

Surface-Mount RTD

Description

Probe

In the case of RTD for flat surfaces, the probe is installed into a contact block, which can be screwed or welded to the vessel surface. RTD designs for pipes will simply be fixed with a worm drive hose clip.

Surface-Mount RTD used for the generator stator core, generator stator windings and transformer etc. positions which spaces is narrow. The installation way is more flexible, respond speed is more quick.

Cable

There are various insulating materials available to match different environmental conditions. The free end of the cable is made up ready for connection, or fitted with plugs and/or sockets as optional extras.

Special Features

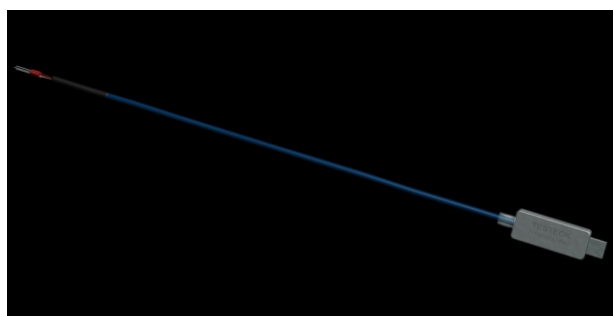
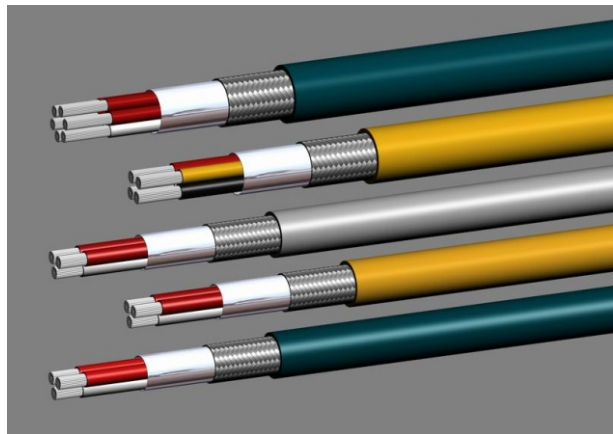
- Application ranges up to max. 250 °C
- Easily interchanged, no thermowell necessary
- For screwing, welding or with worm drive hose clip
- Cable material silicon or Teflon

Applications

- To measure surface temperatures on flat surfaces or pipes in laboratories and industrial applications
- Generator stator core
- Generator stator windings
- Ransformer



Generator Stator Windings



Generator Stator Windings

Technical Data

Sensor limiting error

- Class B per DIN EN 60 751
- Class A per DIN EN 60 751

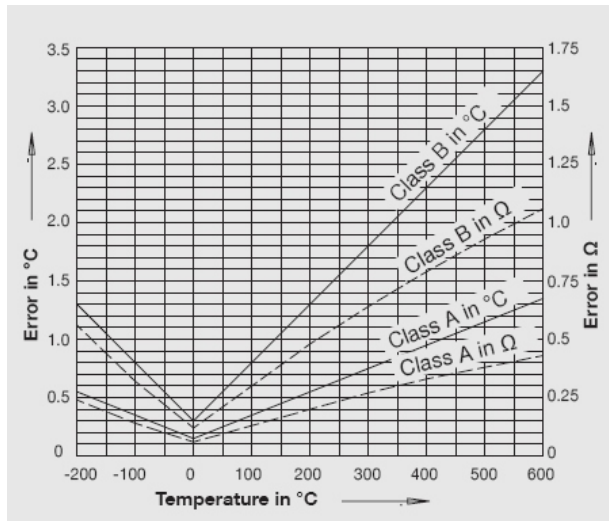
It makes no sense to combine 2-wire connection with Class A, since the lead resistance of the cable overrides the higher sensor accuracy.

Class	Limiting error in °C
A	$0.15 + 0.002 \cdot t $ ¹⁾
B	$0.3 + 0.005 \cdot t $

1) |t| is the value of the temperature in °C without consideration of the sign

Sensor method of connection

- 2-wire The lead resistance compounds the error.
- 3-wire With a cable length of approx. 30 m or longer measuring deviations can occur.
- 4-wire The inner lead resistance of the connecting wires is negligible.



Temperature (ITS 90) °C	Basic value Ω	Limiting error DIN EN 60 751			
		Class A		Class B	
		°C	Ω	°C	Ω
-50	80.31	± 0.25	± 0.10	± 0.55	± 0.22
0	100.00	± 0.15	± 0.06	± 0.30	± 0.12
50	119.40	± 0.25	± 0.10	± 0.55	± 0.21
100	138.51	± 0.35	± 0.13	± 0.80	± 0.30
150	157.33	± 0.45	± 0.17	± 1.05	± 0.39
200	175.86	± 0.55	± 0.20	± 1.30	± 0.48
250	194.10	± 0.65	± 0.24	± 1.55	± 0.56

Physical Dimension

According to customer demand completeness.

