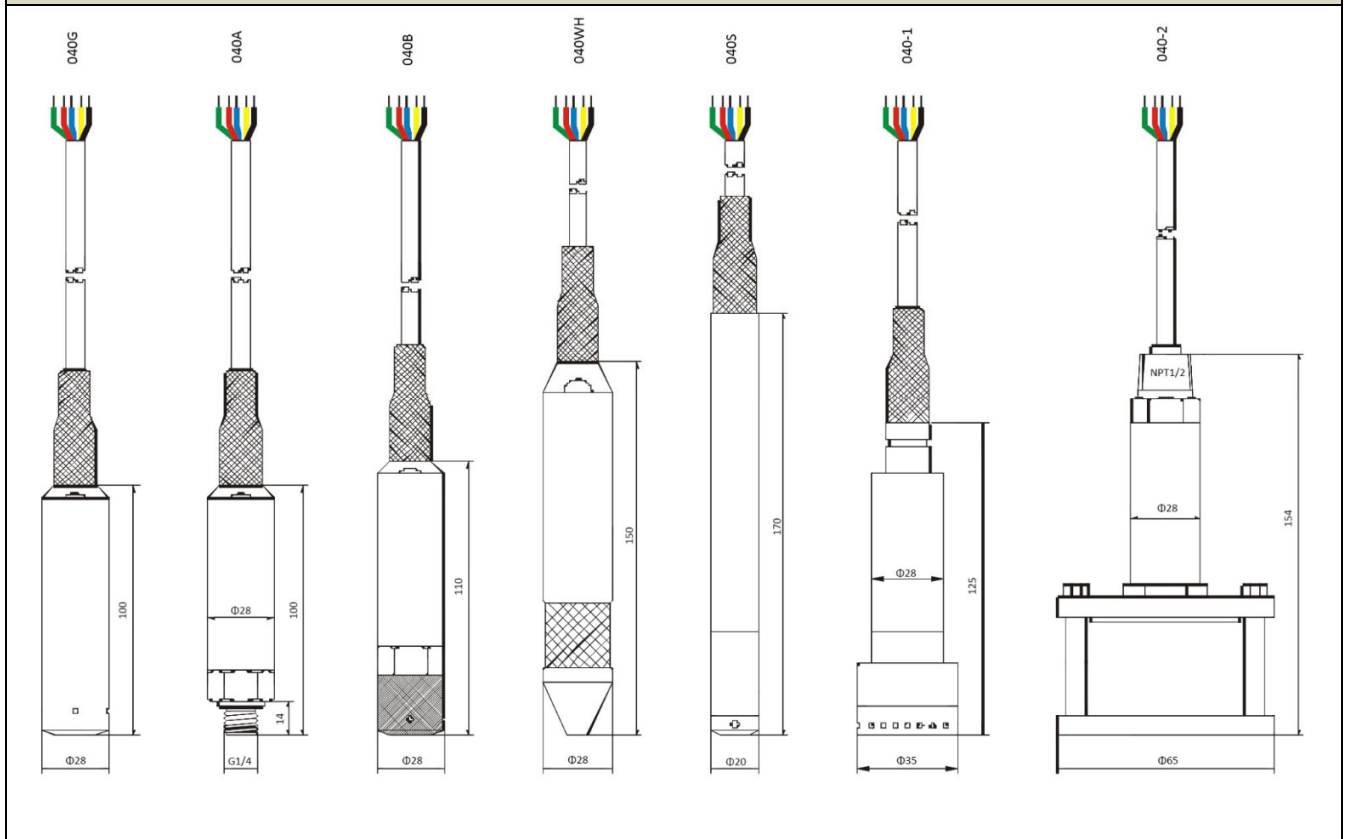
Electrical connection			
Cable	Two wire	Three wire	GX16-7
Red	Power Supply	Power Supply	1
Blue/Green	Output	Output	2
Black		GND	3
Yellow	Shield	Shield	4
Signal output			
Two wire	4~20mA		
Three wire	0/1~5V, 0~10V		

Two wire 4~20mA

Three wire 0~5/10V



Drawing for Different Types



Specifications

Measuring Range	0~1...300mH2O (Customizable for 0~500mH2O)	Medium compatibility	All corrosive mediums compatible with 1Cr18Ni9Ti and 316L
Overload pressure	1.5 times of rated pressure	Insulation	>100MΩ@50V
Burst Pressure	3 times of rated pressure ±0.5/55°C; Note temperature effect error is doubled at range 3; the error for analog model is doubled	Electric Strength	500V@1second

Accuracy:	±0.25%F.S; ±0.5%F.S; ±1.0%F.S		Lightening protection	Air-conduction pressure : 8000V, Shell & cable conduction pressure: 4000V		
Stability	0.1%F.S/Y, 0.2%F.S/Yma		Response time:	10ms		
Working temperature	-40~85°C, (-40~125°C Customize)		Safety Level	Intrinsically Safe E; Explosion-proof D		
Compensation temperature	-10~70°C, (Customizable for full temperature range)		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	RS485	I2C
Power supply	10~30Vdc	8~30Vdc/ac		11~30Vdc/ac	5-30Vdc	3.3-5Vdc
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; G1/4					
1mH2O≈9.81KPa						

Ordering Procedure

ESL	Universal Liquid Level Transmitter							
	Code	Model						
	040G	Universal						
	040E	Intrinsically safe and Explosion-proof						
	040L	Lightening protection						
	040A	Thread-mounting						
	040B	Immersed and Thread-mounting						
	040WH	Anti-sediment						
	043S	Small Diameter						
	040-1	Anti-pollution						
	040-2	High density						
		Code	Span					
		1	0~1...300mH2O;					
		2	0~35MH2O					
		3	0~50MH2O					
		Code	Output Type					
		A	4~20mA					
		V/V1	0/1~5Vdc					
		V2	0~10Vdc					
		RS	RS485					
		IIC	I2C					
		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	3.3~30 Vdc					
		Code	Pressure connections					
		I	Immersed					
		G	G1/4					
		Code	Cable length XXm=... m					
			Code	Packing				
			Bb	Bubble bag				
			Foam	Plastics foam				
ESL	040G	1	A	0.5	DC24	I	1.5m	Bb