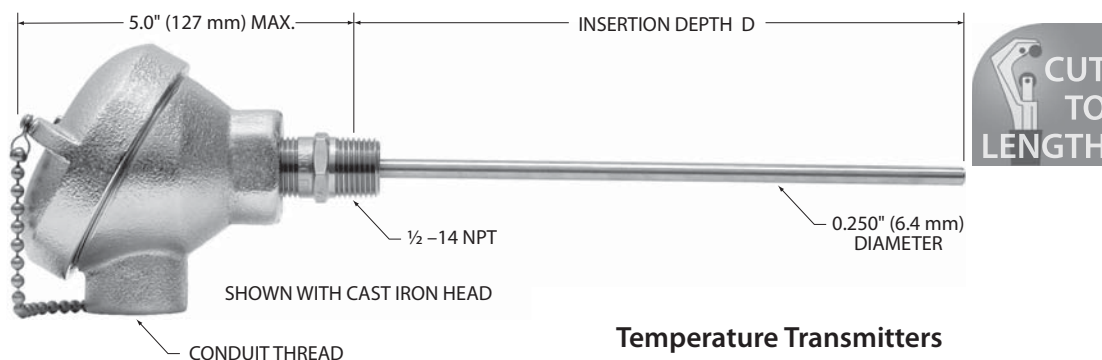


# Tip-sensitive Direct Immersion RTDs



## Overview

Mount sensors directly in fluid flow for fast response. Probes are rated to 100 psi (6.9 bar). For use in non-corrosive fluids only.

- RTD probe for use to 260°C (500°F)
- Adjustable fluid seal fitting
- Cast iron, stainless steel, or aluminum connection head

## Specifications

**Temperature range:** -50 to 260°C (-58 to 500°F).

### Material:

Probe: Stainless steel with copper alloy tip.

Fitting: Stainless steel, silicone rubber O-ring.

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

**Pressure rating:** 100 psi (6.9 bar).

**Insulation resistance:** 100 megohms minimum at 100 VDC, leads to case.

**Connection:** Terminal block for wires to AWG 14.

**Time constant:** Typical value in moving water:

Single element: 2.0 seconds.

Dual element: 5.0 seconds.

## Sensing elements

Element		Code
Platinum (0.00392 TCR)	100 Ω ±0.5% at 0°C	PA
Platinum (0.00385 TCR) (Meets EN60751, Class B)	100 Ω ±0.1% at 0°C	PD
Platinum (0.00385 TCR)	100 Ω ±0.5% at 0°C	PE
Copper (0.00427 TCR)	10 Ω ±0.2% at 25°C	CA
(dual)	10 Ω ±0.5% at 25°C	CC
Nickel (0.00672 TCR)	120 Ω ±0.5% at 0°C	NA

Specify and order products at:  
[www.minco.com/sensors\\_config](http://www.minco.com/sensors_config)

## Temperature Transmitters

Minco's Temptran™ RTD 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.

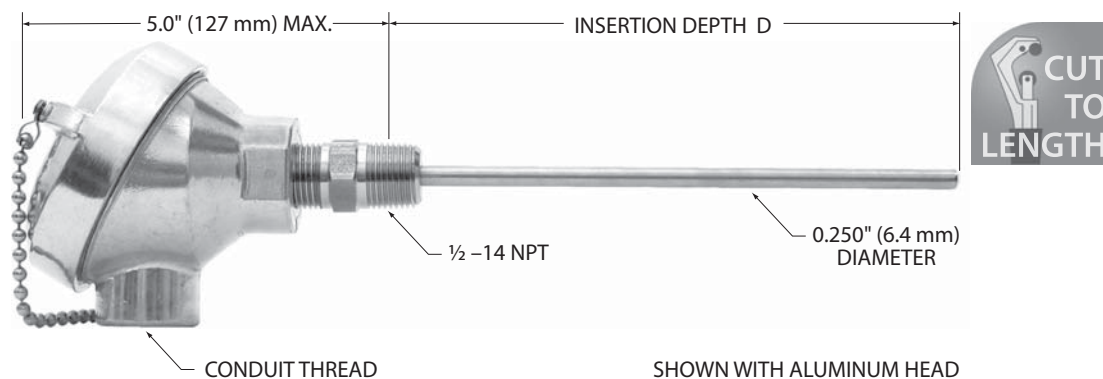
**Special high-accuracy calibration:** For high system accuracy, specify transmitters with matched calibration. Calibration data traceable to NIST will also be provided. Get more information on page 5-22.

## Specification and order options

AS5200	Assembly number AS5200: Single element AS5201: Dual element
PD	Sensing element from table
100	Insertion depth D: Specify in 0.1" increments (Ex: 100 = 10.0 inches)
Z	Leads per sensing element: Y = 2 leads Z = 3 leads (required for CA and CC elements) X = 4 leads (PD elements only)
2	Conduit thread: 1 = 1/2 - 14 NPT 2 = 3/4 - 14 NPT
C	Connection head: C = Cast iron A = Aluminum S = Stainless steel
To order sensor assembly, stop here. To order with transmitters (single platinum element only) add:	
211	Temptran™ transmitter model: 211 = TT211: Fixed Range (2-lead RTDs) 176 = TT176: Fixed Range (3-lead RTDs) 520 = TT520: Programmable (2, 3, & 4-lead RTDs) 521 = TT521: HART® Programmable (2, 3, & 4-lead RTDs)
A	Temperature range codes starting on page 5-20 or at <a href="http://www.minco.com/rangecode/">www.minco.com/rangecode/</a>
1	Calibration: 1 = Nominal calibration 2 = Match calibrated, 0.75% total system accuracy. For other calibration options, contact Minco
AS5200PD100Z2C211A1 = Sample part number	

Specifications subject to change

# Tip-sensitive Direct Immersion Thermocouples



ASSEMBLIES

## Overview

Mount sensors directly in fluid flow for fast response. Probes are rated to 100 psi (6.9 bar). For use in non-corrosive fluids only.

- Thermocouple for use to 260°C (500°F)
- Adjustable fluid seal fitting
- Cast iron, stainless steel, or aluminum connection head

## Specifications

**Temperature range:** -50 to 260°C (-58 to 500°F).

### Material:

Probe: Stainless steel with copper alloy tip.  
 Fitting: Stainless steel, silicone rubber O-ring.  
 Connection head: Cast iron, aluminum, or stainless steel.

**Pressure rating:** 100 psi (6.9 bar).

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

**Connection:** Terminal block for wires to AWG 14.

**Time constant:** Typical value in moving water:

Grounded junction: 1.5 seconds.  
 Ungrounded junction: 7 seconds.

## Temperature Transmitters

Minco's Tempran™ 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

AS5205	Assembly number AS5205: Single junction AS5206: Dual junction
E	Junction type: E = Chromel-Constantan J = Iron-Constantan K = Chromel-Alumel T = Copper-Constantan
U	Junction grounding: G = Grounded U = Ungrounded
215	Insertion depth D: Specify in 0.1" increments (Ex: 215 = 21.5 inches)
P	
1	Conduit thread: 1 = 1/2 - 14 NPT 2 = 3/4 - 14 NPT
C	Connection head: C = Cast iron A = Aluminum S = Stainless steel
To order sensor assembly, stop here. To order with transmitter, add:	
190	Tempran™ transmitter model: 190 = TT190: Fixed Range, Hockey Puck 205 = TT205: Fixed Range, Miniature 520 = TT520: Programmable, Hockey Puck 521 = TT521: HART® Programmable, Hockey Puck
A	Temperature range codes starting on page 5-20 or at <a href="http://www.minco.com/rangecode/">www.minco.com/rangecode/</a>
AS5205EU215P1C190A = Sample part number	

Specify and order products at:  
[www.minco.com/sensors\\_config](http://www.minco.com/sensors_config)

Specifications subject to change

