

CS10

Industrial Pressure Transducer



Core Sensors offers the CS10 industrial pressure transducer designed for demanding industrial applications. The CS10 utilizes MEMS silicon strain gages mounted to a stainless steel or nickel alloy sensing element. The ASIC electronics offer analog voltage or 4-20mA loop powered output signals. Various process connections are available in 17-4PH, 316L or nickel alloy including Hastelloy C276 and Inconel 718.

Electrical connections include cable or various integral connectors. Semi-custom and custom designs are available.

FEATURES

- Pressures from vacuum to 40,000 PSI
- Oxygen cleaning available
- Optional integral snubber
- Reverse polarity and EMI protection
- Highly configurable

APPLICATIONS

- Hydraulic / pneumatic equipment
- Water pressure monitoring
- HVAC/R controls
- Hydrogen (316L SS only)
- Building controls

Certifications

- CE
- CSA Ordinary location available. Contact Core Sensors for more information

SPECIFICATIONS

Performance @ 25°C

Accuracy* $\leq \pm 0.25\%$ BFSL
 $\leq \pm 0.5\%$ BFSL (≤ 2 PSI & $>10,000$ PSI)

Stability (1 Year)	$\leq \pm 0.25\%$ of FS
Pressure Cycles	100 million
Overpressure	2x minimum
Burst Pressure	5X or 60,000 PSI, whichever is less

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

Thermal

Operating Temperature	-40 to +85°C
Media Temperature	-40 to +120°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 $\leq \pm 2\%$ of FS (2 PSI & below)

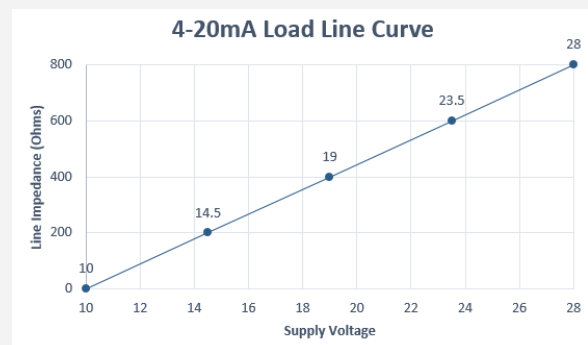
Environmental

EMI/RFI Protection	Yes
IP Rating*	IP65 minimum
Vibration	10g, 20 to 2000Hz
Shock	100g, 11msec, 1/2 sine

* IP rating is dependent on electrical termination selected. Contact factory for more information
 * IP rating applies when mating connector is attached with the appropriate ingress protection

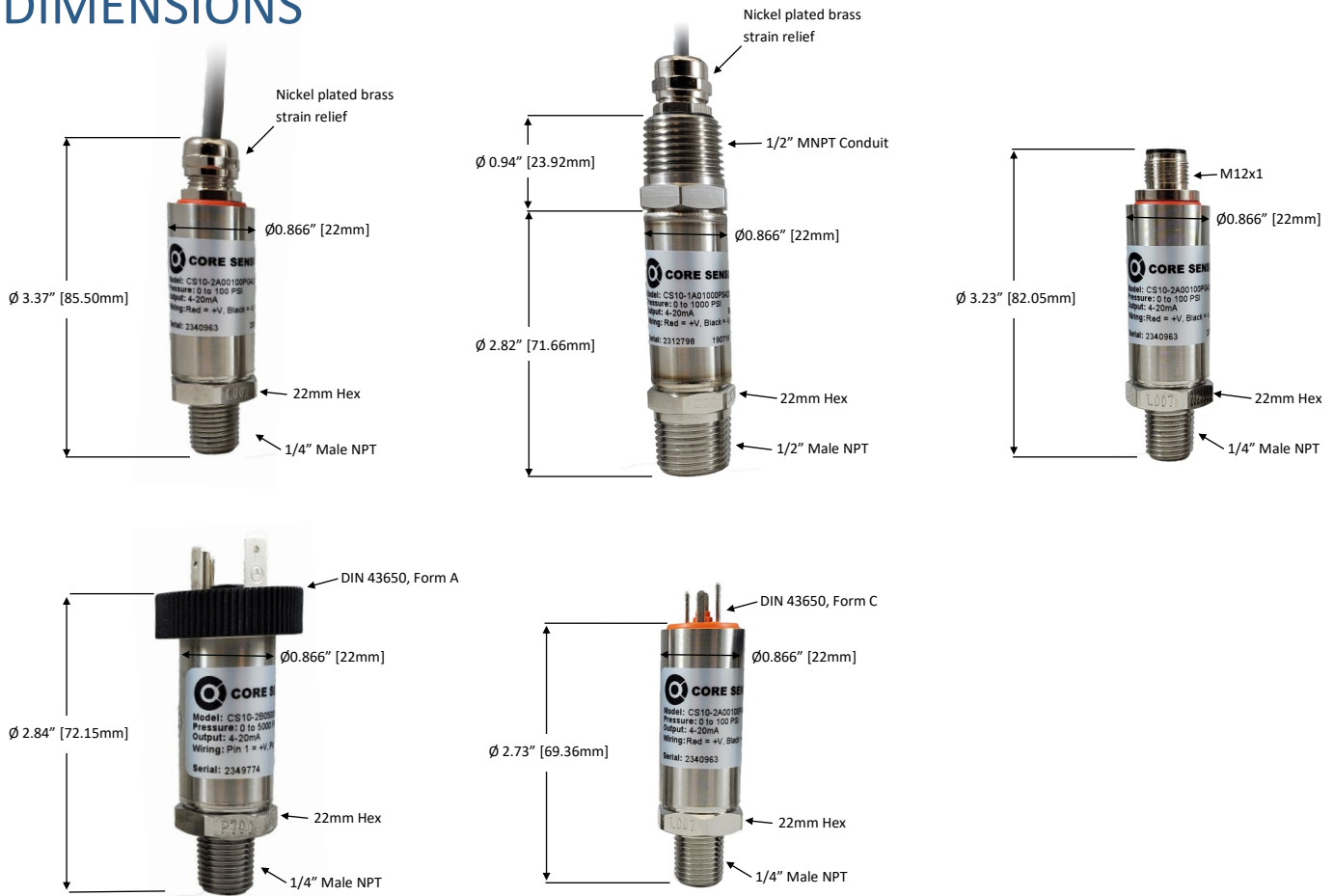
Electrical

Excitation	10-28VDC (4-20mA, 1-5V, 1-6V, 0-5V) 15-28VDC (0-10V 3-wire) 5VDC +/- 0.5V (0.5-4.5V ratiometric) 5VDC, typical (mV/V, millivolt)
Current Consumption	20mA, typical (4-20mA) <10mA (voltage output) <5mA (mV/V, millivolt)
Output Load	See load line curve below (4-20mA) 5K Ohms, min (voltage output) >1M Ohms (mV/V, millivolt)
Frequency Response (minimum)	~250Hz (4-20mA) ~1kHz (voltage output) ~5kHz (mV/V, millivolt)
Zero Offset (of FS)	$\leq \pm 0.5\%$ typical; $\pm 1\%$ max $\leq \pm 2\%$ max (mV/V, millivolt)
Span Tolerance (of FS)	$\leq \pm 0.5\%$ typical; $\pm 1\%$ max $\leq \pm 2\%$ max (mV/V, millivolt)



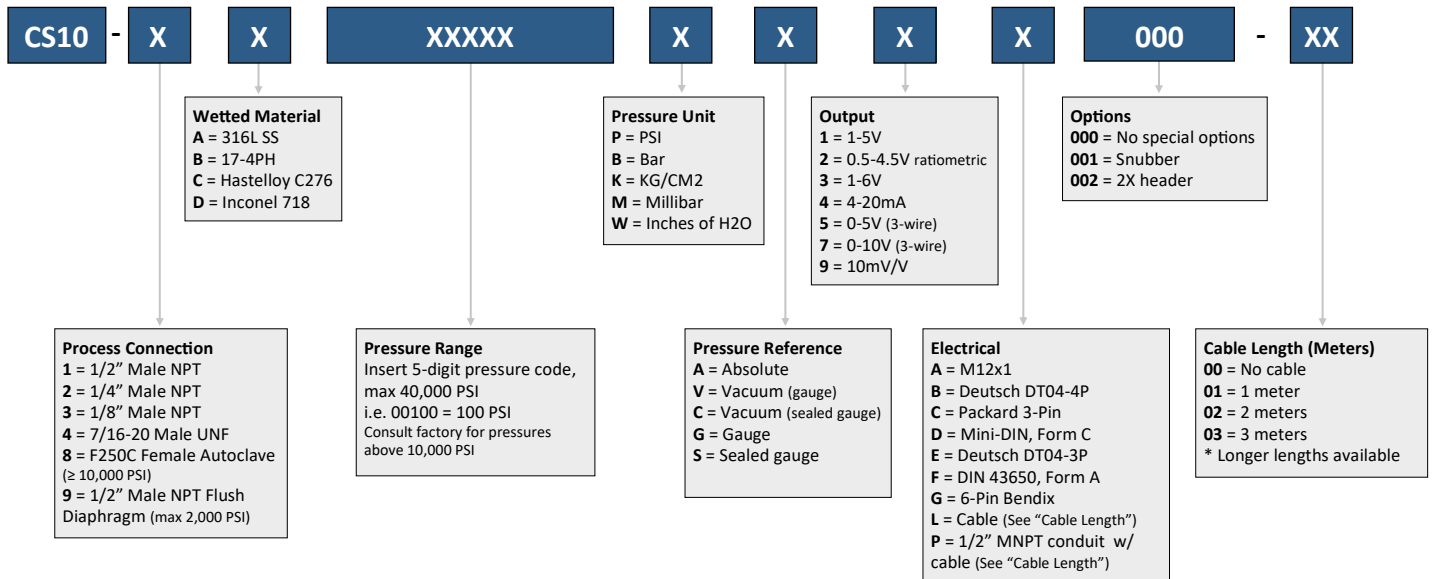
For wiring information, visit <http://www.core-sensors.com/wiring>

DIMENSIONS



*Dimensions are for reference only

MODEL NUMBER CONFIGURATION



Ordering Example: CS10-2A01000PS4A000-00 (1/4" Male NPT, 316L SS, 0-1000 PSI sealed gauge, 4-20mA, M12x1)
 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.

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