

CS12

OEM Submersible Pressure Transducer

The CS12 OEM submersible pressure transducer is designed for liquid level measurement applications. Stainless steel (316L and 304) construction and an Extruded ETFE cable jacket allows for installation in a wide variety of liquids. Precision welds and a high strength cable gland prevent liquids from entering the electronics. A wide diameter vent tube quickly equalizes the barometric pressure within the sensor body to ensure accurate level measurements. The CS12 is available in various output signals including 4-20mA loop powered for long distance transmissions and voltage outputs for low power, low current consumption.



Features

- $\leq \pm 0.25\%$ BFSL accuracy
- Pressures from 1 PSI up to 100 PSI
- 316L SS diaphragm / oil filled sensor element
- Removable nose cone

Applications

- Fuel tank level measurement
- Ballast tanks
- Flood monitoring
- Depth measurement

SPECIFICATIONS

Performance

| | |
|--------------------|------------------------------------|
| Accuracy* | $\leq \pm 0.25\%$ BFSL |
| Stability (1 Year) | $\leq \pm 0.25\%$ of FS |
| Pressure Cycles | 50 million |
| Overpressure | 2X, minimum |
| Burst Pressure | 5X or 1,250 PSI, whichever is less |

* Accuracy includes non-linearity, hysteresis and non-repeatability

Thermal / Environmental

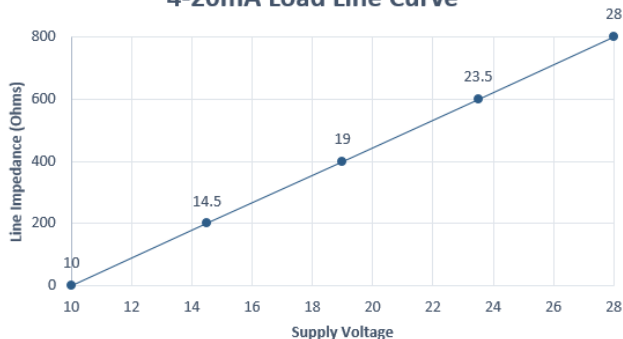
| | |
|-------------------------|------------------------|
| Operating Temperature | -40 to +85°C |
| Compensated Temperature | 0 to +55°C |
| Storage Temperature | -40 to +100°C |
| TC Zero | $\leq \pm 1\%$ of FS |
| TC Span | $\leq \pm 1\%$ of FS |
| EMI/RFI Protection | Yes |
| IP Rating | IP68 |
| Vibration | 10g, 20 to 2000Hz |
| Shock | 100g, 11msec, 1/2 sine |

Electrical

| Output | 4-20mA | 1-5V | 0.5-4.5V ratiometric |
|------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|
| Excitation | 10-28VDC | 10-28VDC | 5VDC +/-0.5V |
| Current Consumption | 20mA, typical | <10mA | <10mA |
| Output Load | See Load Line Curve | 5K Ohms, min | 5K Ohms, min |
| Frequency Response | ~ 250Hz | ~ 1kHz | ~ 1kHz |
| Zero Offset (of FS) | $\leq \pm 0.5\%$ typical $\leq \pm 1\%$ max | $\leq \pm 0.5\%$ typical $\leq \pm 1\%$ max | $\leq \pm 0.5\%$ typical $\leq \pm 1\%$ max |
| Span Tolerance (of FS) | $\leq \pm 0.5\%$ typical $\leq \pm 1\%$ max | $\leq \pm 0.5\%$ typical $\leq \pm 1\%$ max | $\leq \pm 0.5\%$ typical $\leq \pm 1\%$ max |

For wiring information, visit <http://www.core-sensors.com/wiring>

4-20mA Load Line Curve



MODEL NUMBER CONFIGURATION

CS12- 6 A XXXXX X G X Z 000 - XX

Model Family

CS12 - Submersible Pressure Transducer

Process Connection

6 = Nose Cone

Wetted Material

A = 316L SS

Pressure Range

Insert 5-digit pressure code, max 100 PSI
(i.e. 00100 = 100 PSI)

Pressure Unit

P = PSI
B = Bar
W = Inches H2O

Pressure Reference

G = Gauge

Cable Length

05 = 5 meters
10 = 10 meters
16 = 16 meters
20 = 20 meters
32 = 32 meters

Options

000 = No Special Options

Electrical

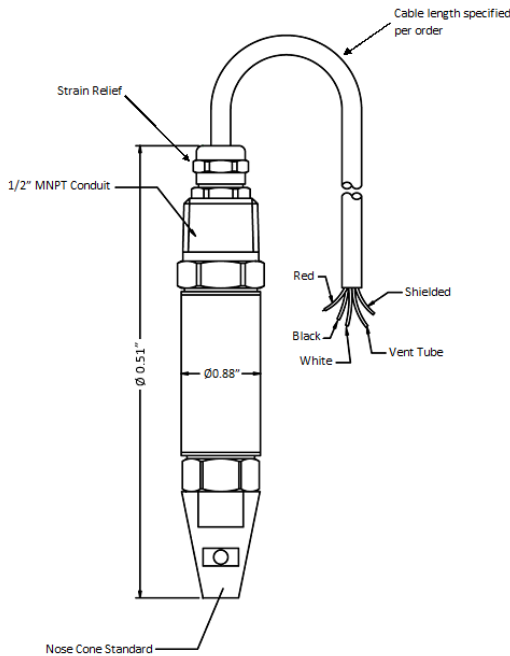
Z = Conduit w/ Cable Gland
(See "Cable Length")

Output

1 = 1-5V
2 = 0.5-4.5V Ratiometric
4 = 4-20mA

* Ordering Example: CS12-6A00010PG1Z000-10 (0-10 PSI, Nose Cone, 1-5V, 1/2" MNPT conduit w/ cable gland, 10 meters of cable, 316L SS, Gauge)
* Contact factory for custom configurations not shown

DIMENSIONS



*Dimensions are for reference only



We are committed to delivering the highest quality instrumentation on every order.

Core Sensors warrants that all items shipped will be free of defects in material and workmanship for a period of one (1) year from the date of shipment.

View complete warranty information online at www.core-sensors.com.