

# CS64

## Explosion-Proof Differential Pressure Transducer

### FEATURES

- Differential pressure ranges from 0.5 PSID up to 50 PSID
- Line pressures up to 500 PSI
- Bi-directional pressure ranges available
- Factory sealed stainless steel case - withstands harsh environments
- Wet/Wet

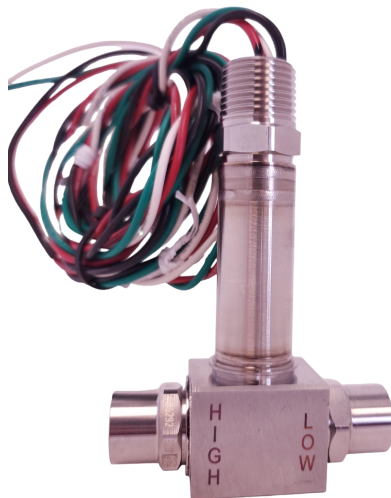
### APPROVALS/CERTIFICATIONS

- **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 0.5 PSI up to 50 PSI are available with 1/4" Female NPT process connections.



### Great For...

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

# SPECIFICATIONS

## Performance

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

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

## Environmental

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

## Electrical (Current)

<b>Outputs:</b>	4-20mA
<b>Excitation:</b>	10-28VDC
<b>Current Consumption:</b>	20mA, typical
<b>Output Load:</b>	0-800 Ohms @ 10-28VDC
<b>Frequency Response (min):</b>	~250Hz
<b>Zero Offset (of FS):</b>	≤ ± 0.5% typical ± 1% max
<b>Span Tolerance (of FS):</b>	≤ ± 0.5% typical ± 1% max

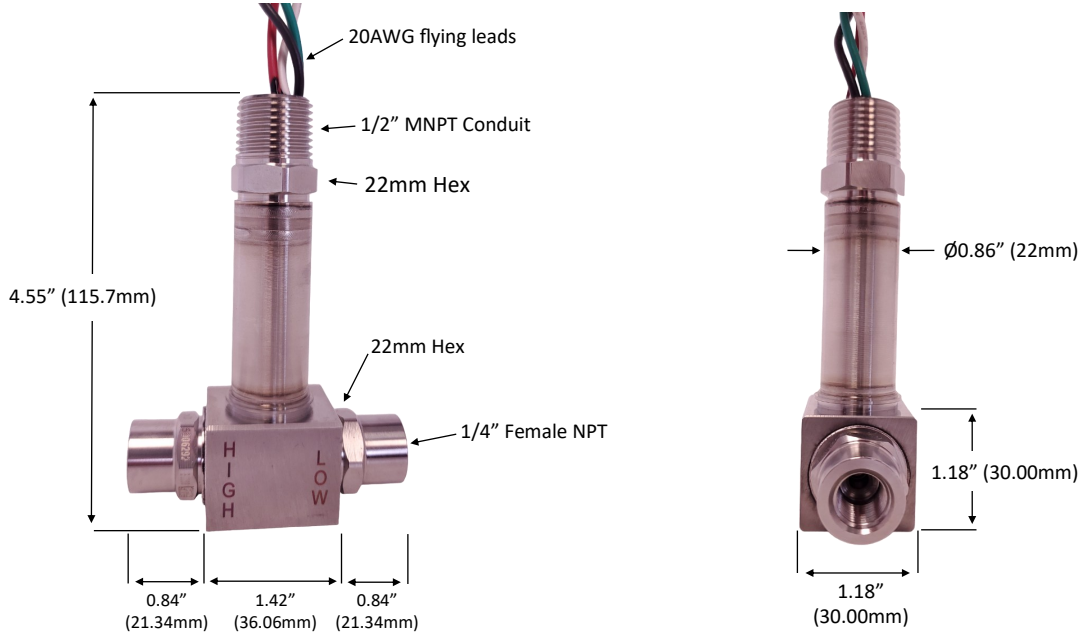
## Electrical (Voltage)

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

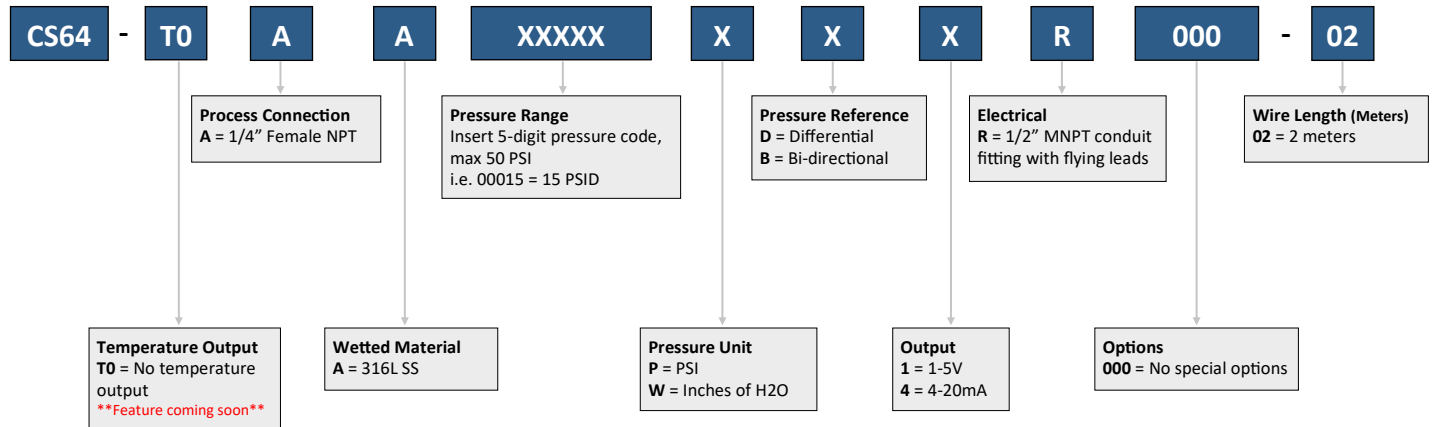
For wiring information, visit [core-sensors.com/wiring](http://core-sensors.com/wiring)

# 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](#).