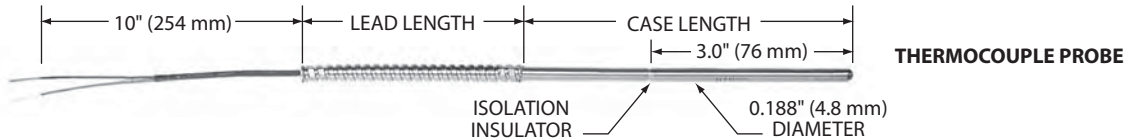


Electrically Isolated Thermocouples



Overview

- Electrically isolated sensing tip for “hot” bearings
- Accurate sensing to 260°C (500°F)
- Copper alloy tip for fast time response and increased tip sensitivity

Time constant: Typical value in moving water:
 Grounded junction: 1.5 seconds.
 Ungrounded junction: 7 seconds.

Insulation resistance: 10 megohms min. at 100 VDC, leads to case, ungrounded junctions only.

Specifications

Dielectric strength of isolation insulator: 1000 volts RMS at 60 Hz for 30 seconds, between case sections, 1 mA max. leakage current.

Pressure rating: 30 psi (2.1 bar).

Vibration: Withstands 10 to 2000 Hz at 20 G’s minimum per MIL-STD-202, Method 204, Test Condition D.

Shock: Withstands 100 G’s minimum sine wave shock of 8 milliseconds duration.

Temp. Range: -50 to 260°C (-58 to 500°F).

Case: Stainless steel with copper alloy tip.
 Minimum case length: 4.0" (101.6 mm).
 Maximum case length: 48" (1220 mm), longer on special order.

Leads: Solid thermocouple wire, AWG 20 (AWG 24 for stainless steel braid option). Specify PTFE insulation or PTFE with stainless steel armor and shrink tubing over all.

Specification and order options

TC2198	Model number: TC2198
E	Junction type: E = Chromel-Constantan J = Iron-Constantan K = Chromel-Alumel T = Copper-Constantan
U	Junction grounding: G = Grounded U = Ungrounded
225	Case length: Specify in 0.1" increments (Ex: 225 = 22.5 inches)
T	Covering over leadwires: T = PTFE only A = Stainless steel armor plus shrink tubing S = SS braid over PTFE (5" min. case length)
48	Lead length in inches
TC2198EU225T48 = Sample part number	

PROBES