Resistance Temperature Detector, Platinum

Introduction

RTDs change resistance with temperature changes. They are more accurate than thermocouples, especially over a narrow range. Standard accuracy ratings of 0.25% and 0.10% are offered. However, they offer less resistance to physical shock, and respond slower.

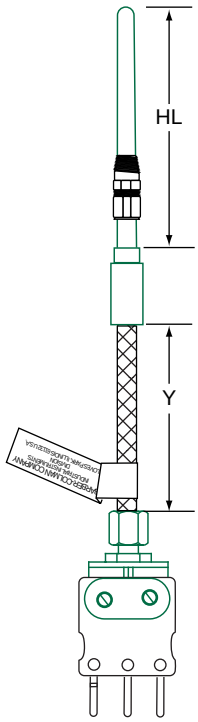
The RTD element is a wire coil precision wound to a specific resistance value, hermetically sealed to prevent influence from moisture. It is mounted in the tip of a metal protection tube for physical protection

Ordering Information

Model No. R ☐☐☐ - ☐☐☐☐☐ - ☐☐☐ - ☐ - ☐☐

Field No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Schedule: S2



Fields 1, 2, 3. BASE MODEL

☞ Determine length by completing Fields 8, 9 and Fields 10, 11, 12, then add together

	Description	Accuracy	Temperature Rating
R51 -	0.00391 Ω/Ω/°C	0.25%	500°F (Teflon)
R52 -	0.00391 Ω/Ω/°C	0.10%	500°F (Teflon)
R53 -	0.00391 Ω/Ω/°C	0.25%	932°F (Fiberglass)
R54 -	0.00391 Ω/Ω/°C	0.10%	932°F (Fiberglass)
R71 -	0.00385 Ω/Ω/°C	0.25%	500°F (Teflon)
R72 -	0.00385 Ω/Ω/°C	0.10%	500°F (Teflon)
R73 -	0.00385 Ω/Ω/°C	0.25%	932°F (Fiberglass)
R74 -	0.00385 Ω/Ω/°C	0.10%	932°F (Fiberglass)

Field 4. NUMBER OF ELEMENTS AND WIRES

See compatibility table after Fields 14, 15

1 - Single element, 3 wire .
2 - Dual element, 3 wire (Requires 0.250" protection tube, Fields 5, 6)
5 - Single element, 4 wire

Fields 5, 6. PROTECTION TUBE

☞ Use length determined in Fields 8, 9

	Size	Material	12" Min.	Ea. Add'l 6"
65 -	0.188" o.d.	304 stainless steel		
66 -	0.250" o.d.	304 stainless steel		
68 -	0.188" o.d.	316 stainless steel		
69 -	0.250" o.d.	316 stainless steel		
72 -	0.250" o.d.	Inconel		

Field 7. FLEXIBLE LEAD MATERIAL

☞ Use length determined in Fields 10, 11, 12. See compatibility table after Field 15.

		First 24"	Ea Add'l 6"
0 -	None		
1 -	Teflon (500°F) or Fiberglass (932°)		
2 -	Teflon (500°F) or Fiberglass (932°) with armor		
3 -	Teflon (500°F) or Fiberglass (932°) with SS overbraid (available only if Field 4 is code 1)		

Ordering Information (continued)

Fields 8, 9. HOT LENGTH (DIMENSION "HL")

☞ Complete these Fields to determine lengths for Fields 1, 2, 3, and Fields 5, 6

HL - Actual length in whole inches; minimum 3" .

99 - Longer than 98". Specify details on order ..... Consult factory

Field 10, 11, 12. FLEXIBLE LEAD LENGTH (DIMENSION "Y")

☞ Complete these Fields to determine lengths for Fields 1, 2, 3, and Field 7

000 - None - no flexible lead

YYY- Actual length in whole inches

999 - Longer than 998". Specify details on order ..... Consult factory

Field 13. MOUNTING FITTING

4 - 1/4" NPT nickel plated brass compression fitting

5 - 1/4" NPT stainless steel compression fitting

7 - Stainless steel double ended bushing, 1/2" NPT only

8 - Spring loaded stainless steel double ended bushing, 1/2" NPT only

9 - Specify details on order ..... Consult factory

Fields 14, 15. COLD END TERMINATION

See page 3-24 for protection tube/cold end termination compatibility table.

See compatibility table below **Single** **Dual**

00 - 2-1/2" split leads, ends stripped .

01 - 2-1/2" split leads, spade lugs

02 - 2-1/2" split leads, spade lugs, 1/2" NPS box connector with lock nut

03 - Solid pin quick disconnect plug

04 - Solid pin quick disconnect plug with mating jack

05 - Ceramic wafer open head

06 - Miniature head and cover

08 - General purpose, cast iron head

09 - General purpose, aluminum head

10 - Weatherproof, cast iron head

12 - Weatherproof, plastic head

27 - Weatherproof, aluminum head

21 - Amphenol connector

22 - Explosion proof head

30 - Single ended 1/4" NPT hex bushing, 6" leads

Compatibility Table. Blank cell = compatible; filled cell = not compatible

Fields 14, 15	00	01	02	03	04	05	06	08	09	10	12	27	21	22	30
Field 4, Code 1															
Field 4, Code 2							■	■			■		■		
Field 4, Code 5				■	■								■		
Field 4, Code 4															
Field 7, Code 0	■	■	■												
Field 7, Code 1						■	■	■	■	■	■	■	■	■	■
Field 7, Code 2						■	■				■				■
Field 7, Code 3						■	■	■	■	■	■	■	■	■	■