



SILICONE RUBBER SURFACE RTD

Temperature Sensor

Specifications

- Fast Response
- Surface Sensing
- Noninvasive, Simple Installation
- Flat, Flexible
- Custom Dimensions Available

The Silicone Rubber Surface RTD is a flat, flexible, rectangular sensor with a sensing element laminated in silicone rubber. They are used to monitor or measure temperature on round or uneven surfaces. For motor and generator applications, they are commonly used in the end turns of the windings. Silicone rubber surface RTD sensors are manufactured with plotted element style. A plotted element allows for measuring the average temperature over an extended area. Measurement Specialties has many sizes available from stock or we can customize to meet your specifications.

Features

- Temperature Range:
 - » -50° to 220°C (-58° to 428°F)
- Elements:
 - » Platinum, Copper, Nickel
 - » Style: Plotted
- Optional Adhesive Backing
- Leadwire/Cable Options

Applications

- Industrial
- Electric Motors
- Generators
- HVACR
- Aerospace & Defense

SILICONE RUBBER SURFACE RTD

Temperature Sensor

Performance Specifications

Time Constant:

Two seconds maximum for 63.2% response to change in temperature per ASTM E644

Repeatability:

Less than $\pm .06\%$ change in ice point resistance after 10 consecutive cycles between ice point and 250°C

Long Term Stability:

Less than $\pm .2\%$ ice point resistance shift after 1000 hours at 250°C

Self-Heating:

10 mW/C in water moving 3 feet/sec

Hysteresis:

$\pm .15\%$ of span temperature

Dielectric Strength:

1,000 Volts RMS at 60 Hz, for one minute, element to outer surfaces, with 1 mA leakage current

Application Temperature Range:

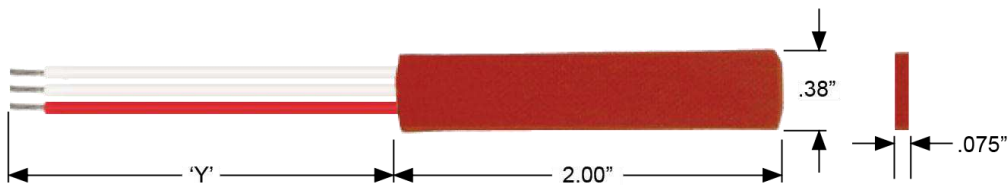
Plotted Element: -50 to 220°C (-58 to 428°F)

Leadwires:

Three Wire: 26 AWG PTFE Insulated

Four Wire: 26 AWG PTFE Insulated

Dimensions



'Y' = Leadwire/Cable Length

SILICONE RUBBER SURFACE RTD

Temperature Sensor

Ordering Information

Silicone Rubber Surface RTD Sensor

Model	Temperature Range
-------	-------------------

320M	Moderate Temperature: -50 to 220°C (-58 to 428°F)
------	---

Model	Element	Accuracy	Temperature Coefficient
-------	---------	----------	-------------------------

P2B	Platinum	100 Ohm \pm .12% at 0°C	.00385
P2C	Platinum	100 Ohm \pm .5% at 0°C	.00385
G2C	Platinum	100 Ohm \pm .5% at 0°C	.00392
C1D	Copper	10 Ohm \pm .2% at 25°C	.00427
N3C	Nickel	120 Ohm \pm .5% at 0°C	.00672

Model	Leadwires, Element Configuration	Color Code
-------	----------------------------------	------------

2S	Two Wire, Single	Red/White
3S	Three Wire, Single	Red/White/White
4S	Four Wire, Single	Red/Red/White/White

Model	'Y' Leadwire/Cable Options
-------	----------------------------

----	Define 'Y' Length in Inches (120 = 120.0")
------	--

Model	Leadwire Material
-------	-------------------

A	PTFE
---	------

Model	Mounting Options
-------	------------------

1	Standard, No Adhesive
2	Adhesive Backing

Stocked Part Numbers*

Part Number	Model Number
R-1630	320M C1D 3S 36 A 1
R-2428	320M P2C 3S 96 A 1
R-10224-16	320M P2C 3S 180 A 1
R-10494-3	320M C1D 3S 96 A 1

* Please consult factory for availability.

NORTH AMERICA

Measurement Specialties, Inc.,
a TE Connectivity Company
1711 139th Lane NW
Andover, MN 55304
Tel +1 763 689 4870
Fax +1 763 689 5033
temp.eng.us@meas-spec.com

EUROPE

Measurement Specialties (Europe), Ltd.,
a TE Connectivity Company
4 Rue Gaye Marie
31027 Toulouse, France
Tel +33 (0) 582 082 200
Fax +33 (0) 582 082 151

ASIA

Measurement Specialties (China), Ltd.,
a TE Connectivity Company
No. 26 Langshan Road
Shenzhen High-Tech Park (North)
Nanshan District, Shenzhen 518057 China
Tel +86 755 3330 5088
Fax +86 755 3330 5099

TE.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, TE Connectivity, TE connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2015 TE Connectivity Ltd. family of companies All Rights Reserved.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Industrial Temperature Sensors](#) category:

Click to view products by [TE Connectivity](#) manufacturer:

Other Similar products are found below :

[590-32AC34-103-WRI](#) [590-59CN02-103](#) [G9864ST22F0](#) [HEL-705-U-0-12-C1](#) [HEL-736-U-2-36](#) [HEL-717-U-0-24-00](#) [519-39AW09-245](#)
[519-39CH01-295](#) [535-32AB36-202](#) [535-34AE08-303](#) [512-32AQ01-503](#) [521-33AG04-303](#) [521-53BR01-503](#) [E52P6DY4M](#) [535-34AE09-222](#)
[590-32AC34-103](#) [590-32AD05-103](#) [HEL-705-U-0-36-00](#) [HEL-705-U-1-12-C2](#) [E52-CA6D-N 4M](#) [E52-P6DY 2M](#) [E52-P20C-N D=8](#) [E52-](#)
[THE5A 100-200 2M](#) [HRTS-5760-B-T-0-18](#) [6655-71990001](#) [LTPCTGA20MBSIBX01](#) [LTPCTAA20MDSIEX01](#) [BB-HS-104T2505402](#)
[NCP81255MNTXG](#) [HEL-707-T-1-24-00](#) [HEL-716-U-0-24-00](#) [USW2247](#) [R-11614-1](#) [RP103ST22P2](#) [R-10331-3F6](#) [E52-P20AY-D32 4M](#)
[B57045K0222K000](#) [B57045K0154K000](#) [PPG102A6](#) [R-7119](#) [R-8949-34](#) [BB-WTJ-10-36-TT](#) [20006233-00](#) [USW2889](#) [E52-P35C-ND3.2](#)
[NB-PTCO-142](#) [B57045K0682K000](#) [R-10224-16](#) [R-1630](#) [R-8204](#)