

CS20

Industrial Temperature Transmitter

The CS20 is an industrial temperature transmitter for fluid temperature measurement applications. Features include a 316L SS probe and thread area and a stainless steel housing, making it compatible with a wide range of process liquids and gasses. Configurable temperature ranges from -40 to +200°C are available with various probe lengths. A wide variety of standard amplified outputs and electrical connections are also available.



Features

- $\leq \pm 0.4\%$ BFSL accuracy
- -40 to +200°C configurable temperature range
- 316L SS probe and thread area (special order Hastelloy C276 available)

Applications

- Gear box lubrication systems
- Hydraulic oil fluid
- Gas flow
- Water & chemical storage

SPECIFICATIONS

Performance

Accuracy*	$\leq \pm 0.4\%$ BFSL
Sensor Type	RTD
Total Error at RT (of FS)	$\pm 0.5\%$ typical, $\pm 1\%$ max
Total Error at FS (of FS)	$\pm 2\%$ max
Max Pressure (<2 inch probe)	7,250 PSI
Max Pressure (>2 inch probe)	2,175 PSI

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

Thermal / Environmental

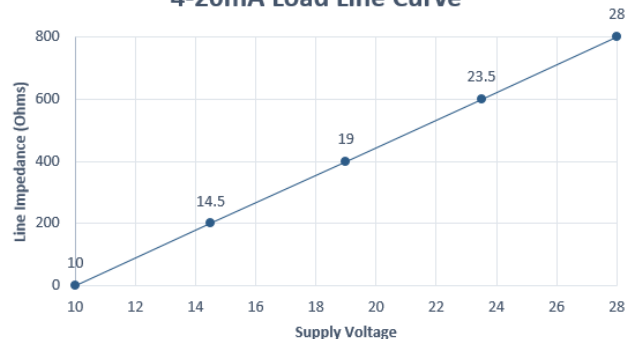
Ambient Operating Temperature	-40 to +85°C
Storage Temperature	-40 to +125°C
Insulation Resistance	100M Ω (50 VDC case to pins)
EMI/RFI Protection	Yes
IP Rating*	IP65
Vibration	10g, 10 to 1000Hz
Shock	100g, 11msec, 1/2 sine

*IP rating is dependent on electrical termination selection. Contact factory for more information.

Electrical

Output	4-20mA	1-5V	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	~ 250 Hz	~ 1 kHz Fg	~ 1 kHz

4-20mA Load Line Curve



MODEL NUMBER CONFIGURATION

CS20- X X X XXX X X 000 - XX

Model Family

CS20 - Industrial Temperature Transmitter

Process Connection

- 1 = 1/2" NPT Male
- 2 = 1/4" NPT Male
- 4 = 7/16-20 UNF Male
- 5 = G1/4 Male

Probe Length

- A = 0.5 inches E = 4 inch
- B = 1 inch F = 5 inch
- C = 2 inch G = 6 inch
- D = 3 inch

Wetted Material

- A = 316L SS
- C = Hastelloy C276 (Special order item. Contact factory)

Temperature Range

- 01A = 0 to 100°C 05A = -55 to 125°C
- 02A = 0 to 200°C 06A = -18 to 100°C
- 03A = 0 to 70°C 07A = -50 to 50°C
- 04A = -40 to 85°C

Cable Length (Meters)

Electrical option "L" only

- 00 = No cable
- 01 = 1 meter
- 02 = 2 meters
- 03 = 3 meters

Options

000 = No Special Options

Electrical

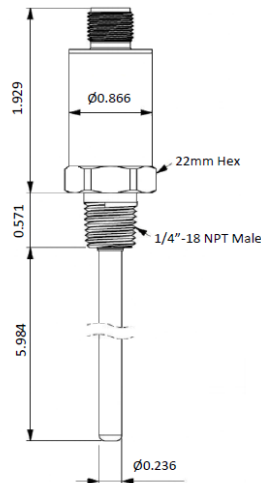
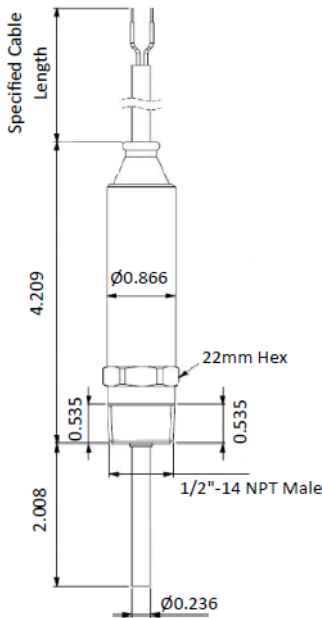
- A = M12x1
- B = Deutsch DT04-4P
- C = Packard 3-Pin
- D = Mini-DIN, Form C
- F = DIN 43650, Form A
- G = 6-Pin Bendix
- L = Cable (See "Cable length")

Output

- 1 = 1-5V
- 2 = 0.5-4.5V ratiometric
- 4 = 4-20mA

* Ordering Example: CS20-1BA01A1A000-00 (0 to 100°C, 1/2" MNPT, 1-5V, M12x1, 316L SS, 1 inch probe)
 * Contact factory for custom configurations not shown

DIMENSIONS



*Dimensions are for reference only