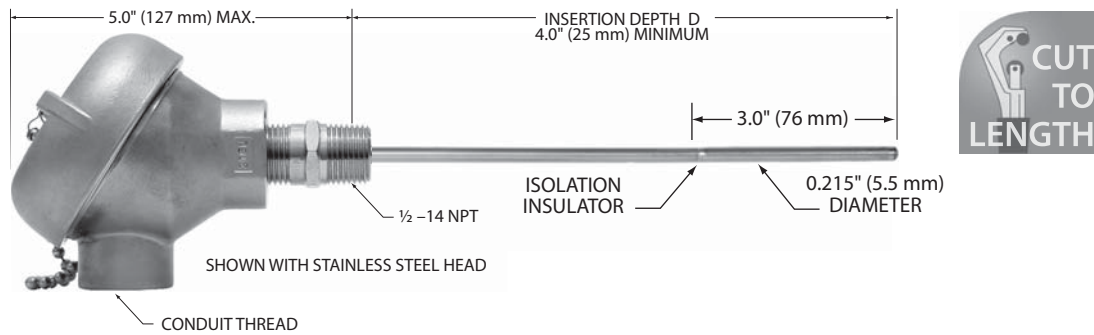


# Tip-sensitive Isolated Tip Spring-loaded RTDs



## Overview

Fast and accurate readings of electrically "hot" bearings with an electrically isolated copper alloy tip-sensitive probe. The spring-loaded holder ensures solid contact in drilled holes and has a built-in oil seal.

- Tip-sensitive RTD probe for use to 260°C (500°F)
- Spring-loaded holder with fluid seal
- Cast iron, stainless steel, or aluminum connection head

## Specifications

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

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

### Material:

Probe: Stainless steel with copper alloy tip & Teflon insulator.  
Holder: Stainless steel with fluoroelastomer O-ring.  
Connection head: Cast iron, aluminum, or stainless steel.

**Pressure rating:** 30 psi (2.1 bar).

**Insulation resistance:** 1000 megohms minimum at 500 VDC, leads to case. Except PEPE element, 100 megohms minimum at 100 VDC

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

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

Single element: 2.0 seconds.

Dual element: 3.0 seconds.

**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.

**Leads:** 2, 3, or 4 leadwires, AWG 22, stranded copper with PTFE insulation. For 2-lead RTDs add 0.03 Ω per foot of combined case and lead length to element tolerance.

## Specification and order options

AS205020	Assembly number AS205020: Single or Dual element RTD
PA	Sensing element from table below
67	Insertion depth D: Specify in 0.1" increments (Ex: 67 = 6.7 inches)
Y	Leads per sensing element: Y = 2 leads Z = 3 leads (required for CA and CACA 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
AS205020PA67Y2C = Sample part number	

## Sensing Elements

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

Specifications subject to change