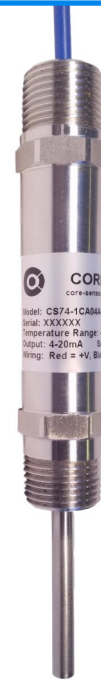


CS74 Intrinsically Safe Temperature Transmitter

- CSA Class 1, Division 1, Groups C and D, T3
- Class 1, Zone 1 AEx ia IIC T4 Gb
- Wide configurable temperature ranges from -40 to +200°C
- $\leq \pm 0.4\%$ BFSL accuracy



OVERVIEW

Core Sensors offers the CS74 Intrinsically Safe temperature transmitter, designed for use in hazardous locations with an approved barrier (see entity parameters on page 3). The CS74 is approved to CSA Class 1, Division 1, Groups C and D, T3. 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. Available with 4-20mA or various voltage output signals.

SPECIFICATIONS

Temperature Sensor Range	-40 to +200°C, as specified	Accuracy (includes non-linearity, hysteresis, non-repeatability)	$\leq \pm 0.4\%$ FSO BFSL
Sensor Type	RTD	Total Error at RT	$\pm 0.5\%$ typical, $\pm 1\%$ max
Max Pressure (<2 inch probe)	7,250 PSI	Total Error at FS	$\pm 2\%$, max
Max Pressure (>2 inch probe)	2,175 PSI	Vibration	10G, 10 to 1000Hz
Storage Temperature	-40 to +125°C	Shock	100g, 11msec, 1/2 sine
Ambient Operating Temperature	-40 to +85°C	Insulation Resistance	100M Ω (50VDC case to pins)
EMI/RFI Protection	Yes		
IP Rating	IP65 minimum. Contact factory for higher ratings		

ELECTRICAL INFORMATION

Output	4-20mA, 1-5V	0.5-4.5V ratiometric	0.5-2.5V non-ratiometric
Power Supply Requirements	10-27 VDC, unregulated	5VDC, +/- 0.5V, regulated	3-5VDC, unregulated

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

ORDERING INFORMATION

CS74 - X - X - X - XXX - X - X - 000 - XX

Process Connection

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

Probe Length

- A = 0.5 inches
- B = 1 inch
- C = 2 inch
- *Contact factory for longer lengths

Wetted Material

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

Temperature Range

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

Cable Length (Meters)

Electrical option "L" only

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

Options

- 000 = No Special Options

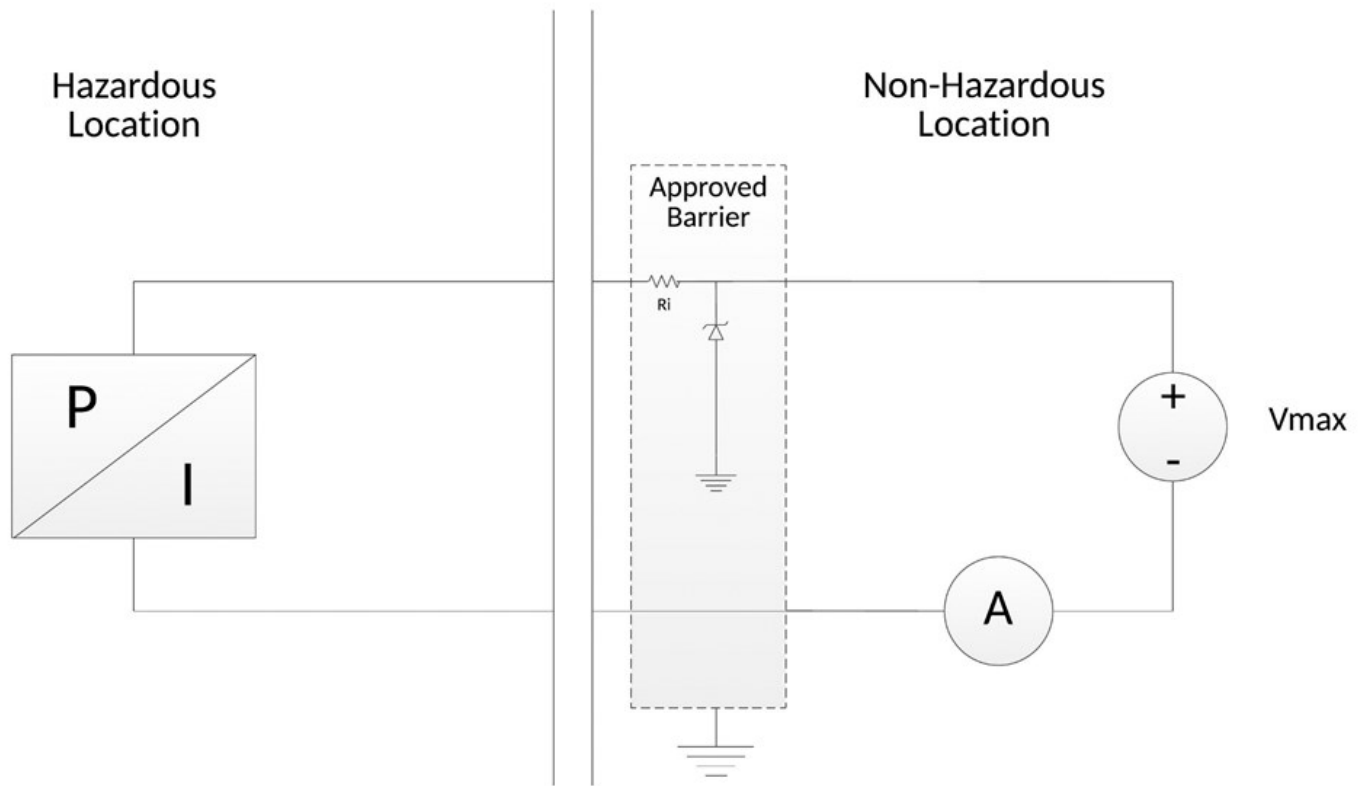
Electrical

- A = M12x1
- 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
- 8 = 0.5-2.5V non-ratiometric

ENTITY PARAMETERS



Entity Parameters for CS74

U_i	27 VDC
P_i	0.85 W
L_i	Negligible
I_i	125 mA
C_i	5 nF

DIMENSIONAL DATA (For Reference Only)

