

# 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

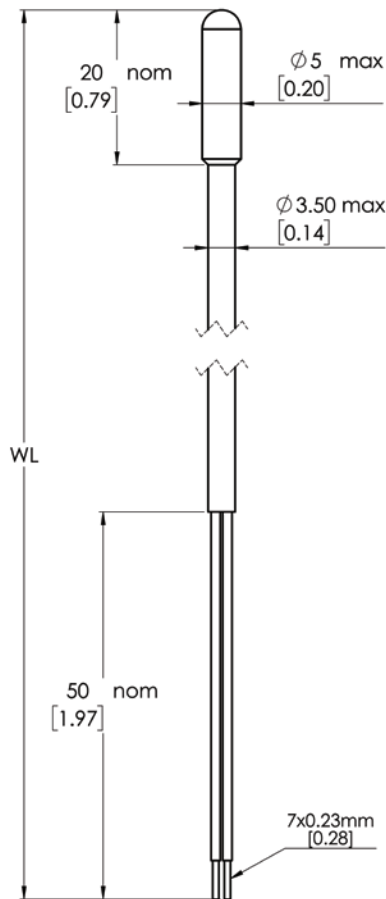
**Cable type:** 2 x 0.30mm<sup>2</sup> (23 AWG)

**Wire conductors:** 7 x 0.23mm diameter (0.30mm<sup>2</sup>)

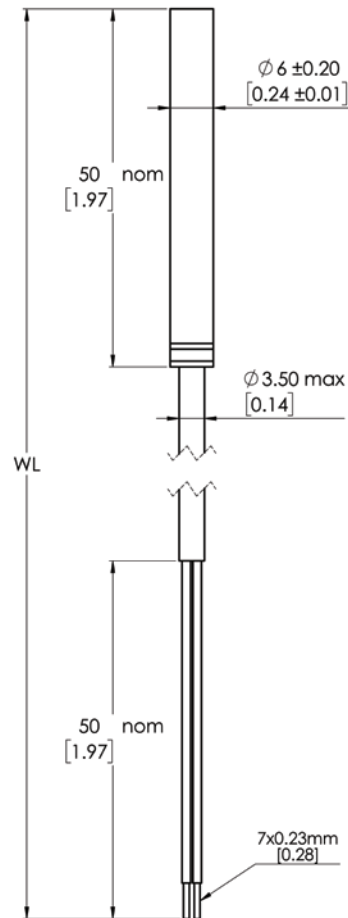
**NK103C1R2:**  
 R25°C = 10kΩ ± 2% (R77°F)  
 B value 25/85°C (R77/185°F) = 3977K  
 Material 1

**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) = 3969K  
 Material F

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



NTC Type JI - Dimensions



NTC Type JIC - Dimensions