

# CS14

## Differential Pressure Transducer



The CS14 Wet/Wet differential pressure transducer is designed for various applications including filtration and tank level monitoring. 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. The compact design makes it a perfect solution for differential measurement applications in confined spaces. Configurable options include differential pressure ranges up to 300 PSI, various voltage and 4-20mA loop powered output signals and both male and female 1/4" NPT process connections.

### FEATURES

- Differential pressures up to 300 PSI
- Bi-directional ranges available
- 316L SS diaphragm / oil filled sensor element

### APPLICATIONS

- Filtration
- Tank level measurement
- Cryogenic bulk tank level measurement

### Certifications

- CE

### SPECIFICATIONS

#### Performance @ 25°C

Accuracy*	≤ ±0.25% BFSL ≤ ±0.5% BFSL (2 PSI & below)
Stability (1 Year)	≤ ±0.25% of FS
Pressure Cycles	4 million
Max Line Pressure**	500 PSI
Max Differential Pressure	300 PSI
Overpressure***	2x or 500 PSI, whichever is less, rated differential pressure
Burst Pressure***	3X rated differential pressure

\* 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 +105°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)

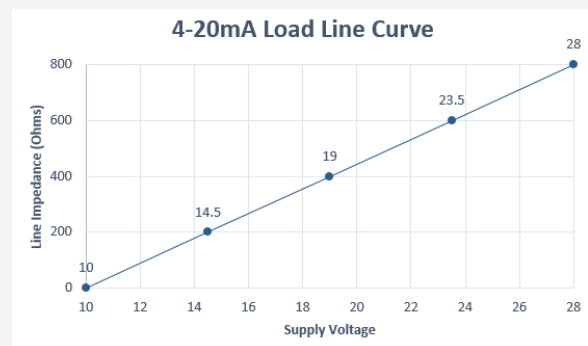
#### Environmental

EMI/RFI Protection	Yes
IP Rating*	IP65 minimum
Vibration	20g, 20 to 5000Hz
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

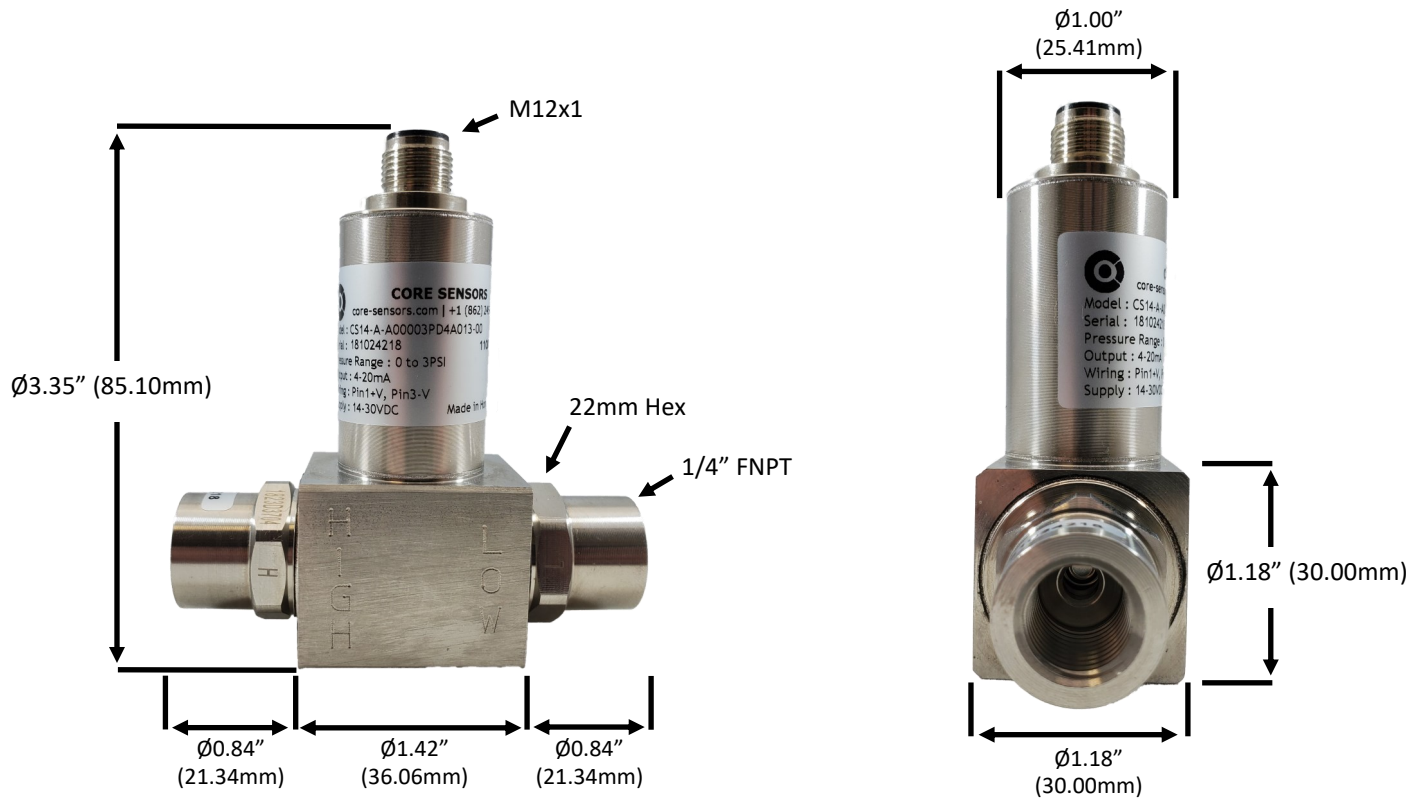
#### Electrical

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



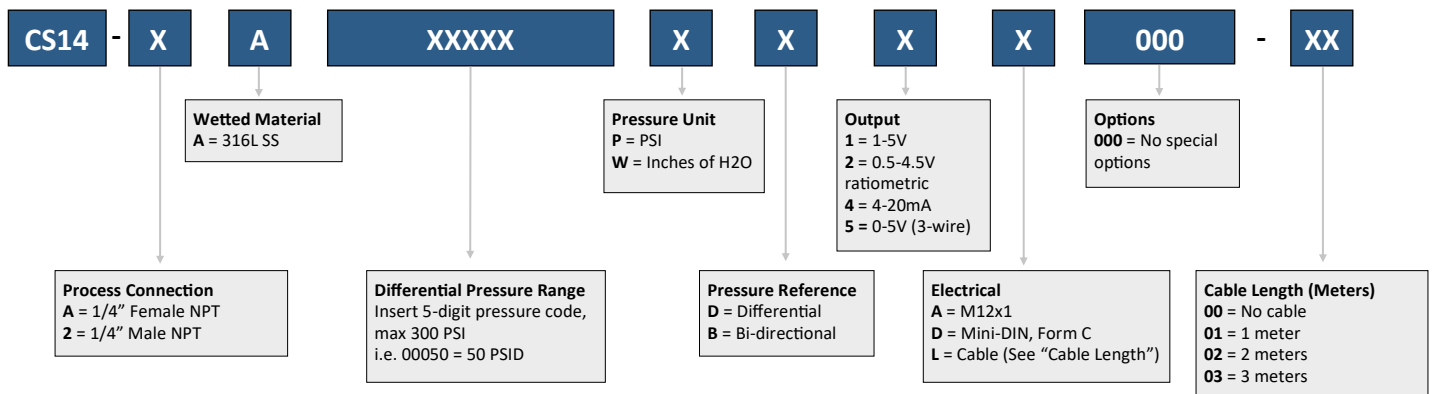
For wiring information, visit <https://www.core-sensors.com/wiring>

# DIMENSIONS



\*Dimensions are for reference only

# MODEL NUMBER CONFIGURATION



Ordering Example: CS14-AA00010PD4A000-00 (1/4" Female NPT, 316L SS, 0-10 PSI differential, 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](http://www.core-sensors.com).