

# ESL040-C Ceramic Titanium Alloy Liquid Level Probe [For Seawater Measurement]

- ✓ **Sensing principle:** Ceramic Capacitive
- ✓ **MOC of Sensing:** Ceramic Diaphragm with High-purity 99.9% Al<sub>2</sub>O<sub>3</sub>
- ✓ **MOC of Housing:** Titanium Alloy
- ✓ **Range:** 0~1...100mH<sub>2</sub>O/-1bar~0~100bar
- ✓ **Accuracy:** ±0.1%F.S; ±0.25%F.S;
- ✓ **Stability:** 0.1%F.S/Year
- ✓ **Operating Temperature:** -40℃~85℃
- ✓ **Signal Output:** 4~20mA+HART
- ✓ **Power Supply:** 10~30V
- ✓ **Ingress Protection:** IP68



## Applications

**Microbial Corrosion Resistant | Seawater Measurement |** Ship draft measurement | Water Level of Seaport Wharf | Height measurement of bridge over the sea | **Corrosive mediums | Strong Acid/alkali Resistance**

## Product Introduction

ESL040-C is kind of liquid level transmitter, by adopting high purity ceramic diaphragm and titanium alloy material, ESL040-C can handle the seawater-related & aggressive gases measurements (with high accuracy @ 0.1% class. It can stand with long distance transmission and produce 4-20mA +HART protocol communication, the product line is highly reliable and stable, and enables digital compensation within full temperature range.

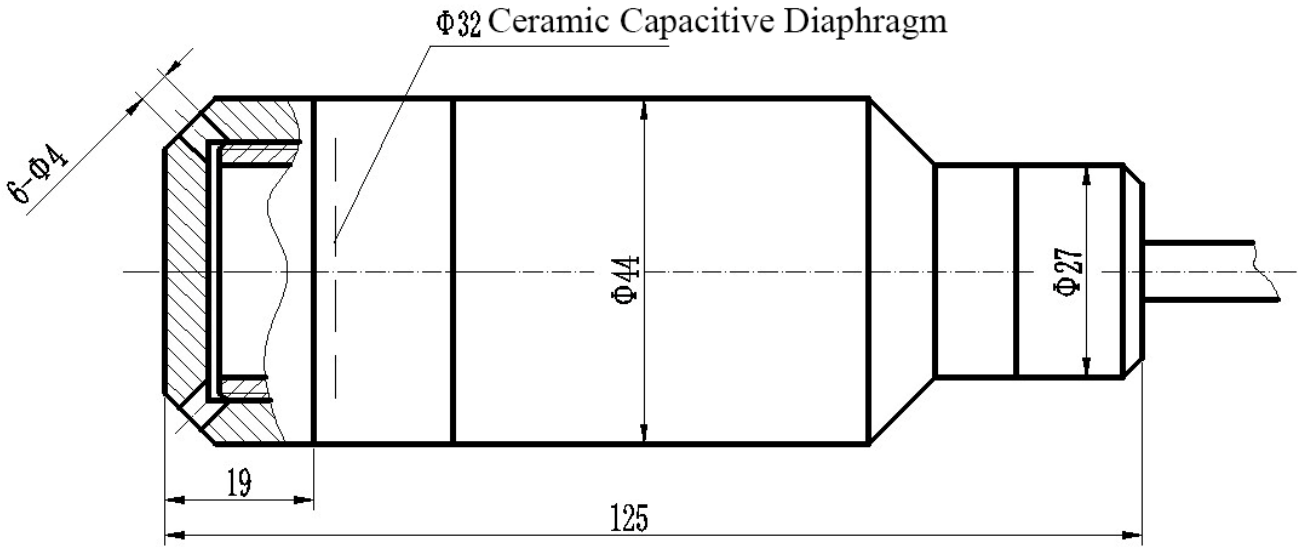
What's more, the wide diameter (Φ 32.4 mm) and the use of the capacitive technology make the ESL040-C suitable for measuring very low pressures, as low as 60 mbar.

The ESL040-C adopts titanium alloy construction to the system and housing, the latest digital compensation technology to ensure no losing of accuracy within the full temperature range, and enables zero/span trim through computer interface and external program-controlled zero/span adjustments.

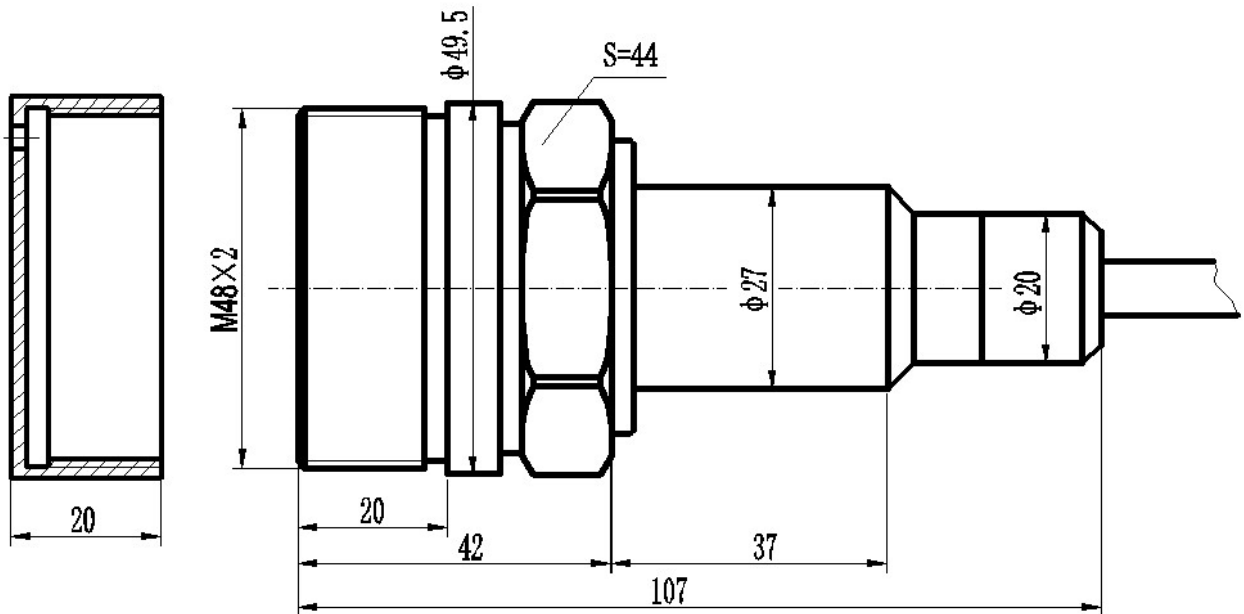
## Electrical Connections & Dimensional Drawings

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		

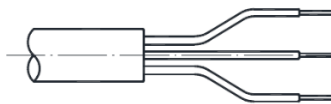
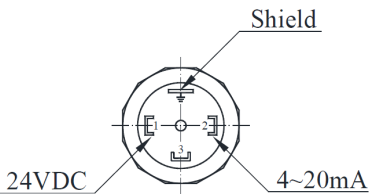
Dimension Drawing-A:  $\Phi$  32.4 mm Ceramic Cell



Dimension Drawing-B:  $\Phi$  32.4 mm Ceramic Cell



ESL040-C Electrical Connection

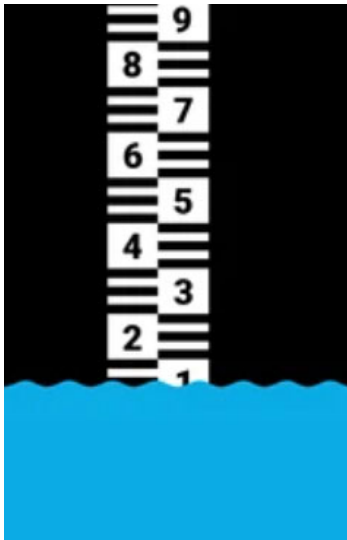


ESL040C Electrical Connection		
<b>Red Wire</b>	Power Supply	24Vdc
<b>Black Wire</b>	Output	4-20mA
<b>Yellow Wire</b>	Shield	-

## Specifications

Measuring Range	0~1...100mH2O/-1bar~0~100bar;		Compensation temperature	-20~70°C
Overload pressure	2 times of rated pressure		Insulation	>100MΩ @50V
Burst Pressure	4 times of rated pressure		Medium compatibility	Seawater of any region
Accuracy	±0.1%F.S: ±0.25%F.S:		Ingress Protection	IP68
Stability	0.1%F.S/Y		Pressure type	GP (G), AP(A)
Working temperature	-40~85°C		Electromagnetic compatibility	Electromagnetic radiation: EN50081-1/-2 Electromagnetic
Electrical	Two wire	Three wire		
Output Signal	4~20mA	0~5Vdc	1~5Vdc	0~10Vdc
Power supply	10~36Vdc	6~24Vdc/ac		11~30Vdc/ac
Load resistance	(U-10)/0.02(Ω)	>100kΩ		

1mH2O≈9.81KPa



**ESL040-C** [Ceramic Capacitive Titanium Alloy]

**Submersible Level Probe—** Corrosion-Resistant Measurement 0.1% Accuracy | 4-20mA HART

◇ Range: 0-1...300mH2O ◇ Accuracy:±0.25%F.S ◇ Signal Output:4-20mA, 0/1-5V, 0-10V, RS485 ◇ IP68 ◇ MOC:SS316/Titanium

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### LIMITED WARRANTY

Seller warrants that the product hereby purchased is, upon delivery, free from defects in material and workmanship and that any such

product which is found to be defective in such workmanship or material will be repaired or replaced by Seller (Ex-works, Factory, Xi'an China. INCOTERMS); provided, however, that this warranty applies only to equipment found to be so defective within a period of 18 months from the date of manufacture by the Seller.

Seller shall not be obligated under this warranty for alleged defects which examination discloses are due to tampering, misuse, neglect, improper storage, and in any case where products are disassembled by anyone other than authorized Seller's representatives.

EXCEPT FOR THE LIMITED WARRANTY OF REPAIR AND REPLACEMENT STATED ABOVE, SELLER DISCLAIMS ALL WARRANTIES WHATSOEVER WITH RESPECT TO THE PRODUCT, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR

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