

Waterproof IP68 Temperature Sensor

Thermometrics Overmolded Type JI & JIC NTC Thermistor



NTC Type JI

Temperature Sensor Type JI : The NTC thermistor is molded onto a flexible circular cable. Tip and outer cable insulation material is thermoplastic elastomer rubber. The tinned copper conductors have individual polypropylene insulation.

Features

- Waterproof to IP68
- Withstands freeze/thaw cycling
- Range of wire lengths 300 to 5000mm (11.8in to 16.4ft)
- Halogen free cable
- Sensor tip and extension cable moulded together as one hot vulcanised unit
- RoHS compliant



NTC Type JIC

Temperature Sensor Type JIC : The NTC thermistor is moulded onto a flexible circular cable housed in stainless steel. The tip and outer cable insulation material is thermoplastic elastomer rubber. The tinned copper conductors have individual polypropylene insulation.

Applications

- Ventilation
- Refrigeration
- Heat pumps
- Water heaters
- Weather stations
- Outdoor temperature measurement
- Under-floor heating
- Fish tanks
- Evaporators

Options

- Other resistance - temperature characteristics
- Other wire lengths
- Other housing lengths

NTC Type JI & JIC Specifications

Coding

Resistance characteristic and wire length are specified by the product code as per the table below:

Code Type

JI Double Insulated Sensor with rubber tip
 JIC Double Insulated Sensor with Stainless Steel Housing

Code Type

103C1R2 NK103C1R2

F103W DC95F103WN

Code Wire Length WL mm (in)

L301 300 (11.8) ± 10 (0.4)

L102 1000 (39.4) ± 20 (0.8)

L252 2500 (98.4) ± 50 (2.0)

J - - - Typical model number

Other wire lengths are available for quantities > 5000 pieces

Data

Temperature range: -50°C to +105°C (-58°F to 221°F) continuous.
 (125°C/257°F up to maximum 6 hours)

Dielectric strength: 3750V AC

Insulation resistance: >100MΩ at 1000V DC

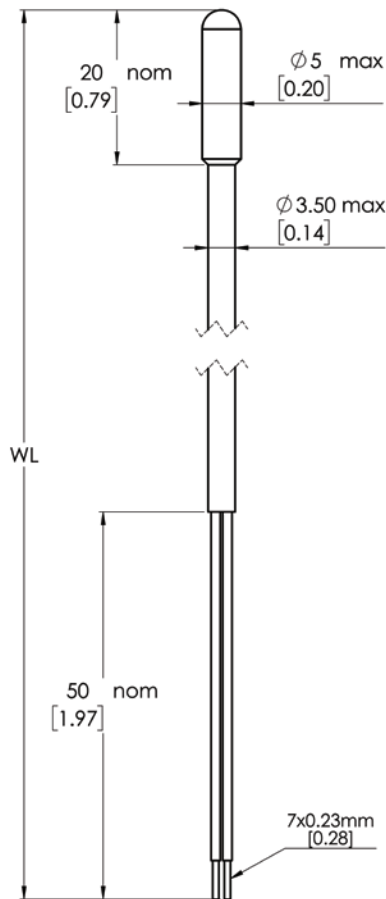
Cable type: 2 x 0.30mm² (23 AWG)

Wire conductors: 7 x 0.23mm diameter (0.30mm²)

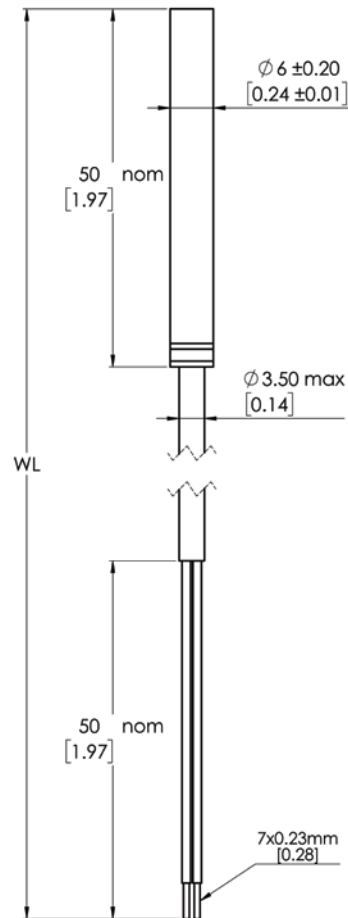
NK103C1R2:
 R25°C = 10kΩ ± 2% (R77°F)
 B value 25/85°C (R77/185°F) = 3977K ± 0.75%
 Material 1

DC95F103WN:
 R25°C = 10kΩ (R77°F)
 Tolerance 0°C - 70°C = ±0.2°C
 (32°F to 158°F = +/- 0.36°F)
 B value 25/85°C (R77/185°F) = 3977K ± 0.75%
 Material F

RVT Table : Data refer to Document : AAS-913-318



NTC Type JI - Dimensions



NTC Type JIC - Dimensions

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Amphenol:

[JI-103C1R2-L301](#) [JIC-103C1R2-L301](#) [JI-F103WN-L252](#) [JI-103C1R2-L102](#) [JI-103C1R2-L252](#) [JIC-F103WN-L102](#)
[JIC-103C1R2-L252](#) [JIC-F103WN-L301](#) [JI-F103WN-L301](#) [JI-F103WN-L102](#) [JIC-F103WN-L252](#) [JIC-103C1R2-L102](#)