

Product Description

CS-PT400 submersible level transmitter is a high-accuracy, compact structure, long terms stability product. with high resistance to abrasion, oil, acid, and alkali cables. CS-PT400 is widely used in potable water supply, and reservoirs/lakes/river water monitoring.

The CS-PT400 complies with intrinsically safe and CE, UKCA certifications.



CS-PT400/L/E

CS-PT400WH

CS-PT400-2

CS-PT400FD

Feature

- ★ $\pm 0.25\%F.S$, $\pm 0.5\%F.S$
- ★ High accuracy diffused silicon pressure sensor
- ★ Anti-freezing, anti-blocking, anti-lightning strike
- ★ Several special structures for different usage
- ★ Multiply measurement range and output
- ★ Non-polarity two wire current output
- ★ CE.UKCA Intrinsically safe type available

Application

- ★ Deepwater level measurement
- ★ Hydrological monitoring
- ★ Water tank level monitoring
- ★ Water-saving irrigation
- ★ Circulating fluid monitoring
- ★ Water extraction project

Technical Parameters

| Parameter | Value | | | Note |
|-------------------------|--|----------------------|----------|-------------------------------|
| Measure Range | 0~1...350mH ₂ O | | | Customized |
| Overload Pressure | 1.5×RP(rated pressure) | | | |
| Broken Pressure | 3.0×RP(rated pressure) | | | |
| Accuracy | (±0.5%F.S, ±0.25%F.S)@25°C | | | |
| Zero thermal error | ±1%F.S (0-3mH ₂ O, 0~70°C) | ±0.75%F.S (-10~80°C) | | @25°C |
| Span thermal error | ±1%F.S (0-3mH ₂ O, 0~70°C) | ±0.75%F.S (-10~80°C) | | @25°C |
| Long term stability | ±0.25%F.S/year | | | |
| Operate Temperature | - 40°C~+85°C | | | According to O-ring and cable |
| CompensationTemperature | -10°C~+80°C | | | |
| Media Compatibility | 304 stainless steel, 316L stainless steel and Titanium optional | | | |
| Seal material | NBR O-Ring, FKM optional | | | |
| Wires | Two-wire | Three-wire | | |
| Output Signal | 4~20mA | 0.5-4.5V | 0-10V | |
| Power Supply | 12~30Vdc | 5Vdc | 12~30Vdc | |
| Load | (U-10)/0.02(Ω) | ≥10kΩ | | |
| Supply Current | | ≤8mA | | |
| Insulation | > 100M Ω@50V | | | |
| Electrical connector | IP68 | | | |
| Cable material | PE, PUR and FEP optional | | | |
| Weight(excluding cable) | About 250g | | | |
| Response Time | 10ms | | | |
| Pressure Form | Gauge G, Absolute A | | | |
| Compliant | CNEX, CE, UKCA | | | |
| EMC | EN: 61326-1 | | | |
| Surge Immunity | EN:61000-4-5: ±0.5KV,±1KV, on I/O Ports &DC lines | | | |
| RandomVibration | 10g, 5~2000Hz | | | |
| Shock | X/Y/Z, 20g, sine 11ms | | | |

CS-PT400—Submersible Level Transmitter

Type Selection Guide

CS-PT400

Type

| - | Universal type | Code | Measurement Range |
|----|------------------|------|-------------------|
| E | Atex type | 001Y | 0-1m |
| L | Lightning | 002Y | 0-2m |
| WH | Filter nose type | 003Y | 0-3m |
| 2 | Non-fouling | 006Y | 0-6m |
| FD | Freeze proof | 010Y | 0-10m |
| | | 050Y | 0-50m |
| | | 100Y | 0-100m |
| | | 200Y | 0-200m |
| | | 350Y | 0-350m |

| Code | Accuracy |
|------|-----------|
| 2 | ±0.25%F.S |
| 5 | ±0.5%F.S |

| Code | Output Signal |
|------|---------------|
| A | 4~20mA |
| V | 0.5~4.5VDC |
| T | 0~10VDC |

| Code | Power supply |
|------|--------------|
| 02 | 5VDC |
| 13 | 12~30VDC |


| Code | Seal Material |
|------|------------------|
| N | NBR |
| H | HNBR |
| C | CR |
| F | FKM |
| W | Welded structure |

| Code | Cable Material |
|------|----------------|
| PE | PE |
| PU | PUR |
| F4 | FEP |

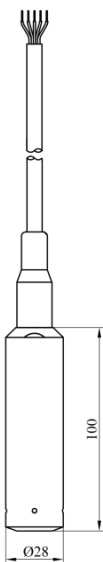
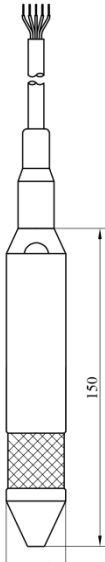
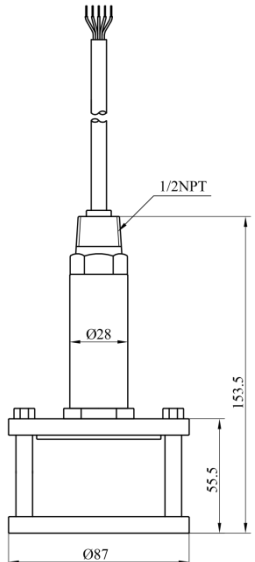
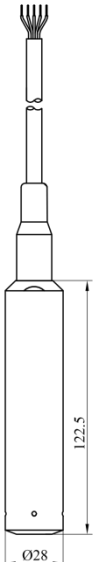
| Code | Cable |
|------|-------|
| 01 | 1m |
| 02 | 2m |
| 04 | 4m |
| 05 | 5m |
| XX | |

CS-PT400 L 003Y 2 A 13 F F4 05

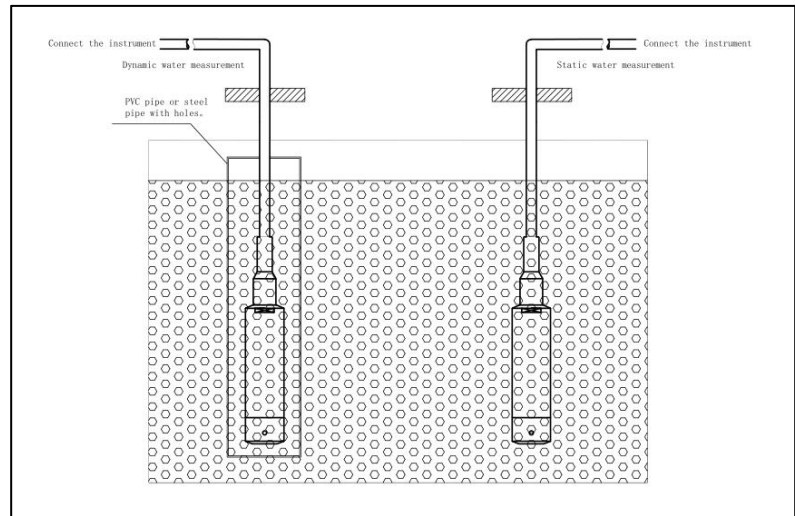
Electrical Connection

| | Line color | Line define | |
|---|--------------|---------------------|---------------------|
| | | Two line | Three line |
|  | Red | Supply power (U+) | Supply power (U+) |
| | Green / Blue | Current output (IO) | Voltage output (VO) |
| | Black | | GND |
| | Yellow | Shield (PE) | Shield (PE) |

Structure and Dimension (mm)

| CS-PT400/L/E | CS-PT400WH | CS-PT400-2 | CS-PT400FD |
|---|---|---|---|
|  |  |  |  |

Installation



Notes

1. Only use the pressure sensor to test the medium without corrosion to its housing and seal material.
2. Can not use sharp tools to clean the pressure hole when the hole of the pressure sensor is blocked. The pressure sensor shall be removed from the system and put the pressure hole part into the fluid which can dissolve the blocking substance.
3. To protect the transmitter used in areas with lightning, suggest adding a lightning protection device and reliably connecting the shield line to EARTH.
4. Drop the level transmitter into the container without touching the bottom sediment.
5. Please contact the factory if you need anything else.

Disposal methods of hazardous wastes such as waste circuit boards and their components after the end of product life

After the end of the product life, each part shall be distinguished according to the “National hazardous waste list” to determine whether it is hazardous waste. Among them, the waste lithium battery not disassembled is not hazardous waste, and the waste circuit board (including components, chips, plug-ins, pins, etc. attached to the waste circuit board) belongs to hazardous waste.

The part that is not hazardous waste shall be treated as general industrial solid waste, and the lithium battery shall be handed over to the nearby renewable resource recovery department or sent to the product manufacturer for recycling.

Hazardous wastes must be handed over to legally qualified departments for disposal in accordance with national regulations, and shall not be dumped or stacked without authorization. If it is really necessary to store temporarily, protective measures meeting the national environmental protection standards must be taken, and the storage period shall not exceed one year. At the same time, the time and place of temporary storage and the protective measures taken shall be reported to the competent environmental protection department. Hazardous waste transfer activities can be arranged according to the actual production situation. The system shall be strictly implemented in the transfer process

Statement

Chinastar Company. reserves the right to modify the specifications and contents of this instruction. No further notice will be given if any changes are made. Due to product updates, the individual details of this document may not match the product. Please refer to the actual product. The right to interpret this document belongs to Chinastar Company.