

# **STATOR RTD**Temperature Sensor

#### **Specifications**

- · Variety of Configurations
- Single and Dual Elements
- Custom Designs Available with:
  - » Specific Dimensions
  - » Side Exit
  - » Paddle Style
  - » High Accuracy
  - » Special Cable or Leadwires

The Stator RTD Sensor is a rectangular, flat, laminated sensors commonly called "Stator Sticks" because they are inserted between the coils in the stator of a motor. These averaging type sensors are used in electric motors and generators for continuous sensing of the temperature and provide for consistent thermal monitoring without false alarms. Many sizes are in stock or we can customize for your application. Measurement Specialties' Stator RTD sensors are built to meet the specifications of ANSI C50.10-1990, general requirements for synchronous motors. We can build to your specifications!

#### **Features**

- Rear Exit, Epoxy Glass Laminated
- Elements, Single and Dual:
  - » Platinum, Copper, Nickel
- Custom Body Thickness: .030" to .375"
  - » Standard: .030", .050", .078", .093", .125"
- Custom Body Widths: .250" to 2.50"
  - » Standard: .260", .305", .344", .455", .500", .625"
- Leadwire/Cable Options

## **Applications**

- Electric Motors
- Generators

## Performance Specifications

#### **Dielectric Strength:**

Class F: 3,000 volts RMS @ 60 Hz for 1 minute, between leads and external body surface Class H: 2,000 volts RMS @ 60 Hz for 1 minute, between leads and external body surface

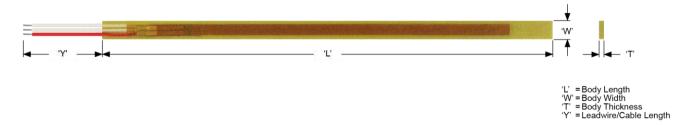
#### **Temperature Limits:**

Class F: 155°C (311°F) Class H: 180°C (356°F)

#### **RTD Leadwires:**

Two Wire, Three Wire or Four Wire Standard: Stranded Copper plated wire with PTFE insulation Other leadwire coverings available

#### **Dimensions**



#### **Ordering Information**

| Model                                  | Classification  | Temperature Limit  | Material   | Dielectric Strength        |  |
|--|---|--|--|----------------------------|--|
| 300F<br>300H                           | Class F<br>Class H  | 155°C<br>180°C   | Epoxy Glass<br>Epoxy Glass                                 | 3,000 Volts<br>2,000 Volts |  |
| Model                                  | Element   | Accuracy   | Temperature (  | Temperature Coefficient    |  |
| P2B<br>P2C<br>P2D<br>G2C<br>C1D<br>N3C | Platinum<br>Platinum<br>Platinum<br>Platinum<br>Copper<br>Nickel  | 100 Ohm ±.12% at 0°C<br>100 Ohm ±.5% at 0°C<br>100 Ohm ±.2% at 0°C<br>100 Ohm ±.5% at 0°C<br>10 Ohm ±.5% at 0°C<br>120 Ohm ±.5% at 0°C | .00385<br>.00385<br>.00385<br>.00392<br>.00427<br>.00672   |                            |  |
| Model                                  | 'L' Body Length   |  |  |                            |  |
|  | Define 'L' Length in Inches<br>Example: 10.00 = 10.00"; 6.25 = 6.25"  |  |  |                            |  |
| Model                                  | Leadwires, Element Configuration Color Code   |  |  |                            |  |
| 2S<br>3S<br>4S<br>3D                   | Two Wire, Single<br>Three Wire, Single<br>Four Wire, Single<br>Three Wire, Dual   |  | Red/White<br>Red/White/Wh<br>Red/Red/White<br>Red/White/Wh |                            |  |
| Model                                  | 'T' Body Thickness  | Standard Leadwires   |  |                            |  |
| A<br>B<br>C<br>D<br>E<br>F<br>G<br>H   | .030"<br>.050"<br>.078"<br>.093"<br>.125"<br>.093"<br>.125"   | 30 AWG 26 AWG 22 AWG 22 AWG 22 AWG 22 AWG 22 AWG, Jacketed Cable 22 AWG, Jacketed Cable 26 AWG (0.050" Thick at Lea                    | d Exit)  |                            |  |
| Model                                  | 'Y' Leadwire/Cable Options  |  |  |                            |  |
|  | Define 'Y' Length in Inches (120 = 120.0")  |  |  |                            |  |
| Model                                  | 'W' Body Width  |  |  |                            |  |
| A<br>B<br>C<br>D<br>E                  | .260" (Single Element Only) .305" (Single Element Only) .344" (Single Element Only) .455" (Single Element Only) .500" .625" |  |  |                            |  |

| Stocked Part Numbers*   |   |  |  |  |
|---|---|--|--|--|
| Part Number   | Model Number  |  |  |  |
| R-1630<br>R-2428<br>R-10224-16<br>R-10494-3<br>R-12269-6<br>R-12269-8 | 320M C1D 3S 36 A 1<br>320M P2C 3S 96 A 1<br>320M P2C 3S 180 A 1<br>320M C1D 3S 96 A 1<br>322M G2C 3S 96 A 1<br>322M P2C 3S 96 A 1 |  |  |  |

<sup>\*</sup> Please consult factory for availability.

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