CORE SENSORS

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 designs 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

- ≤ ±0.4% BFSL accuracy
- Max line pressure of 500 PSI
- 316L SS diaphragm / oil filled sensor element

Applications

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

CE

SPECIFICATIONS

Performance

Accuracy*	≤ ±0.4% BFSL
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 pressure
Burst Pressure***	3X rated pressure

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

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

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

Environmental / Thermal

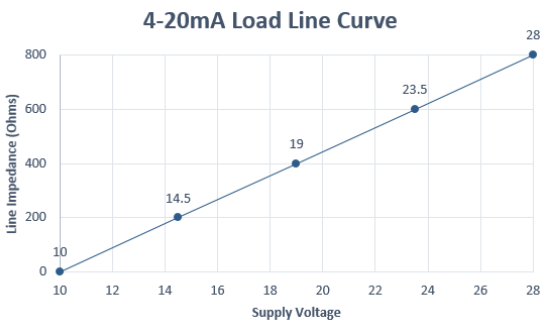
EMI/RFI Protection	Yes
IP Rating*	IP65 minimum
Vibration	20g, 20 to 5000Hz
Shock	100g, 11msec, 1/2 sine
Operating Temperature	-40 to +105°C
Storage Temperature	-40 to +125°C
Compensated Temperature	0 to +70°C
TC Zero	≤ ±1.5% of FS
TC Span	≤ ±1.5% of FS

*IP Rating is dependent on electrical termination selected. Contact factory for more information.

Electrical

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

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



MODEL NUMBER CONFIGURATION

CS14- X A XXXXX X D X X 000 - XX

Model Family
CS14 - Differential Pressure Transducer

Process Connection
A = 1/4" NPT Female
2 = 1/4" NPT Male

Wetted Material
A = 316L SS

Differential Pressure Range
Insert 5-digit pressure code, max 300 PSI
(i.e. 00300 = 300 PSI)

Pressure Unit
P = PSI
W = Inches H2O

Pressure Reference
D = Differential

Cable Length (Meters)
Electrical option "L" only
00 = No cable
01 = 1 meter
02 = 2 meter
03 = 3 meter

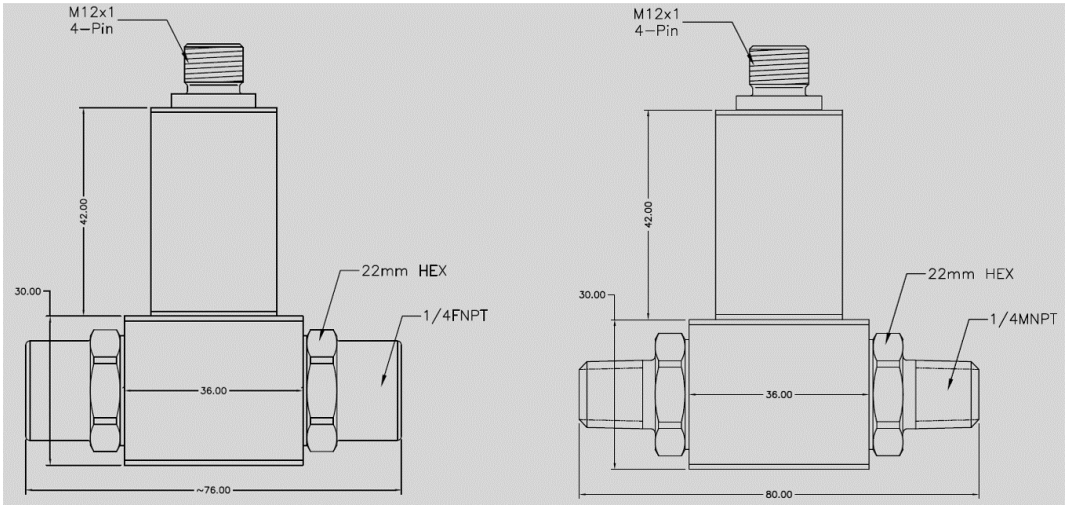
Options
000 = No Special Options

Electrical
A = M12x1
D = Mini-DIN, Form C
L = Cable (See "Cable Length")

Output
1 = 1-5V
2 = 0.5-4.5V Ratiometric
4 = 4-20mA
5 = 0-5V (3-wire)

* Ordering Example: CS14-AA00100PD4A000-00 (0-100 PSI Differential, 1/4" FNPT, 4-20mA, M12x1, 316L SS)
* Contact factory for custom configurations not shown

DIMENSIONS



*Dimensions are for reference only

We are committed to delivering the highest quality instrumentation on every order.

Core Sensors warrants that all items shipped will be free of defects in material and workmanship for a period of one (1) year from the date of shipment.

View complete warranty information online at www.core-sensors.com.