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### 590-33BQ01-103



500 Series surface temperature probe

*Actual product appearance may vary.*

#### Features

Wide selection of housing options  
Choice of custom or existing designs  
Operating temperature range design available from -60 °C to 300 °C {76 °F to 572 °F}

#### Potential Applications

Automotive  
White goods  
Communications  
Medical  
Fire detection  
Computers  
Instrumentation test equipment  
Microwave oven probes  
Bulk freight refrigeration  
Digital thermometers  
Drinking and vending machines  
Military  
Aerospace

#### Description

The 500 Series Probes represents a full range of thermistor and RTD-based temperature sensors. These assemblies have been designed for use in specific applications. Housings may accommodate air/gas, immersion or surface sensing requirements. Housing material ranges from all plastic to all metal. In addition to custom configurations, the customer may also choose from a variety of existing designs.

#### Supporting Documentation

None Available

| Product Specifications                |                                     |
|---------------------------------------|-------------------------------------|
| Thermistor Type                       | NTC                                 |
| Temperature Sensing Type              | Surface                             |
| Nominal Resistance at 25 °C [77 °F]   | 10,000 Ohm                          |
| Tolerance                             | ± 0.1 °C [0.18 °F]                  |
| Accuracy                              | 0 °C to 70 °C [32 °F to 158 °F]     |
| R-T Curve                             | 16                                  |
| Operating Temperature Range           | -60 °C to 125 °C [-76 °F to 257 °F] |
| Housing Material                      | Aluminum                            |
| Mechanical Interface                  | M5x0.8 6 g thread                   |
| Electrical Interface                  | Lead wires with connector(s)        |
| Lead Material                         | 28 Gauge Teflon insulation          |
| Lead Length                           | 305 mm [12 in]                      |
| Connector Type                        | Molex 50-57-9402                    |
| Time Constant on Metal Surface        | 3.0 s                               |
| Dissipation Constant on Metal Surface | 10 mW/°C                            |
| Availability                          | Global                              |
| Series Name                           | 500                                 |

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