

## SS636 series submersible pressure sensors for level and depth applications

### Descriptions

SS636 series submersible pressure sensors are designed by piezoresistive technology, enhanced double O-ring(viton) structure meet the IP68 grade protection, the hermetically sealed housing make them suitable for immersion in almost all kinds of industrial liquids. The sensors give a long term and accurate readings at pressure ranges from 100 mBar up to 20 Bar in the measurement of level and depth. (corresponding to water column depths of 1 m to 200 m).



SS636 series have a more opened 316L stainless steel corrugated diaphragm, this special structure extremely reduces the possibility of being blocked, no pressure port and no blocking problems. The electrical connection is a special designed PU cable with air tube(PE cable is on request), easy for daily maintenance.

Typical applications including water and sewage treatment plants, water level monitoring at reservoirs, dams, down-hole water wells.

### Technical data

#### Performance (EN 60770)

|                         |   |
|-------------------------|---|
| Accuracy @25°C          | ±0.5% F.S.(incl. non-linearity, hysteresis and repeatability) |
| Response time           | < 4 ms  |
| Pressure range          | 0...100mbar to 20bar  |
| Overload pressure       | 2.0 × F.S.  |
| Pressure type           | vented gauge  |
| Long term stability     | ≤0.2%F.S./Year  |
| Temperature coefficient | ±0.03%F.S./°C   |

#### Electrical specifications

|                          |         |          |               |          |
|--------------------------|---------|----------|---------------|----------|
| Output signal            | 4-20mA  | 0-10V    | 0-5V/0.5-4.5V | 0.5-4.5V |
| Supply voltage           | 9-30Vdc | 12-30Vdc | 9-30Vdc       | 5Vdc     |
| Polarity protected       | yes     | yes      | yes           | yes      |
| Short-circuit protected  | yes     | yes      | yes           | yes      |
| Zero and span adjustment | No      | No       | No            | No       |
| Surge protection         | yes     | yes      | yes           | yes      |

#### Environmental conditions

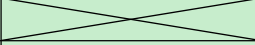
|                        |                  |
|------------------------|------------------|
| Medium temp range      | -20°C → +85°C    |
| Ambient temp range     | -20°C → +80°C    |
| Compensated temp range | 0°C → +50°C      |
| EMC - Emission         | EN 61000-6-3     |
| EMC - Immunity         | EN 61000-6-1     |
| Insulation resistance  | >100 MΩ at 250 V |

## SS636 series submersible pressure sensors for level and depth applications

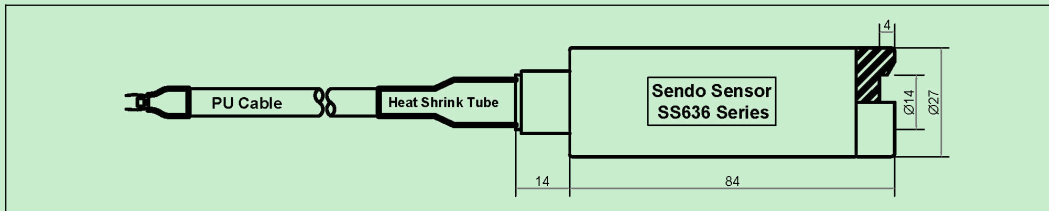
### Mechanical characteristics

|                |  |                               |                                |
|----------------|--|-------------------------------|--------------------------------|
| Materials      | Diaphragm                                      | Stainless steel 316L(typical) | More options see Page 3        |
|                | Housing  | Stainless steel 304(typical)  | Stainless steel 316L(optional) |
|                | Cable  | PU(typical)                   | PE(optional)                   |
|                | O-ring   | Viton                         |                                |
| Weight         | 0.5 - 5.0 kg(depending on cable length)        |                               |                                |
| Sealing rating | IP68(fulfilled together with mating connector) |                               |                                |

### Electrical connections

|                        |                |  |                 |
|------------------------|----------------|--|-----------------|
| 4-20mA(current signal) | Red: Voltage + |  | Black: Signal + |
| 0-10V/0-5V/0.5-4.5V    | Red: Voltage + | Black: GND   | Blue: Signal +  |

### Dimensions(Unit: mm)



## Installation and precautions

- The installation place should be easy to operation and fixing
- When installation, the metal probe should sink to the bottom of the container
- The installation place should be away from the heat source as far as possible
- The installation place should be away from the vibration source as far as possible
- If the customer need to connect with other cable, waterproofing measures must be taken
- When the sensor put into the water, it is the best that the sensor can be fixed, and away from the inlet

## Precautions for safety use

- Clean the metal probe(sensor) regularly to avoid block the pressure port
- The cable is a special waterproof cable, abrasion, puncture, and cut the cable is not allowed
- The wiring should strict reference to the electrical connection, wrong wiring will cause damage to the sensor
- A stainless steel 316L diaphragm is in the front part of the sensor, artificially foreign body touch is not allowed

## SS636 series submersible pressure sensors for level and depth applications

### Ordering information

EXAMPLE: [SS636 D 04 A 01 A](#)

|   |  |    |
|---|--|----|
| 1 | Pressure range   | D  |
|   | A(1m) B(2m) C(3m) D(4m) E(5m) F(6m) G(7m) H(8m) I(9m) J(10m)<br>X(Other range is on request)           |    |
| 2 | Cable length   | 04 |
|   | 01(2m) 02(5m) 03(8m) 04(10m) 05(12m) 06(15m) 07(20m) 08(25m)<br>09(30m) 10(Other length is on request) |    |
| 3 | Test medium  | A  |
|   | A(Water) B(Diesel) C(Other medium is on request)   |    |
| 4 | Density  | 01 |
|   | 01(1g/cm <sup>3</sup> ) B(0.85g/cm <sup>3</sup> ) C(Other density is on request)                       |    |
| 5 | Signal & supply  | A  |
|   | A(4-20mA & 9-30Vdc) B(0-10V & 12-30Vdc) C(0-5V & 9-30Vdc) D(0.5-4.5V & 9-30Vdc)<br>E(0.5-4.5V & 5Vdc)  |    |

Optional(please contact us for more details)

|   |  |
|---|--|
| 1 | PE cable   |
|   | A(YES) B(NO)   |
| 2 | Material of diaphragm  |
|   | 01(Titanium) 02(Tantalum) 03(Hastelloy-C)                      |
| 3 | Material of housing  |
|   | A(Titanium) B(Tantalum) C(Hastelloy-C) D(Stainless steel 316L) |

### Contact us

|                         |  |                             |
|-------------------------|--|-----------------------------|
| Company                 | Ningbo Sendo Electronic Technology CO., LTD                              |                             |
| Email                   | sales@sendo-sensor.com   |                             |
| Email                   | cain.chen@sendo-sensor.com   |                             |
| Factory                 | Floor 5, building 2, no.48 jiujuan road, jianggan district, 310019 China |                             |
| Office                  | Building. 1#1108, Wante business center, Hi-Tech, 315040 China           |                             |
| Website                 | http://www.pressuresensorsuppliers.com                                   | http://www.sendo-sensor.com |
| Skype: sendosensor      | We Chat: chenjie4884   | WhatsApp: +8613616574884    |
| Tel: 0086-0574-27725960 | Fax: 0086-0574-27725970  | Phone: 0086-13616574884     |

\*Specifications subject to change without notice, the latest date sheet please contact: sales@sendo-sensor.com



**WARNING: DO NOT USE THIS PRODUCT AS SAFETY OR EMERGENCY STOP DEVICE OR IN ANY OTHER APPLICATION WHERE FAILURE OF THE PRODUCT COULD RESULT IN PERSONAL INJURY OR EVEN DEATH.**