**Ceramic Wire-Wound Platinum** 

**RTD Elements** 

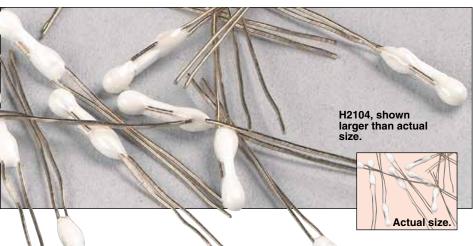
## **All Models**



To Order						
Dimensions in millimeters (1 mm = 0.03937")	Nominal Resistance (ohms)	Temperature Range, °C (°F)	Model No.	Self-Heating Error in °C/mW Flowing Air V = 1m/sec		
0 1.5	1 x 100	-200 to 600 (-330 to 1110)	1PT100KN815	0.28		
	1 x 100	-200 to 600 (-330 to 1110)	1PT100KN1510	0.14		
25 1.5	1 x 100	-200 to 850 (-330 to 1560)	1PT100K2515	0.08		
25	1 x 100	-200 to 600 (-330 to 1110)	1PT100KN2510	0.07		
30	1 x 100	-200 to 600 (-330 to 1110)	1PT100KN3026	0.04		
1.5	1 x 100	-200 to 600 (-330 to 1110)	1PT100KN1515	0.08		
4.5	1 x 100	-200 to 600 (-330 to 1110)	1PT100KN3045	0.01		
25 1.5	1 x 100	-200 to 600 (-330 to 1110)	1PT100KN2515	0.07		
25 1.7	2 x 100	-200 to 850 (-330 to 1560)	*2PT100K2517	0.06		
30 ————————————————————————————————————	2 x 100	-200 to 600 (-330 to 1110)	*2PT100KN3045	0.01		
30	2 x 100	-200 to 600 (-330 to 1110)	*2PT100KN3026	0.04		

<sup>\*</sup> Dual elements. All RTD elements come standard with 10 mm bare leads. Welded insulated extension leads available. Pricing is dependent on lead style.

Ordering Examples: 1PT100KN815,  $1 \times 100 \Omega$  self-heating error of 0.28 ceramic wire-wound platinum RTD elements. 1PT100KN1515,  $100 \Omega$ ,  $1.5 D \times 15 mm$  L, ceramic wire wound RTD.



# **Class B Tolerance (Per IEC751)** Alpha = 0.00385

Ceramic wire-wound platinum RTD elements are made by placing a coiled platinum wire into a ceramic core and sealing the ends off with glass. They are suitable for extremely low or high temperatures

and are tolerant of thermal shocks. They offer limited vibration resistance (depending on mounting method) and should be used in dry environments only.



### Available!

OMEGA's RTD MI Cable! Available in a wide selection of conductor configurations and sheath materials. Please visit omega.com.

Response Time in Seconds						
Flowing Water V = 0.4 m/sec		Moving Air V = 1 m/sec				
50% Response	90% Response	50% Response	90% Response			
0.2	0.5	6.7	21.8			
0.2	0.3	3.0	9			
0.2	0.4	5.7	17			
0.2	0.4	3.0	8.8			
0.3	0.6	10.5	34.0			
0.2	0.4	5.0	15.7			
0.40	1.4	26.0	90.0			
0.2	0.4	5.3	16.0			
0.2	0.4	6.1	19.0			
0.4	1.4	26.8	83.7			
0.30	0.6	11	36.0			

#### Enlarged to show construction. See previous page for dimensions.

#### **RTD Elements for Tight Spaces**

Model Number	Temperature Range	Nominal Resistance $(\Omega)$	Dimensions
A2105*	-50 to 400°C (-60 to 750°F)	1 x 100	2 L x 2.4 W x 2 mm D (0.08 x 0.09 x 0.08")
A2132*	-50 to 400°C (-60 to 750°F)	1 x 500	4 L x 5 W x 2 mm D (0.16 x 0.20 x 0.08")
A2142*	-50 to 400°C (-60 to 750°F)	1 x 1000	4 L x 5 W x 2 mm D (0.16 x 0.20 x 0.08")

<sup>\*</sup> These elements have leads perpendicular to the body for surface measurements. Curve is European  $\propto$  = 0.00385. All RTD elements available with welded PTFE insulated extension **Ordering Examples: A2142**, 1000  $\Omega$ , 4 x 5 mm RTD element.