CS12

Submersible Pressure Transducer

FEATURES

- Pressures from 1 PSI up to 100 PSI
- Optional nose cone
- ETFE cable jacket with wide diameter vent tube
- 316L and 304SS construction
- 4-20mA or voltage output
- IP68 rated
- Low power options available for remote telemetry applications!

GREAT FOR....

- Depth measurement
- Level monitoring
- Flood monitoring
- Ballast tanks



Assembled in USA



About the CS12

The **CS12 Submersible Pressure Transducer** is designed for liquid level measurement applications. Stainless steel (316L and 304) construction and an ETFE cable jacket allows for installation in a wide variety of liquids. Precision tig welds and a high strength Nylon cable gland prevent liquids from entering the transducer. 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.



Reliable Continuous Liquid Level Measurement

The **CS12 Submersible Pressure Transducer** is the ideal solution for continuous liquid level measurement. This transducer was engineered with a high strength 300 series stainless steel (304 & 316L) metallic construction, corrosion resistant ETFE cable jacket, and a Nylon strain relief for compatibility in a wide range of liquids.

The CS12 Submersible Pressure Transducer is also great for non-submersible applications where flooding is a concern. While 100 PSI is the max rated submersion, the CS12 can be configured with pressure ranges above 100 PSI for non-submersible applications, ensuring continuous pressure measurement even during flooding events.

SPECIFICATIONS

Performance

Accuracy @ 25°C:* ≤ ± 0.25% BFSL

 \leq ± 0.5% BFSL (2 PSI & below)

Stability (1 Year): $\leq \pm 0.25\%$ of FS

Pressure Cycles: 50 million

Overpressure: 2X minimum

Burst Pressure: 5X or 500 PSI, whichever is less

Max Submersion: 100 PSI

Thermal

Operating Temperature: -40 to +85°C

Compensated Temperature: 0 to +55°C

Storage Temperature: -40 to +125°C

TC Zero: $\leq \pm 1\%$ of FS

 $\leq \pm 2\%$ of FS (2 PSI & below)

TC Span: $\leq \pm 1\%$ of FS

 \leq ± 2% of FS (2 PSI & below)

Environmental

EMI/RFI Protection: Yes

IP Rating: IP68

 Vibration:
 10g, 20 to 2000Hz

 Shock:
 100g, 11msec, 1/2 sine

Physical

Cable Conductors:

Weight, excluding cable: 0.50 lb. (approx.)

Wetted Material: See Dimension/Materials

listing

22 AWG

Cable Pull Strength: 150 lb.

Electrical (Current)

Outputs: 4-20mA

Excitation: 10-28VDC

Current Consumption: 20mA, typical

Output Load: 0-800 Ohms @ 10-28VDC

Frequency Response (min): ~250Hz

Zero Offset (of FS): $\begin{array}{c} \leq \pm~0.5\% \text{ typical} \\ \pm~1\% \text{ max} \end{array}$

Span Tolerance (of FS): $\begin{array}{c} \leq \pm~0.5\% \text{ typical} \\ \pm~1\% \text{ max} \end{array}$

Electrical (Voltage)

Outputs: 1-5V

Excitation: 10-28VDC

Current Consumption: <10mA

Output Load: 5K Ohms, min

Frequency Response (min): ~1kHz

Zero Offset (of FS): $\leq \pm 0.5\%$ typical $\pm 1\%$ max

Span Tolerance (of FS): $\begin{array}{c} \leq \pm~0.5\% \text{ typical} \\ \pm~1\% \text{ max} \end{array}$

Electrical (Ratiometric Voltage)

Outputs: 0.5-4.5V ratiometric

Excitation: 5VDC +/- 0.5V

Current Consumption: <10mA

Output Load: 5K Ohms, min

Frequency Response (min): ~1kHz

Zero Offset (of FS): $\leq \pm 0.5\%$ typical $\pm 1\%$ max

 $\leq \pm 0.5\%$ typical

Span Tolerance (of FS): ± 1% max

Electrical (Low Power Voltage)

Outputs: 0.5-2.5V non-ratiometric

Excitation: 3-5VDC unregulated

Current Consumption: $\leq 3mA$

Output Load: 5K Ohms, min

Frequency Response (min): ~1kHz

Zero Offset (of FS): $\begin{array}{c} \leq \pm~0.5\% \text{ typical} \\ \pm~1\% \text{ max} \end{array}$

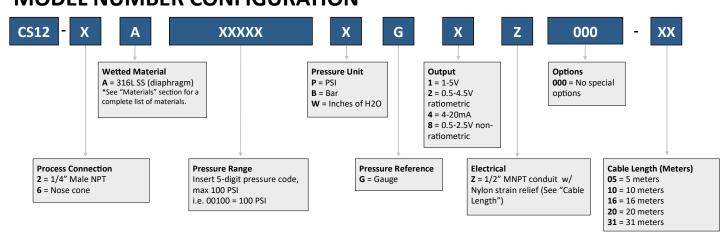
Span Tolerance (of FS): $\begin{array}{c} \leq \pm \ 0.5\% \ \text{typical} \\ \pm \ 1\% \ \text{max} \end{array}$

For wiring information, visit core-sensors.com/wiring

^{*} Accuracy includes non-linearity, hysteresis and non-repeatability



MODEL NUMBER CONFIGURATION



Ordering Example: CS12-6A00005PG4Z000-10 (Nose cone, 316L SS, 0-5 PSI gauge, 4-20mA, 1/2" MNPT conduit with nylon strain relief, 10 meters of ETFE cable)
Not all configurations are available. Our sales team can recommend the closest available configuration based on your requirements.
Contact Core Sensors for configurations not shown.
Visit our How To Buy page or contact us for a quote.

Nvlon strain relief

Buna-N form seal

Viton O-ring

Warranty information can be found online at core-sensors.com.

316L SS threads and

diaphragm

(Nose cone installed is standard)

