

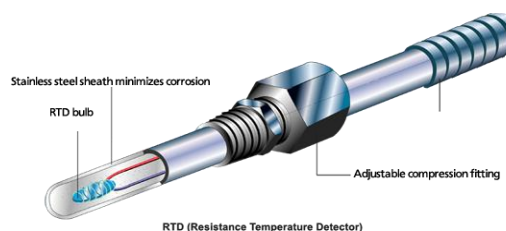
RTD (Pt100/Pt1000 Temperature Sensor)

Introduction

Vedika Instruments Temperature Products line includes platinum and nickel RTDs & temperature sensor ICs.

Platinum and Nickel sensors are both resistance temperature detectors with a variety of temperature ranges from -200°C to +1000°C, Nickel has higher resolution within a smaller temperature range. We also offer custom RTDs in both platinum and nickel with user specified values for TCR, nominal resistance, etc. We also have semiconductor temperature sensors that feature highly accurate measurement within a limited temperature range. They are ideal for mobile applications due to their low power consumption.

A Resistance Temperature Detector operates on the principle of the change in electrical resistance in wire as a function of temperature.



RTD 1 RTD Assembly with Screwed/Flanged Connection

Special Features:

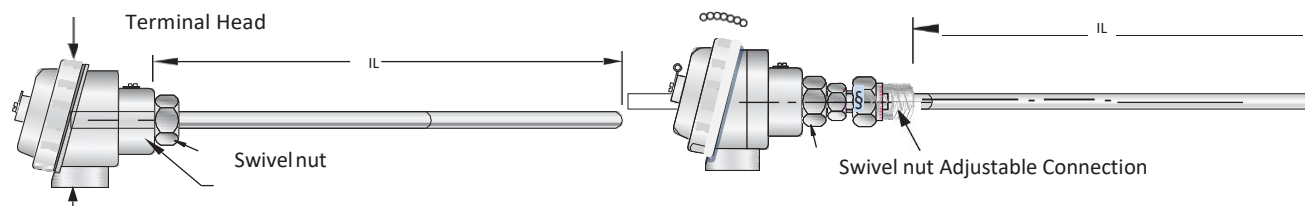
- Spring loaded design for positive contact with thermowell
- Available in various connections & sheath diameters
- Reference Standard: IEC -751/DIN 43760
- Non-bendable sheath
- Termination: Aluminum head with threaded cap and chain
- Elements terminated into nickel plated brass terminals mounted on high purity ceramic terminal block
- Different type of terminal heads
- Single/Dual cable entries & cable gland

Application:

- Such assemblies are generally inserted in existing Thermowells/protection tubes
- This assembly can be provided with threaded connection and Thermowell

No. of element	: Simplex/Duplex/Triplex
Element Type	: Pt100/Pt1000
Range	: -50°C to 450°C
Accuracy	: Class "A" Tolerance as per IEC-751/DIN 43760
Wire configuration	: 3 wire system
Sheath Diameter	: 6.0 mm.
Sheath Material	: SS316

Terminal Head type	: Screwed type, weatherproof, IP-65 in Die cast Aluminum
No. of Conduit Entry	: One/Two as per customer specified
Cable Gland	: 3/4" ET, PVC PG11 cable gland
Sheath Length in mm	: 150/ 300/ 450/ 600 mm.
Tag Plate	: Aluminum Tag Plate



Vedika Instruments Mineral Insulated RTD sensors are made with compacted magnesium oxide (MgO) that make our sensors durable and vibration resistant. This range of products is widely used in industries like chemicals, food and pharmaceuticals. The measuring element in Mineral Insulated RTD can be designed in several configurations and conforms to the IEC 751 standard for RTD sensors. The sensors are made with weatherproof aluminum heads that protect the inner construction. As per the application, these mineral insulated RTD sensors can be constructed of Pt50, Pt100, Pt200, Pt500 or Pt1000; with 2, 3 or 4 wires single or dual assembly; and in Class A or B. Radix Mineral Insulated RTDs with Terminal Head offer high-utility by virtue of the mineral insulated sheaths which can be very long and bent or coiled as per the application. Choose from standard assemblies, free rotating fittings, hex nipples, round nipple connections, NUN assemblies, adjustable compression fittings, fixed flange connections or adjustable flange connections.

Variety of measuring element configurations

Bendable sheath up to 50 meters long

50 mm long non-bendable tip

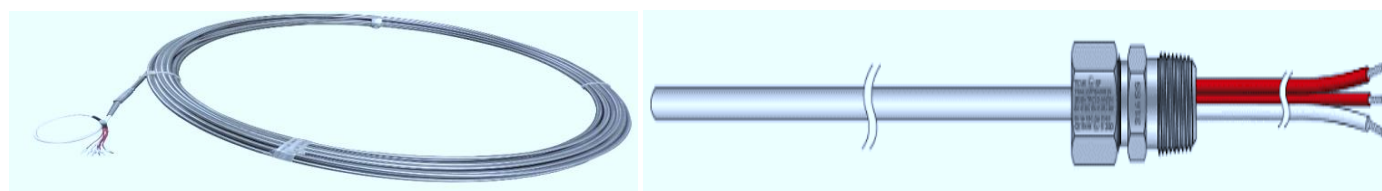
Temperature range: -50 to 400°C range

3, 4, 5, 6 and 8 mm diameters

Different types of terminal heads available

SS316L sheath material

Copper or Nickel conductors



RTD 2

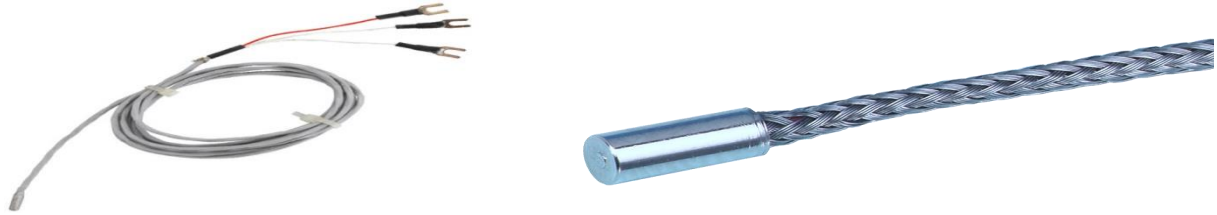
Push Fit Type Bearing RTD

Special Features:

- Available in various sheath diameters
- Lead wires of your choice
- Reference Standard: IEC -751/DIN 43760

Application:

- Bearing Temperature measurement used by equipment/instrument manufacturer.



RTD 3

RTD Insert with Terminal Block/SS Base Plate

Special Features:

- Mineral insulation enables flexibility and durability.
- Spring loaded design for positive contact with thermowell
- Available in various standard sheath diameters and sheath materials
- Transmitter output 4-20Ma (Optional)
- Reference Standard: IEC – 751/DIN 43760

Application:

- Used as a spare or replacement RTD element in existing RTD assembly.



RTD 4

Autoclave Sensors

Special Features:

- Designed for the pharmaceutical industry.
- Eliminates the problem associated with ordinary probes where the pressure cycling the autoclave can force moisture inside the probe.



DE codification			
Basic Model	RTD1	Head Extension Type	
Optional Extras		FF Fixed Flange Connection	
Elements Type		AF Adjustable Flange Connection AC	
P1 Pt- 100 (Standard)		Adjustable Threaded connection FC	
P2 Pt- 500	XX	Fixed Threaded connection	
P3 Pt - 1000		XX Without threaded connection (Standard)	
Accuracy		Process Connection.	
A Class 'A'	X	2BM 1/4" BSP (M)#	4MM M20 x 1.5 (M)*
B Class 'B' (Standard)		2NM 1/4" NPT (M)#	ANM 3/4" NPT(M)
		4NM ?" NPT (M)"	SNF 3/4" NPT(F)
		4BM ?" BSP(M)"	SBM 3/4" BSP (M)
No of Element		4NF ?" NPT (F)*	6BM 1" BSP (M)
1 Simplex (Standard)	X	4BF ?" BSP (F)*	6NM 1" NPT (M)
2 Duplex		*Suitable sheath dia. Up to 12 mm	
Wire Configuration		#Suitable sheath dia. for 6 mm or Below 6mm only.	
2 2 Wire system	X	Flange connection - Refer flange table.	
3 3 Wire system (Standard)			
4 4 Wire system			
Range		(As per ANSI B 16.5) *	
N -200°C till 50°C	X	B09 ?" 150 #	B21 1" 150 #
C 0°C till 600°C		B10 ?" 300 #	B22 1" 300 #
S -50°C till 450°C (Std.)		B11 ?" 600 #	B23 1" 600 #
		B15 3/4" 150 #	B33 1 ?" 150 #
		B16 3/4" 300 #	B34 1 ?" 300 #
		B17 3/4" 600 #	B35 1 ?" 600 #
Sheath Diameter		(* Flanged connections applicable with sheath diameter of 12 mm, 16 mm & °/ Sch. 40 pipe only)	
30 3.0 mm	XX	Please consult for other flanges.	
40 4.0 mm		Other Options	
50 5.0 mm		MIC RTD With MI Cable	
60 6.0 mm (Standard)		PLC Plug for conduit entry in carbon steel	
80 8.0 mm		PL4 Plug for conduit entry in SS304	
10 10.0 mm		PL6 Plug for conduit entry in SS316	
Sheath Length (Consider Length Below Head)	300 mm	CG1 S.C.cablegland in Nickel plated Brass-WP	
SL- Specify in mm.		CG2 D.C.cablegland in Nickel plated Brass-WP	
Sheath / Connection Material		CG3 S.C.cablegland in Nickel plated Brass-FLP	
4 SS304 (Standard)	X	CG4 D. C. cable gland in Nickel plated Brass - FLP	
L SS 316L		FPC Calibration Certificate	
6 SS 316		STG SS Tag Plate	
T Titanium		Note:	
Terminal Head Type (Enclosure)		1. When selecting option "PW", please also specify temp. Points at which calibration is to be carried out.	
A Screwed type, weatherproof, IP-65 in Die Cast Aluminum (Standard)		2. Explanations of Abbreviations used:	
B Weatherproof Head, IP-67 in Die-cast Aluminum with cover fitted with two screws.	X	S.C. = Single Compression S.S. = Stainless Steel	
F Screwed type, Flameproof, IP-67, Gr. IIA IIB in Die Cast Aluminum		D.C. = Double Compression FLP = Flameproof WP = Weatherproof	
E Screwed type, Explosion proof, IP-67, Gr. IIC in Die Cast Aluminum			
P Screwed type, Weather Proof IP-68 Plastic Head			
No of Conduit Entry / Entries		Note: Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing. Modifications may take place materials Specified may be replaced by others without prior notice.	
1 One entry (Standard)	X		
2 Double entry			
Cable Gland			
A 3/4" ET (Standard)	X		
B 1/2" NPT(F)			