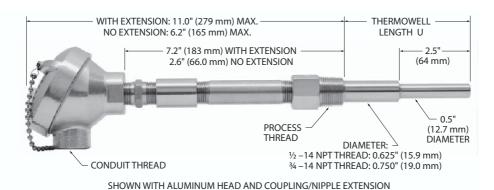
550°C Thermocouples with Thermowells



Overview

Sense temperature in high-pressure fluids and gases. These assemblies are spring-loaded for positive probe contact against the bottom of the thermowell.

Note: For temperatures less than 260° C (500° F), assemblies using tip-sensitive sensors are recommended.

- · 316 stainless steel thermowell
- Thermocouple probe for use to 550°C (1022°F)
- · Spring-loaded probe
- · Cast iron, aluminum or stainless steel connection head

Specifications

Temperature range:

Thermowell and sensor: -100 to 550°C (-148 to 1022°F).

Connection head:

Cast iron: 260°C (500°F) max. Aluminum: 316°C (600°F) max. Stainless steel: 121°C (250°F) max.

Material:

Probe: 316 stainless steel.

Connection head: Cast iron, aluminum, or stainless steel.

Thermowell: 316 stainless steel. Extension: Stainless steel.

Pressure rating: 7000 psi (483 bar) at 21°C, reducing to 2500 psi (172 bar) at 550°C.

Standard U dimensions:

2.5, 4.5, 6.0, 7.5, 8.0, 10.5, 13.5, 16.5, and 22.5".

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

Connection: Terminal block for wires to 14 AWG.

Time constant: 60 seconds typical in moving water.

Specify and order products at: www.minco.com/sensors_config

Specifications subject to change

Temperature Transmitters

Minco's Temptran™ thermocouple transmitters provide a 4 to 20 mA signal or HART® Protocol that can be sent over long distances with a simple 2-wire system. See Section 5 for complete temperature transmitter specifications.

Specification and order options

AS5165	Assembly number: AS5165
К	Junction type: E = Chromel-Constantan J = Iron-Constantan K = Chromel-Alumel
U	Junction Grounding: G = Grounded U = Ungrounded
135	Thermowell length U: Specify in 0.1" increments (Ex: 135 = 13.5 inches)
Р	
1	Conduit thread: 1 = 1/2 - 14 NPT 2 = 3/4 - 14 NPT
С	Connection head: C = Cast iron A = Aluminum S = Stainless steel
1	Thermowell process thread: $1 = \frac{1}{2} - 14 \text{ NPT}$ $2 = \frac{3}{4} - 14 \text{ NPT}$
U	Extension option: P = Coupling/nipple extension N = No extension U = Union/Nipple extension
To order sensor assembly, stop here. To order with transmitter, add:	
190	Temptran™ transmitter model: 190 = TT190: Fixed Range, Hockey Puck 205 = TT205: Fixed Range, Miniature 520 = TT520: Programmable, Hockey Puck 521 = TT521: HART® Programmable, Hockey Puck
А	Temperature range codes starting on page 5-20 or at www.minco.com/rangecode/
AS5165KU135P1C1U190A = Sample part number	