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

RoHS COMPLIANT

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 ≤ ± 0.5% BFSL (2 PSI & below)
Stability (1 Year):	≤ ±0.25% of FS
Pressure Cycles:	50 million
Overpressure:	2X minimum
Burst Pressure:	5X or 500 PSI, whichever is less
Max Submersion:	100 PSI

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

Thermal

Operating Temperature:	-40 to +85°C
Compensated Temperature:	0 to +55°C
Storage Temperature:	-40 to +125°C
TC Zero:	≤ ± 1% of FS ≤ ± 2% of FS (2 PSI & below)
TC Span:	≤ ± 1% of FS ≤ ± 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

Weight, excluding cable:	0.50 lb. (approx.)
Wetted Material:	See Dimension/Materials listing
Cable Conductors:	22 AWG
Cable Pull Strength:	150 lb.

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

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):	≤ ± 0.5% typical ± 1% max
Span Tolerance (of FS):	≤ ± 0.5% typical ± 1% max

Electrical (Voltage)

Outputs:	1-5V
Excitation:	10-28VDC
Current Consumption:	<10mA
Output Load:	5K Ohms, min
Frequency Response (min):	~1kHz
Zero Offset (of FS):	≤ ± 0.5% typical ± 1% max
Span Tolerance (of FS):	≤ ± 0.5% typical ± 1% max

Electrical (Ratiometric Voltage)

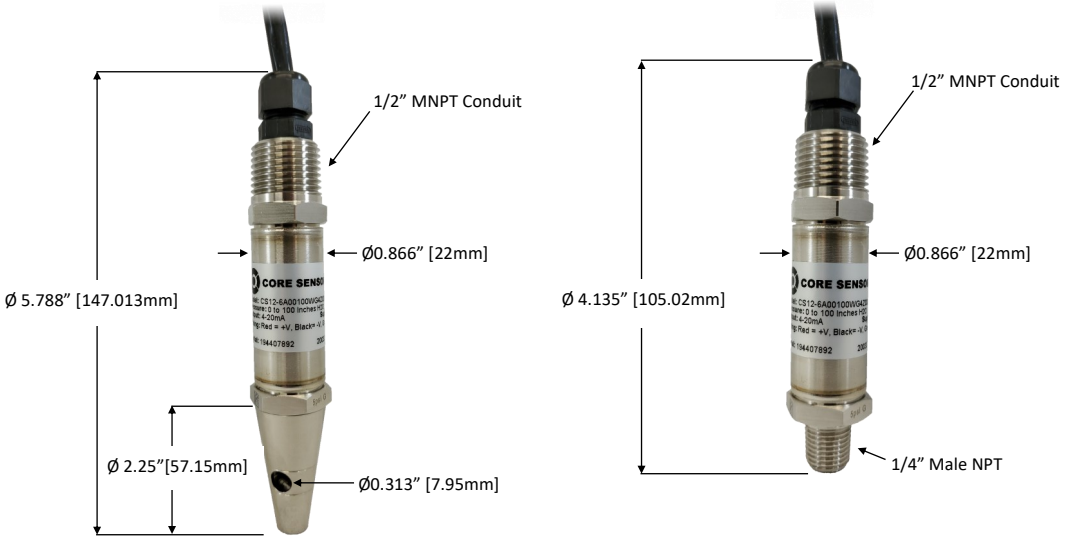
Outputs:	0.5-4.5V ratiometric
Excitation:	5VDC +/- 0.5V
Current Consumption:	<10mA
Output Load:	5K Ohms, min
Frequency Response (min):	~1kHz
Zero Offset (of FS):	≤ ± 0.5% typical ± 1% max
Span Tolerance (of FS):	≤ ± 0.5% typical ± 1% max

Electrical (Low Power Voltage)

Outputs:	0.5-2.5V non-ratiometric
Excitation:	3-5VDC unregulated
Current Consumption:	≤ 3mA
Output Load:	5K Ohms, min
Frequency Response (min):	~1kHz
Zero Offset (of FS):	≤ ± 0.5% typical ± 1% max
Span Tolerance (of FS):	≤ ± 0.5% typical ± 1% max

DIMENSIONS

*Dimensions are for reference only



MATERIALS

MODEL NUMBER CONFIGURATION

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

Wetted Material
A = 316L SS (diaphragm)
*See "Materials" section for a complete list of materials.

Pressure Unit
P = PSI
B = Bar
W = Inches of H2O

Output
1 = 1-5V
2 = 0.5-4.5V ratiometric
4 = 4-20mA
8 = 0.5-2.5V non-ratiometric

Options
000 = No special options

Process Connection
2 = 1/4" Male NPT
6 = Nose cone

Pressure Range
Insert 5-digit pressure code, max 100 PSI
i.e. 00100 = 100 PSI

Pressure Reference
G = Gauge

Electrical
Z = 1/2" MNPT conduit w/ Nylon strain relief (See "Cable Length")

Cable Length (Meters)
05 = 5 meters
10 = 10 meters
16 = 16 meters
20 = 20 meters
31 = 31 meters

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.

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