



Boiler, Stack or Cryogenic Applications

Features & Options

- Stainless Steel Probe & Industrial Construction
- Double-ended 1/2" NPT Stainless Steel Fitting
- Optional Weatherproof Enclosure
- Standard or Outside Mount Configurations

This immersion element has been designed for use in applications from -200°C to 600°C. This unit is provided with a stainless steel probe and a 1/2" NPT double-ended stainless steel fitting.

These units are packaged to handle vibration, moisture, and wide temperature ranges.

Optional Temperature Transmitter

The Extreme Temperature RTD Units can be used with the remote mounted **BAPI** ruggedized temperature transmitter to provide a linear proportional 4 to 20 mA output. For more info, see page A72.

**Note: Please select a desired range which falls within the operating range of the RTD Sensor you specified.*



Unit with
Weatherproof
(WP)
Enclosure
Standard
Mount



Unit
without
Enclosure



Unit with
Weatherproof
(WPO)
Enclosure
Outside Mount



Specifications

Sensor Type: Platinum 1K Ω or 100 Ω RTD

Reference Resistance: 1K Ω or 100 Ω at 0°C

Operating Range: -328 to 1,112°F (-200 to 600°C)

Humidity: 0 to 100%, non-condensing

Standard Accuracy: 0.1% at 0°C

Temp. Coefficient: 3.85 Ω /°C

Output: Resistive

Leadwire: PTFE or Fiberglass, 36" long

[1] PTFE, -328 to 32°F (-200 to 0°C)

[2] PTFE, 212 to 410°F (100 to 210°C)

[3] Fiberglass, 482 to 900°F (250 to 482°C)

Enclosure Material: Cast Aluminum

Enclosure Rating: NEMA 3R

Enclosure Dimensions: H x W x D

Weatherproof (WP): 4.5 x 2.75 x 2.2" (114 x 70 x 55mm)

(For enclosure dimension drawings, see the end of the section.)

RTD Output Table

Temperature		Resistance (Ω)	
°F	°C	1K RTD	100 Ω RTD
-328	-200	195	
-148	-100	603	
32	0	1,000	100
122	50	1,194	119
212	100	1,385	139
392	200	1,758	176
572	300	2,120	212
752	400	2,470	247
932	500	2,809	281
1,112	600	3,136	314



Extreme Temp. Platinum RTD - Immersion

A63

Rev. 10/16/12

Temperature Sensors



Ordering Information		Extreme Temperature RTD with Immersion Probe	
BA/			
	Platinum RTD Sensor Type	Must select one	36" Wire Lead Length
	100[2]	100Ω Platinum RTD for operating range 212 to 410 °F (100 to 210 °C), PTFE Insulation Leads	
	100[2][3W]	3 Wire 100Ω Platinum RTD for operating range 212 to 410 °F (100 to 210 °C), PTFE Insulation Leads	
	100[3]	100Ω Platinum RTD for Operating Range 392 to 1,112 °F (200 to 600 °C), Fiberglass Insulation Leads	
	100[3][3W]	3 Wire 100Ω Platinum RTD for Operating Range 392 to 1,112 °F (200 to 600 °C), Fiberglass Insulation Leads	
	1K[1]	1K Platinum RTD for Operating Range -328 to 32 °F (-200 to 0 °C), PTFE Insulation Leads	
	1K[2]	1K Platinum RTD for Operating Range 212 to 410 °F (100 to 210 °C), PTFE Insulation Leads	
	1K[3]	1K Platinum RTD for Operating Range 392 to 1,112 °F (200 to 600 °C), Fiberglass Insulation Leads	
		Probe Selection	Must select one
		-I-2"	2" length of 1/4" Diameter, Stainless Steel Probe, double-ended 1/2" NPT
		-I-4"	4" length of 1/4" Diameter, Stainless Steel Probe, double-ended 1/2" NPT
		-I-8"	8" length of 1/4" Diameter, Stainless Steel Probe, double-ended 1/2" NPT
			Optional Weatherproof Enclosure
		-WP	NEMA 3R rated metal Weatherproof Enclosure
		-WPO	NEMA 3R rated metal Weatherproof Enclosure, Outside Air Mount
EXAMPLE			
BA/	1K[1]	-I-2"	-WP
Part Number: BA/1K[1]-I-2"-WP			
Your Part Number:			

Call BAPI if you have questions about the above ordering grid.
 Note: Order temperature transmitters separately as needed.

Gray shaded items follow the Buy and Resale Multiplier.

