# **CS60**

# **Explosion-Proof Pressure Transducer**

#### **FEATURES**

- Configurable pressure ranges from 50 PSI up to 30,000 PSI
- One piece diaphragm design No internal O-rings or welds
- Factory sealed stainless steel case Withstands harsh environments
- IP66 rated

## **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
- ANSI/UL 122701 Single Seal Certified







## About the CS60

The CS60 Explosion-Proof Pressure Transducer is a high strength sensor designed for use in Class I, Division 1 explosion-proof locations. The CS60 features an all welded, factory sealed stainless steel construction, offering a minimum IP66 rating. A 1/2" Male NPT conduit fitting with 2 meters of 20AWG flying leads is standard, allowing for easy installation of rigid metal conduit. A wide operating temperature range and configurable design makes the CS60 a versatile pressure transducer that was engineered to operate in some the harshest conditions. Available output signals include 1-5V and 4-20mA loop powered. The CS60 is an excellent solution for applications such as well head pressure measurement, natural gas compressors and oil exploration.



#### **Great For...**

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

# **SPECIFICATIONS**

#### **Performance**

Accuracy @ 25°C:*	$\leq$ ± 0.25% BFSL $\leq$ ± 0.5% BFSL (>10,000 PSI)
Stability (1 Year):	≤ ±0.25% of FS
<b>Pressure Cycles:</b>	100 million
Overpressure:	2X minimum
<b>Burst Pressure:</b>	5X or 60,000 PSI, whichever is less

<sup>\*</sup> Accuracy includes non-linearity, hysteresis and non-repeatability

#### **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:	$\leq$ ± 1% of FS $\leq$ ± 2% of FS (500 PSI and below)
TC Span:	$\leq$ ± 1% of FS $\leq$ ± 2% of FS (500 PSI and below)

#### **Environmental**

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

# **DIMENSIONS**

<sup>\*</sup>Dimensions are for reference only



### Electrical (Current)

Outputs:	4-20mA
Excitation:	10-28VDC
<b>Current Consumption:</b>	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

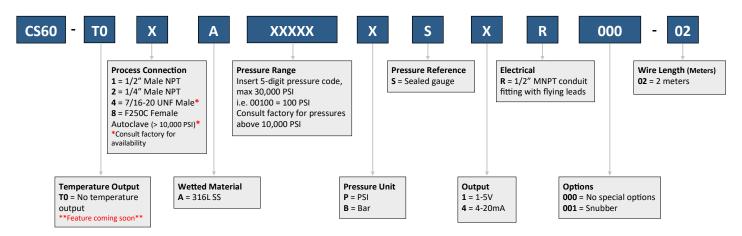
#### Electrical (Voltage)

Outputs:	1-5V
Excitation:	10-28VDC
<b>Current Consumption:</b>	<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 <u>core-sensors.com/wiring</u>



## MODEL NUMBER CONFIGURATION



Ordering Example: CS60-T01A00500PS1R000-02 (No temp, 1/2" Male NPT, 316L SS, 0-500 PSI sealed gauge, 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.

<sup>\*\*</sup>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 CS60 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 CS60 product web page at <u>core-sensors.com</u>.

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

