

SRC400 Capacitive level gauge

MAIN FEATURES

- Adaptable: It can work reliably under high temperature, high pressure, strong corrosion and dusty environment.
- No maintenance required: Due to the simple structure of the sensor, no maintenance is required once it has been put into operation.
- Wide range of applications: liquid and solid materials can be used.
- Complete protection: The transmitter is designed for explosion-proof and intrinsically safe circuits with a maximum output of less than 30 mA.
- Standard output: The transmitter adopts 4-20mA/DC standard current signal output, two-wire system operation, with load and strong anti-interference ability.



OVERVIEW

This product is a new type of capacitive continuous level meter. Due to the use of radio frequency technology and microcomputer technology, the traditional capacitive level gauge solves the problem of large temperature drift, difficult calibration and fear of adhesion, and can be widely applied to continuous measurement of various liquid solid level and interface. Especially in the environment of high temperature, strong corrosion and dust, it is unmatched by other types of level gauges.

working principle:

When the liquid level sensing electrode is installed in the container, a capacitor is formed. The metal rod (measuring electrode) of the electrode serves as a plate of the capacitor. The container: (Note: If the wall of the container is insulating material, it should extend into the other electrode. , referred to as the reference electrode) as the other plate of the capacitor, when the level rises, the air or other gas normally enclosed between the two plates has a different dielectric constant, when measured The material changes the dielectric capacity due to the change in dielectric properties between the plates. The RF capacitance level meter detects this change in capacitance through the RF circuit and converts it into a linear current output. The relative dielectric constant of the general process medium should be above 1.5.

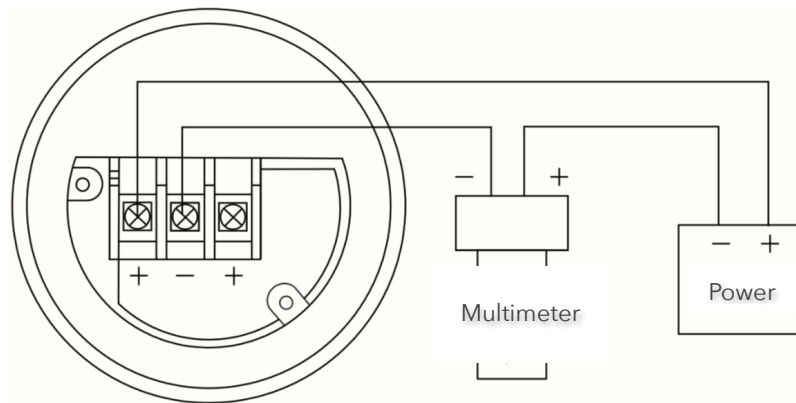
SPECIFICATION

| ITEMS | PARAMETER |
|-----------------------|---|
| Sensor type | coaxial rod type, parallel rod type, coaxial cable type, parallel cable type |
| Sensor length | the pole type is up to 2 meters and the cable length is up to 20 meters. |
| Sensor material | ICr18Ni9Ti or 316 stainless steel, Teflon |
| Medium temperature | -20 ° C ~240 ° C |
| Applicable pressure | -0. 1MPa~32MPa |
| Measuring range | 0-0. 2-20m |
| Power supply | 12-36V/DC |
| Adjustment range | ≥30% |
| Ambient temperature | -20~7 ° C |
| Measurement accuracy | ±0. 5% FS |
| Measuring medium | non-crystalline conductive liquid such as acid, alkali or water having a conductivity of not less than 10-3 s/m |
| Maximum load | ≤500Ω |
| Electrical interface | 1/2NPT |
| Shell material | die-cast aluminum |
| Shell spraying | the main part is milky white polyurethane, the end cover is dark green |
| Protection level | IP65 |
| Explosion-proof grade | ExdIIBT6 |

OUTLINE CONSTRUCTION

| | |
|--------------------|--|
| <p>Thread type</p> | |
| <p>Flange type</p> | |
| <p>Cable type</p> | |

WRING CONNECTION



APPLICATION



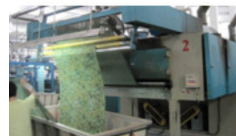
Sewage treatment



Desulfurization industry



Chemical Industry



Printing & dyeing



Electroplating industry

ORDER GUIDE

| | | | | | | | |
|--------|------------------------|--|---|---|---|----|---------------|
| SRC400 | Capacitive level gauge | | | | | | |
| | CODE | type | | | | | |
| | A | Ordinary type | | | | | |
| | B | High temperature type | | | | | |
| | C | Hygienic type | | | | | |
| | D | Anticorrosive type | | | | | |
| | CODE | Insertion depth | | | | | |
| | 1 | 1000m (standard) | | | | | |
| | 2 | Pole type extension 1000-3000 optional | | | | | |
| | 3 | Cable type extended split 1-20000m optional | | | | | |
| | CODE | Voltage | | | | | |
| | D | 24V DC $\pm 10\%$ | | | | | |
| | CODE | Material | | | | | |
| | 1 | 304(standard) | | | | | |
| | 2 | 316 | | | | | |
| | 3 | Anti-corrosion type, surface sprayed with PTFE | | | | | |
| | CODE | Process connection | | | | | |
| | G | G1 "thread (standard) | | | | | |
| | T | 1 "NPT thread | | | | | |
| | F | Flange installation (flange specification and standard shall be indicated) | | | | | |
| | C | Other customization | | | | | |
| | CODE | Other parameters | | | | | |
| | A | Normal teperature_° C | | | | | |
| | B | Normal pressure_Kpa | | | | | |
| | C | Protection level IP66 | | | | | |
| | D | Flameproof level ExdIICT6 | | | | | |
| | E | Maximum temperature _° C | | | | | |
| | F | Maximum pressure Kpa or Mpa | | | | | |
| | G | Other requirements | | | | | |
| SRC400 | A | 1 | D | 1 | G | AB | Order example |