## KPT-RTD- Coil Winding Polyamide Patch RTD with Lead Wire



**KPT-RTD-** Polyamide patch surface RTDs are specifically designed to measure the winding temperature in electric motors, generators and other applications. Silicone patch RTDs are installed on uneven surface for temperature measurement, these RTDs offer flexibility to measure temperature accurately on uneven surfaces.

## **Key Features**

- Flexible Polyamide Patch to install on round or uneven surface.
- Available in pt100, pt1000, and Ni120 ohm.
- Custom Size patch to cover entire surface temperature.
- Available with Silicon Adhesive back.

**RTD Wire Configuration** 

## **Technical Specification:**

Insulation Resistance: 100 MG Ohms @ 250 vdc Response Time: <3 Sec in circulating water @ 3ft/sec Accuracy: As per IEC60751 (See tolerance chart)

**Self Heating Error**: < 0.30°F (0.17°C)

Alpha Curve : IEC 0.00385 Time Constant : < 3 sec

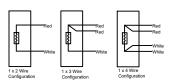
Patch Thickness: 0.015 for Pt100 and Pt100 Ohm RTD

0.025 for Ni120 Ohm RTD

**2 Wire:** In 2 wire RTDs, one lead wire is connected to each wire of the RTD element. 2 Wire RTDs are an economical option for the applications where high accuracy is not required. Since there is no compensation wire, the accuracy of RTD can be affected if long lead wire is used.

**3 Wire**: 3 wire RTDs are the most common type of RTDs used in the industry. In 3 three-wire Rtd 1 wire is connected to the one side of the RTD element, and on the other side, 2 wires are connected to compensate for the resistance. With compensating wire, accuracy is very close to the element accuracy at the termination end.

4 wire: 4 wire RTDs are highly accurate. In 4 wire RTDs 2 wires are connected to each side of the RTD element. With additional wire on each side of the RTD element, the output at the termination is highly accurate. 4 wire RTDs are recommended where high accuracy and long lead wire is required.

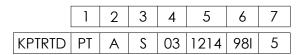


Tolerance	Temperatu	re Range °C	Tolerance	Tolerance
Class	Wire Wound	Thin Film	Values Ω	values °C
AA	-50 TO +250	0 TO +150	±0.04	± (0.1 + 0.0017  t )
Α	-100 TO +450	-30 TO +300	±0.06	± (0.15 + 0.002  t )
В	-196 TO +600	-50 TO +500	±0.12	± (0.3 + 0.005  t )
С	-196 TO +600	-50 TO +600	±0.23	± (0.6 + 0.01  t )

For 1/10 DIN B RTD is not standardize. The only accuracy defined is 1/10 of Class B accuracy at 0°C = 0.03°C

Temperature	Class B±	Class A±	Class AA± (1/3 DIN B)	Class 1/10 DIN B±
-50° C	0.55	0.25	0.19	0.060
0° C	0.30	0.15	0.10	0.030
100° C	0.80	0.35	0.27	0.070
200° C	1.30	0.55	0.44	0.120
250° C	1.55	0.65	0.53	0.160
300° C	1.80	0.75	0.61	0.220
350° C	2.05	0.85	0.70	-
400° C	2.30	0.95	0.78	-
450° C	2.55	1.05	0.87	-
500° C	2.80	1.15	0.95	-
550° C	3.05	1.25	1.04	-
600° C	3.30	1.35	1.12	-
650° C	3.55	1.45	1.21	-





1. RTD TYPE		
CODE		
PT	Pt100 Ohm, 0.00385, Coefficient	
PTK	Pt1000 Ohm, 0.00385 Coefficient	
NI	Ni120 Ohm, 0.00672 Curve Class B Only (Only Available in Low temp)	

2. RTD ACCURACY		
CODE		
В	Class "B" (For Ni120)	
Α	Class "A" (For PT100)	

3. SENSOR ELEMENT		
CODE		
S	Single Element	

4. WIRE CONFIGURATION		
CODE		
02	2 wire (Red White)	
03	3 wire (Red/Red/White) STD	
04	3 wire (Red/White/White) STD	
05	4 wire(Red/Red/White/White)	

	5. PATCH SIZE
CODE	
1125	½" X 1.0"
382	3/8" X 2.0"
1458	½" X ½"
1214	1 ½" X 1 ¼"
09	Specify if any other

6. LEAD LENGTH (L)
Lead Length - use "I" for inches and "M" for
millimetre

7. WIRE TYPE		
CODE		
5	PFA (260° C) 24 Awg. Conductor	
09	Specify if any other	

8. ADHESIVE		
CODE		
Leave blank for Non Adhesive		
AD	Adhesive Back	

