

ABOUT EASTSENSOR

Measuring your business up



Almost 30-year manufacturing experience, Eastsensor products have been used in more than 800 projects across the country and the world.

Eastsensor is a major manufacturer and supplier of measuring products and solutions. Ever since its foundation, Eastsensor has been committed to precise measurement industry and kept remarkable record in government procurement in the industry of petroleum production and storage.

With more than decades of experience and development, Eastsensor Instruments has long been viewing as the leading manufacturer in the field of process control & measuring industry. Eastsensor values the quality of concentration and has been prudent at expanding the product lines. We know clearly what we are capable of but we care more about quality and would rather focus on supplying better products. And we have every reason to expect a brighter future for Eastsensor.



Headquarter | Hi-tech Zone Xi'an China

Why Choose Us?

Eastsensor specializes in the research, design and manufacture of pressure sensor, transducer, transmitter, switch, gauge as well as liquid level sensor, transducer, and transmitter.

Decades experiences, One Step Forward, One Idea Ahead

- Eastsensor has been engaged in the research and development of HART transmitter (pressure and liquid level) ever since 1990s. With our factory and professional R&D team, we are able to provide specific devices (OEM and tailor-made) both for standard and harsh environment.
- 2 Lying at the foot of Qin Mountain, the factory offers you not only the charming beauty of the nature, but also the wonderful manufacturing process.
- 3 Here, you are able to see the most professional experts in the industry and the earnest employees, who are ready to present you word-class products and service.
- Eastsensor attaches great importance to the professional skills of its employees. Besides internal trainings, we keep sending out our technical personnel at key posts for technical trainings from industry-leading companies, ROSEMOUNT for example.





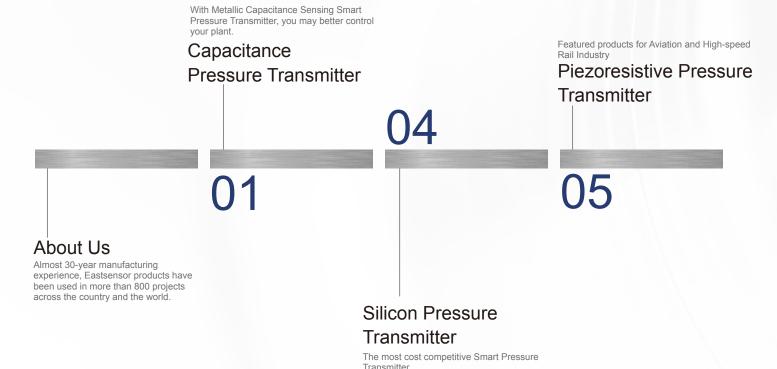
Manufacturing Base | Xi'an China

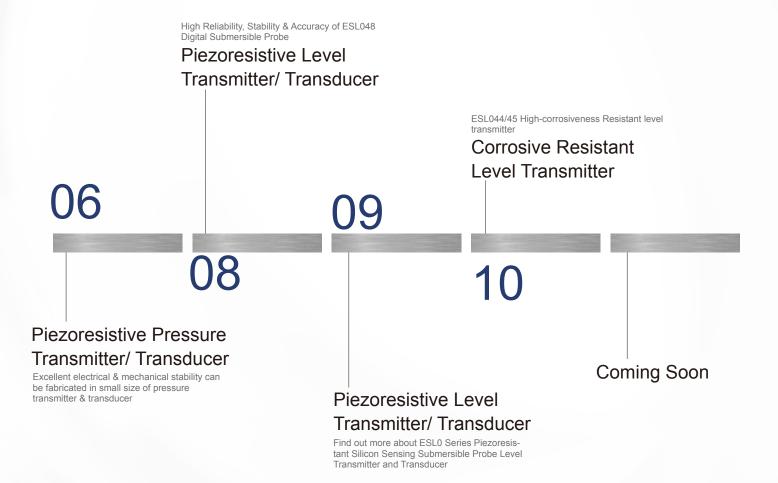
At Eastsensor, we adopt the sensing technology ranging from piezoresistive to capacitive based on silicon and ceramic to design product heading for different environment.

Eastsensor's sensing elements are signal conditioned, calibrated over temperature including digital or analog outputs based on broad range from inches of water column to 200Mpa industry pressure measuring process.

Advanced design and sophisticated manufacturing ensure Eastsensor to provide customer the most affordable, accurate, and long –term stable sensors, transmitters and transducers.

Gontent







EST4300 Smart Pressure Transmitter (Gauge/Differential/Absolute/High Static)

EST4300 COPLANAR



Highlight Features

With digital compensation for temperature and static pressure, EST4300 Series Pressure Transmitter is the new generation of Smart Capacitance Differential Pressure Transmitter; the sensors improve the accuracy and reduce the temperature drift.

The metallic capacitance sensors have been performed excellent due to long-term stability, high reliability, self-diagnostic capability as well as excellence cost performance.

With HART 388 or Rosemount 275 field communicator, EST4300 can perform address polling, test, configuration, and calibration

- Microprocessor-based high flexibility and enhanced features.
- Enhanced self-diagnostic capacity.
- Perfect local and remote set-up and calibration function.
- Independent Zero & Span Adjustment
- General components ensuring convenient maintenance.
- High stability and precision, adjustable damping and strong overload capacity.
- Two-wire, HART-compliant, communicating with HARTcompliant devices without interrupting
- No mechanical transmission parts, less maintenance, firm and shock resistant.

Main Specification			
Rangeability	40:1/100:1	Power Supply	24V dc
Accuracy	±0.05~0.1	Lacation	Explosion-Proof Exd IIBT5
Stability	± 0.15%12months	Location	Intrinsic Safe Exia IICT5
Temperature Effect	±0.25 (55°C) Max Span	Temp. Limits	-40~104℃
Power Supply	≤ ± 0.005% /span /V	Damping	Time constant: 0.2~32.0s
Overpressure	140kgf/cm2, error=±0.25%/URL	Booting Time	3s, No warm up
Volumetric Displ	Less than 0.16 cm3	Electromagnetic	IEC801 standards



Metallic Capacitance Sensing

EST4300 Smart Pressure Transmitter (Knock-down parts & Materials)

CONSTRUCTION



Materials

EST4300 adopt the sophisticate material and rugged design to provide reliable performance even under harsh environment.

Ranging from Isolating Diaphragm, Drain/Vent Valves, to Flange and Connectors, customers may choose the most popular construction material according to the requirement of their project.

Wetted Part	Isolating Diaphragm	316 SST, Alloy C, Monel and Tantalum	
Materials	Drain/Vent Valves /Flange	316 SST, Alloy C and Monel	
	O-rings:	Fluororubber, NBR	
Non-Wetted	Fill Fluid	Silicone	
Parts	Bolt	Zinc Plated CS	
Electrical housing		Low copper aluminum	

Metallic Capacitance Sensing

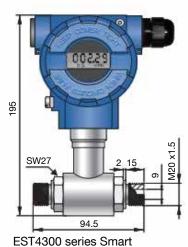
EST4300 Smart Pressure Transmitter (Gauge/Differential/Absolute/High Static)

DIMENSION 133 129 Rating plate 91.5 M20x1.5 packing gland 6...12 cable 62200 Four holes M10 (standard) or 7/16" UNF Two holes (M6) Lock preventing the casting rotation 70 9 Venting and draining valves 54 54

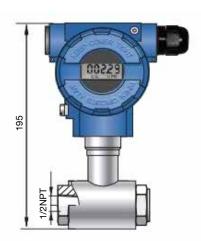
EST4300 series Smart Pressure Transmitter with type C process connection to be mounted together with a valve manifold

Span Code	2、3、4、5	6	7	8	9
M(mm)	54	55.4	55.8	57.4	58.5

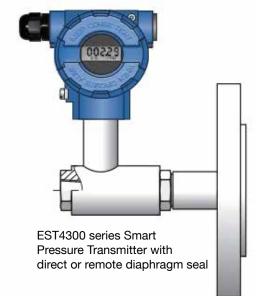
Metallic Capacitance Sensing



EST4300 series Smart
Pressure Transmitter with
P type process connection



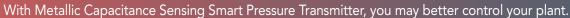
EST4300 series Smart Pressure Transmitter with PN type process connection





Metallic Capacitance Sensing

METALLIC CAPACITANCE SENSING PRODUCTS





EST4300 Smart Liquid Level Transmitter (Flange Mounting)

EST4300 LIQUID LEVEL TRANSMITTER



Highlight Features

With level mounting flanges, the transmitter can be mounted directly to the tank to be measured, and provide accurate measurement of the pressure, differential pressure and liquid level of various tanks.

Differential pressure transmitter can be used for level measurement in most cases; however, a flange mounting liquid level transmitter is needed for any of the following situations.

The process liquids are prone to solidifying or crystallizing

The process liquids are too thick or contains suspended solid and can easily block the impulse piping

The process liquids are hot or corrosive, and cannot be measured directly The process liquids are food or other materials that cannot be contaminated

Unit	kg	Coplanar flange	2"Extension Length	4"Extension Length	6"Extension Length
3"	150lb	8.9	9.8	10.3	10.7
4"	150lb	11.6	12.9	13.9	14.8
3"	300lb	11.1	12.1	12.5	12.9
4"	300lb	15.7	17	18	22.9

Flange siz	:e						Bolt h	nole	
Ordering	Dimension	Specification	Diameter	Α	В	С	No.	Diamet	Distribution
Code								er	diameter
Α	3"	150lb	190	22	66	127	4	20	152.5
В	4"	150lb	230	22	89	157	8	20	190.5
С	3"	300lb	210	27	66	127	8	22	168.5
D	4"	300lb	255	30	89	157	8	22	200

Metallic Capacitance Sensing



EST4300 REMOTE PRESSURE TRANSMITTER

EST4300 Smart Remote Differential Pressure Transmitter (RG/RD)

Remote Differential Pressure Transmitter is used where to keep the isolating diaphragm out of direct contact with the process liquid and to prevent the process from the sensor module





Highlight Features

With the same technology and specifications with 3151 differential pressure transmitter, EST4300-RG/RD transmitter is a little bit weakened in measurement accuracy and response time.

Besides, as the capillary length is over 10m, special attention must be paid to the installation position of the capillary to ensure the pressure tested is within the measuring scope of the basic sensing element; compatible with HART 475 field communicator

Where a remote differential pressure transmitter shall be used?

- The process liquids are prone to solidifying or crystallizing
- The process liquids are too thick or contains suspended solid and can easily block the impulse piping
- The process liquids are hot or corrosive, and cannot be measured directly
- The process liquids are food or other materials that cannot be contaminated.

Remote device specification Fill fluid working temperat • Silicone: 15~315°C • Fluorocarbon oil:-45~205 Pressure Limits • Threaded:14MPa: • Check ring:2MPa: • Flange, plug-in, and flat. Based on flange rating.

Booting
Time
Affected by the temperature, pressure, remote type, capillary length, diameter as well as the fill fluid.

Metallic Capacitance Sensing

EST4300 In-line Smart Pressure Transmitter

EST4300 IN-LINE



Highlight Features

EST4300 In-line Smart Pressure Transmitter is the industry standard for gauge and absolute pressure measurement. The in-line, compact desgin allows the transmitters to be connected directly to a process for quick, easy and cost effectively installation.

EST4300 In-line Smart Pressure Transmitter utilizes advanced and most sophisticate silicone sensing technology to maintain a reference accuracy of ±0.5% of span including error of linearity and repeatability.

- Pressure type: Gauge/Absoulte
- Process medium: Liquid/Gas/Steam
- Range: 0~35kPa~60MPa
- Output: 4-20mA with HART protocol

Ra	ange	Output	Parts	Diaphragm	Filled	Mechanical Connection
1	0~3.5~35kPa	4~20mAdc		SS316L		M20x1.5 M
2	0~10~100kPa	4~20mAdc+HART		Alloy C-276		1/2NPT-14M
3	0~35~350kPa	FOUNDATION fieldbus		Monel		G1/2M
4	0~0.1~1MPa		SS316	Tantalum		1/2NPT-14F
5	0~0.35~3.5MPa		1	Titanium	Silicone	
6	0~1.0~10MPa		_			
7	0~2.1~21MPa					
8	0~4.1~41MPa					
9	0~6.0~60MPa					



EST4300 Smart Pressure Transmitter

Sillicone Sensing

EST4300 In-line Smart Pressure Transmitter is ruggedly constructed of high quality materials.

Most advanced and sophisticate silicone sensing technology guarantee stable and accurate performance.



It combines proven sensor and electronics technologies with a single isolator.



It is designed for absolute and gauge pressure measurements from 0.5 to 9,000 psi.



It provides a superior alternative for measuring absolute or gauge pressure with the rugged, reliable performance.





EST-Air Pressure Transmitter for Aviation & High-speed Rail Industry

EST-AIR PIEZORESISTIVE PRESSURE TRANSMITTER









Highlight Features

Featuring high accuracy, high reliability, and full temperature compensation, the EST-air line is widely used for the measurements of water, oil, light corrosive liquid and gas.

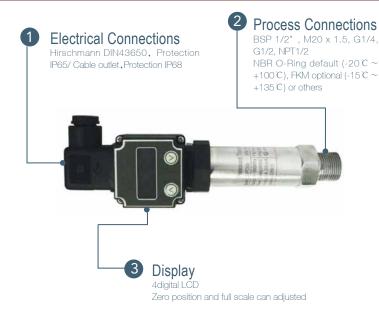
EST-air is easy to perform zero/span trim. Two wire circulating current output; Three-wire voltage/current output

Specification	
Pressure	Gauge Pressure
Range	0~0.1MPa60MPa
Accuracy	±0.1%F.S
Stability	0.1%F.S/Year (typical)
Output	4~20mA, 1~5V, 0.5~4.5V
Power supply	10~30Vdc, 5V, 8~30Vdc
Overload	200%
Insulation	>100MΩ@50V
Electric Strength	500V@60second
Shock	10g/5~2000Hz
Response time	10ms
Temperature	-40℃~85℃
Electrical Connections	DIN43650, IP65; GX 16-7, IP45; Wire jacket connection, IP68; Waterproof connection; Packard

Piezoresistive Sensing

EST330S Piezoresistive Pressure Transmitter (High Temperature)

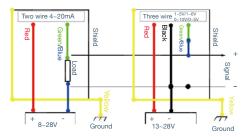
EST330S PIEZORESISTIVE PRESSURE TRANSMITTER



Highlight Features

EST330S Piezoresistive Pressure Transmitter is specially designed for high temperature (130 °C) which is the ideal solution for general industrial applications.

- Accuracy of ±0.5%F.S within measuring range 0 ... 100MBar ... 400MBar
- High temperature of 130°C
- Variety of process connections available
- 4 digital LCD display or Cable outlet connection
- Measuring ranges can be combined in almost ways with all the standard industry output signals



EST3100 Economical Piezoresistive Pressure Transmitter

Economical type

Highlight Features



With stainless steel construction, easy for zero/span trim, EST3100 is cost-effective pressure transmitter for both civil and industrial purposes. The product is widely used for the measurements of gas and liquid, such as water, oil and light corrosive liquid and gas.

Application for Gas dispenser | Refrigerator | Hydraulic lubrication | Constant pressure water supply | Line pressure | Pressure vessel | Petrochemical | Industrial process control

Specification			
Range	0~0.560MPa	Working Temp.	-40°C~100°C
Accuracy	±0.5 %F.S	Stability	0.25~0.4%F.S/Year
Output	4~20mA, 0/1~5V, 0~10V	Electrical Connections	DIN43650A/GX16-7
Power supply	10~30Vdc, 8~30Vdc/ac	Pressure Connection	M20 x 1.5, G1/4, G1/2, NPT1/2

Piezoresistive Sensing

EST383 Thin Film Sensing Pressure transmitter for Construction Machinery Industry

Construction Machinery type

Highlight Features



EST383 is one kind of industrial pressure transmitter which adopts thin film sensing measuring principle, it is featuring heat-resistance, wide range and high stability and is widely used for the measurements of gas and liquid, such as water, oil and light corrosive liquid and gas.

Application for Construction Machinery | Automobile engines | High-pressure common-rail engine | Hot and Cold environment | Deep well hydraulic detection | Boiler pressure detection

Specification			
Range	0~580MPa	Working Temp.	-40°C~150°C
Accuracy	±0.5 %F.S	Stability	0.2~0.4%F.S/Year
Output	4~20mA, 1~5V, 0.5~4.5V	Electrical Connections	DIN43650A/GX16-7
Power supply	10~30Vdc, 8 ~30Vdc/ac	Pressure Connection	G1/2, NPT1/2, R1/2

Piezoresistive Sensing

EST3110 Gauge type Pressure Transmitter for Air Compressor Industry

Air Compressor type

Highlight Features



EST3110 line is low-cost pressure transmitter of high quality and reliability. Aiming for both civil and industrial purposes, the product is available for OEM. Being small in size and light in weight, the compact product is widely used for the field measurements of compressors, automobiles and air conditioners.

Application for Frequency Compressor | Building water supply | Hydraulic control | Air conditioning unit | Automobile engine | Automatic detection system | Refrigeration equipment

Specification					
Range	0~550bar	Working Temp.	-40℃~120℃		
Accuracy	±0.5 %F.S	Stability	0.5%F.S/Year		
Output	4~20mA, 0.5~4.5V	Electrical Connections	Packard		
Power supply	10~30Vdc	Pressure Connection	G1/4, NPT1/4, 7/16-20UNF		



EST3123 Special Pressure Transducer for Centrifuges Assembly

Centrifuges Assembly type

Highlight Features



EST3123 line is widely used in large water-cooler centrifuges or chillers, single-spiral water-cooled chiller or hot water units. Featuring strong anti-jamming capability, high reliability and adaptability, the product has been successfully used in 10000Vac water-cooled centrifugal chillers.

Application for Large water-cooler centrifuges or chiller | Water-cooler single cold | Hot water units

Specification			
Range	0~550bar	Working Temp.	-35°C~105°C
Accuracy	±0.5 %F.S	Housing Material	Brass
Output	0.5~2.54.5Vdc	Electrical Connections	Packard
Power supply	5Vdc	Pressure Connection	7/16-20UNF; 9/16-20UNF

Piezoresistive Sensing

EST3130 Pressure Transducer for Automobile Industry

Automotive vehicle type

Highlight Features



EST3130 line is low-cost pressure transducer for automobile industry; Aiming for both civil and industrial purposes, the product is high quality and reliability. Being small in size and light in weight, the compact product is widely used for the field measurements of compressors, automobiles and air conditioners.

Application for Compressor | Building water supply | Hydraulic control | Air conditioning unit | Automobile engine | Automatic detection system | Hydraulic station| Refrigeration equipment

Specification					
Range	0~2600bar	Working Temp.	-40℃~125℃		
Accuracy	±1.0 %F.S	Stability	1.0 %F.S/Year		
Output	0~5V, 0.5~4.5V	Electrical Connections	Packard; DJ7032-2.3		
Power supply	10~24Vdc; 5Vdc	Pressure Connection	M14x 1.5, G1/2, M12x 1		

Piezoresistive Sensing

EST3135 Pressure Transducer for VRF Air-Conditioning System

VRF Air-Conditioning type

Highlight Features



EST3135 pressure transducers line is specially designed for VRF air-conditioning system. The product features low power, bidirectional over voltage protection, high overload capacity, great electrical strength and salt-spray resistance that can meet the special demands of VRF.

Application for VRF Air-conditioning system

Specification			
Range	0~50bar	Working Temp.	-35℃~105℃
Accuracy	±1.0%F.S;±2.0%F.S	Housing Material	Brass
Output	0.5~4.5V	Electrical Connections	Packard
Power supply	5Vdc	Pressure Connection	Cooper Pipe

ESL0 series Submersible Probe Liquid Level Transmitter & Transducer

Submersible Probe type

Highlight Features

High Reliability, Stability & Accuracy

Submersible probe level transmitter



Electromagnetic Compatibility EN50081-1/-2; EN50082-2

Piezoresistant Silicon Sensing Submersible Probe Level Transmitter

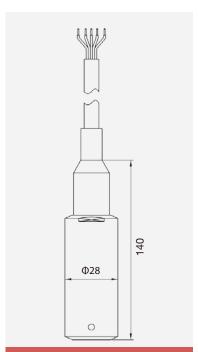
The probe type liquid level transmitter ESL0 series, basing on relationship between the height of the liquid column and the resulting hydrostatic pressure.

ESL0 series are carried out on the level of separating diaphragm of the immersed probe and is related to atmospheric pressure through a capillary in the cable.

ESL0 products are widely used for the measurements of gas and liquid, such as water, oil and light corrosive liquids.

The active sensing element is a piezoresistant silicon sensor separated from the medium by an isolating diaphragm.

The electronic amplifier, which words in combination with the sensor, and is meat to standardize the signal, is additionally equipped with an overvoltage protection circuit, which protects the probe from damage caused by induced interference from atmospheric discharges or from associated heavy current engineering appliance.



ESL048 Digital Submersible Probe

Specification

Pressure	Gauge/Seal gauge
Range	0~2200mH2O
Accuracy	±0.5%F.S
Stability	0.25%F.S/Year (
Output	RS485
Power supply	10~30Vdc
Overload	150%
Insulation	>100MΩ@50V
Temperature	-40°C~85°C
Electrical	Waterproof wire jacket
Connections	
Pressure	M20 x 1.5, G1/4, G1/2,
connection	R1/2, NPT1/2
Response time	10ms
Ingress	IP68
Protection	



ESL040 Universal Submersible probe level transmitter

Universal type

Highlight Features



Featuring high accuracy and stability, ESL040 is designed with special construction and widely used for the treatment of wastewater and river water, and for hydrologic monitoring in ditches, reservoirs, rivers, coast and etc, the high-strength cables that are wear-proof, acid/alkali resistant and oil resistant.

Application for monitoring Deep water level | River hydrologic | Wastewater treatment | Turbidity level measurement | Liquid level of storage tank | Water-saving irrigation

Specification			
Range	0~1500mH2O	Working Temp.	-40℃~85℃
Accuracy	±0.25/0.5/1.0%F.S	Stability	0.1%F.S/Year
Output	4~20mA, 0/1~5V, 0~10V	Electrical Connections	Waterproof wire jacket (IP68)
Power supply	10~30Vdc, 8/11~30Vdc/ac	Pressure Connection	Immersed G1/4

Piezoresistive Sensing

ESL042 Geothermal Water Submersible probe level transmitter

Geothermal Water type

Highlight Features



ESL042 is featuring heat-resistant, 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.

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

Specification			
Range	0~1500mH2O	Working Temp.	-20℃~100℃
Accuracy	±0.25/0.5%F.S	Stability	0.15~0.25%F.S/Year
Output	4~20mA, 0/1~5V, 0~10V	Electrical Connections	Waterproof wire jacket (IP68)
Power supply	10~30Vdc, 8/11~30Vdc/ac	Pressure Connection	Immersed /Split

Piezoresistive Sensing

ESL040T Temperature and Liquid Submersible probe level transmitter

Temperature & Liquid type

Highlight Features



ESL040T can measure the temperature and pressure at the same time. Featuring high reliability, stability and accuracy, the product is widely used for the measurements of gas and liquid, such as water, oil and light corrosive liquid and gas. It is easy to perform zero/span trim.

Application for Hydrologic monitoring | Constant pressure water supply | Tailwater elevation | Wastewater treatment | Frequency water supply | Metallurgy & Chemical industry

Specification			
Range	0~3200mH2O	Working Temp.	-40℃~85℃
Accuracy	±0.5 %F.S	Stability	0.1~0.2%F.S/Year
Output	4~20mA, 1~5V, 0.5~4.5V	Electrical Connections	Waterproof wire jacket (IP68)
Power supply	10~30Vdc, 8/10~30Vdc/ac	Pressure Connection	Immersed/M20 x 1.5



ESL044/45 High-corrosiveness Resistant level transmitter

High-corrosiveness Resistant type

Highlight Features



With the sensing element of ceramics, ESL044/45 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.

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

Specification			
Range	0~1500mH2O	Working Temp.	-20℃~120℃
Accuracy	±0.25/0.5/1.0%F.S	Stability	0.25~0.5%F.S/Year
Output	4~20mA, 0/1~5V, 0~10V	Electrical Connections	Waterproof wire jacket (IP68)
Power supply	10~30Vdc, 6/11~30Vdc/ac	Pressure Connection	Immersed

Piezoresistive Sensing

ESL046 Marine Titanium Alloy Submersible probe level transmitter

Marine Titanium Alloy type

Highlight Features



ESL046, adopts the titanium alloy construction and the oil fill system and housing, is specially designed for the seawater-related measurements. ESL046 is based on the locations; different high-strength breathable cables featuring wear-proof, acid/alkali resistance and oil resistance can be configured.

Application for Seawater measurement | Ship draft measurement | Water level of seaport wharf | Height measurement of bridge over the seal Corrosive mediums

Specification			
Range	0~1100mH2O/bar	Working Temp.	-20℃~70℃
Accuracy	±0.5%F.S	Stability	0.25 %F.S/Year
Output	4~20mA, 0/1~5V, 0~10V	Electrical Connections	Waterproof wire jacket (IP68)
Power supply	10~36Vdc, 6/11~30Vdc/ac	Pressure Connection	Immersed

Piezoresistive Sensing

ESL040M Separated Submersible probe level transmitter

Separated type

Highlight Features



ESL040M line is liquid level transmitter with compact and separate design. Featuring high reliability, stability and accuracy, the product is widely used for the measurement of liquid level in small-diameter pipe or liquid storage tank, such as water, oil and light corrosive liquids.

Application for Hydrologic monitoring |Constant pressure water supply | Frequency water supply | Tailwater elevation | Liquid level of storage tank | Water-saving irrigation

Specification			
Range	0~1500mH2O	Working Temp.	-40℃~85℃
Accuracy	±0.1/0.25/0.5%F.S	Stability	0.1~0.2%F.S/Year
Output	4~20mA,0/1~5V, 0~10V	Electrical Connections	Waterproof wire jacket (IP68)
Power supply	10/11~30V; 6~24V	Pressure Connection	Immersed, Entry Size M27x 1.5

