

CS64

Explosion-Proof Differential Pressure Transducer

FEATURES

- Differential pressure ranges from 1 PSI up to 50 PSI
- Line pressures up to 500 PSI
- Bi-directional pressure ranges available
- Factory sealed stainless steel case - withstands harsh environments
- Wet/Wet

APPROVALS/CERTIFICATIONS

- **Explosion-Proof:**
 - ✓ CSA Class I, Division 1, Groups A, B, C, D, T4
 - ✓ Class I Zone 1 AEx db IIC T4 Gb
 - ✓ Ex db IIC T4 Gb
- **Dust Ignition-Proof:**
 - ✓ Class II, Division 1, Groups E, F and G, T135°C
 - ✓ Zone 21 AEx tb IIIC T135°C Db
 - ✓ Ex tb IIIC T135°C Db
- CE



About the CS64

The **CS64 Explosion-Proof Differential Pressure Transducer** is a high strength sensor designed for differential pressure measurements of liquids and gases in Class I, Division 1 explosion-proof locations. The CS64 features an all welded, factory sealed stainless steel construction, offering a minimum IP66 rating. A 316L SS oil filled sensor element provides excellent stability over a wide operating temperature range while offering corrosion resistance against various liquids and gases. A 1/2" Male NPT conduit fitting with 2 meters of 20AWG flying leads is standard, allowing for easy installation of rigid metal conduit. Differential pressure ranges from 1 PSI up to 50 PSI are available with 1/4" Female NPT process connections.



Great For...

- Well head pressure measurement
- Marine and offshore equipment
- Oil exploration
- Natural gas compression
- Pipeline equipment
- Power generation

SPECIFICATIONS

Performance

Accuracy @ 25°C:*	≤ ± 0.25% BFSL ≤ ± 0.5% BFSL (2 PSI and below)
Stability (1 Year):	≤ ±0.25% of FS
Pressure Cycles:	4 million
Max Line Pressure:**	500 PSI
Max Differential Pressure:	50 PSI
Overpressure:***	2X or 500 PSI, whichever is less, configured differential pressure range
Burst Pressure:***	3X configured differential pressure range

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

** Max line pressure is the highest common mode pressure that can be applied to the sensor without damage.

*** Overpressure and burst pressure are the maximum differential pressure that can be applied to the high or low side before damage to the sensor will occur.

Thermal

Operating Temperature:	-40 to +85°C
Media Temperature:	-40 to +120°C
Compensated Temperature:	-15 to +65°C
Storage Temperature:	-40 to +125°C
TC Zero:	≤ ± 1% of FS ≤ ± 2% of FS (2 PSI and below)
TC Span:	≤ ± 1% of FS ≤ ± 2% of FS (2 PSI and below)

Environmental

EMI/RFI Protection:	Yes
IP Rating:	IP66
Vibration:	10g, 20 to 2000Hz
Shock:	100g, 11msec, 1/2 sine

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

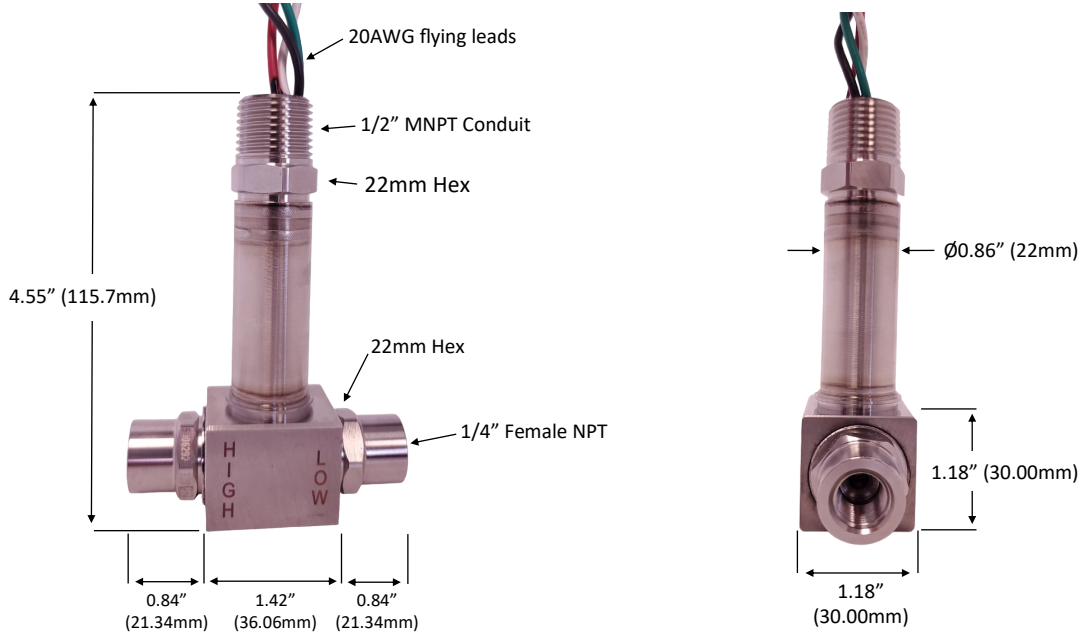
Electrical (Voltage)

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

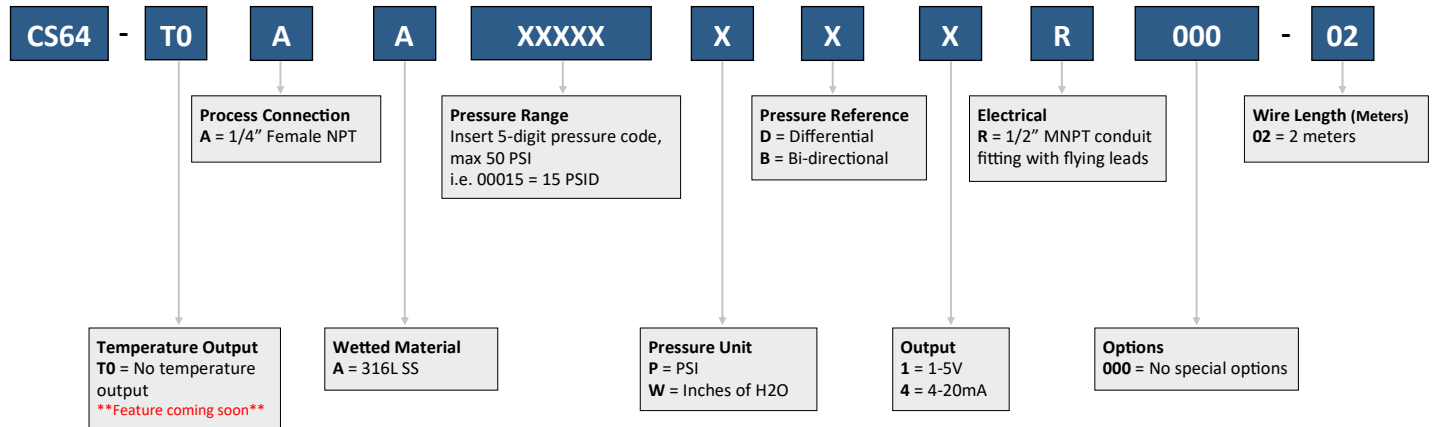
For wiring information, visit core-sensors.com/wiring

DIMENSIONS

*Dimensions are for reference only



MODEL NUMBER CONFIGURATION



Ordering Example: CS64-T0AA00015PD1R000-02 (No temp, 1/4" Female NPT, 316L SS, 0-15 PSI differential, 1-5V, 1/2" MNPT conduit fitting with flying leads, 2 meter flying leads)
 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.

****Disclaimer:** Unless otherwise agreed in writing, Core Sensors products are not authorized for use in applications including medical devices, life support systems, in-flight aerospace, nuclear or any other application where the product failure could result in personal injury or death.



Caution must be taken when installing and operating the CS64 in known Class I, Division 1 hazardous locations. **Please review the Explosion-Proof Operating Instructions prior to installation. Call Core Sensors at (862) 245-2673** if you are unsure about any of the instructions or to request a copy. Operating Instructions and Certificates of Compliance can be downloaded from the CS64 product web page at [core-sensors.com](#).

Warranty information can be found online at [core-sensors.com](#).