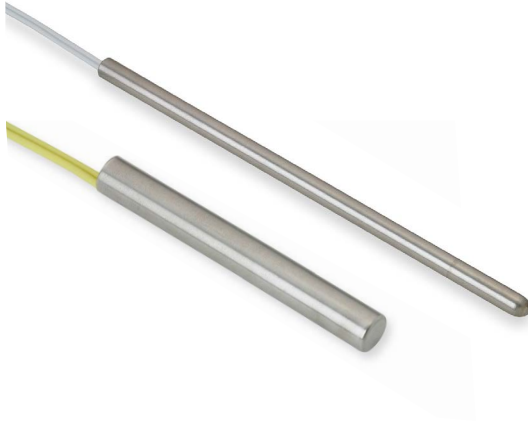


# Thermistor Probes and Assemblies

## NPSS Series - Straight

NTC Straight Thermistor Probe With Stainless Steel Housing

REACH RoHS



### Description

The NPSS series straight, stainless-steel NTC thermistor probe assemblies are suitable for a broad range of temperature sensing applications. The standard probe housings range in size from less than 1.066 mm to 11.125 mm in diameter with various lengths and a wide selection of lead wire materials and terminations. The high stability, precision, cost, and inherent ruggedness of these probe assemblies makes them an excellent temperature standard for medical, consumer, and industrial electronics applications.

If off-the-shelf solutions are not applicable, Littelfuse can customize the probe assemblies per customer specifications.

### Features

- 300 series stainless steel
- Standard and moisture resistant
- Wide range of resistance and tolerances
- Fast and simple design
- Max operating temperature is 300 °C
- Highly stable electrical characteristics

### Benefits

- High reliability
- Efficient
- Wide selection of probe diameters
- Assembled with terminal ends or without

### Applications

- Food handling and processing
- Medical equipment
- Consumer electronics
- HVAC
- Aerospace
- Communication and instrumentation
- Industrial electronics

# Thermistor Probes and Assemblies

## NPSS Series - Straight

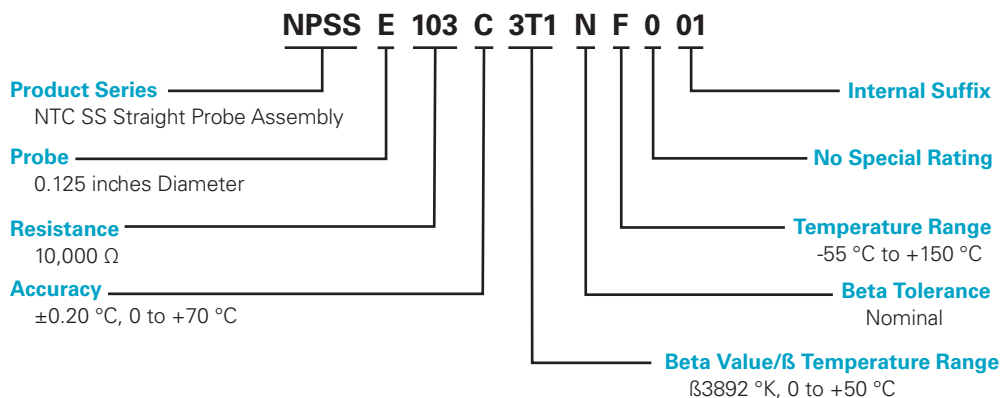
### Specifications

| PART NUMBER       | RESISTANCE IN OHMS AT 25 °C (Ω) | RESISTANCE TOLERANCE ± % @ 25 °C | BETA K 0-50 °C | OPERATING TEMPERATURE MAX °C | TEMPERATURE COEFFICIENT @ 25 °C | RESISTANCE-TEMPERATURE CURVE | ACCURACY 0 °C – +70 °C (± °C) |
|-------------------|---------------------------------|----------------------------------|----------------|------------------------------|---------------------------------|------------------------------|-------------------------------|
| NPSSE103C3T1NF001 | 10000                           | Nom                              | 3892           | 150                          | -4.4%/°C                        | J                            | 0.20                          |
| NPSSH103F3T1NDM01 | 10000                           | 1                                | 3892           | 105                          | -4.4%/°C                        | J                            | –                             |

### Certification & Compliance

|              |                                                      |
|--------------|------------------------------------------------------|
| <b>REACH</b> | Reach Regulation (EC) No. 1907/2006                  |
| <b>RoHS</b>  | RoHS 2 Directive 2011/65/EU; Directive (EU) 2015/863 |

### Part Numbering System



### Ordering Information

| CATALOG NUMBER    | PACKING |
|-------------------|---------|
| NPSSE103C3T1NF001 | Bulk    |
| NPSSH103F3T1NDM01 | Bulk    |

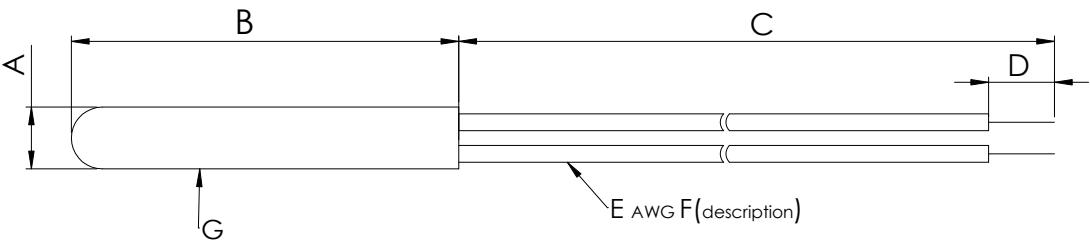
### Electrical Specifications

| RESISTANCE (25 °C) Ω | RESISTANCE TOLERANCE, ±% | ACCURACY (± °C) | TEMP. COEFFICIENT (%/°C) | BETA (K)    | TEMP RATING (°C) |
|----------------------|--------------------------|-----------------|--------------------------|-------------|------------------|
| 1000 to 2000000      | 1 to 10                  | 0.1 ~ 1         | 3.31 to 4.4              | 2000 ~ 5000 | -40 ~ +300       |

# Thermistor Probes and Assemblies

## NPSS Series - Straight

### Dimensions Inches (mm)



| A                                       | B                                | C                                                  | D                                       | E                | F                        | G                          |
|-----------------------------------------|----------------------------------|----------------------------------------------------|-----------------------------------------|------------------|--------------------------|----------------------------|
| 0.042" to 0.438"<br>(1.066 to 11.125mm) | 0.2" to 36"<br>(5.08 to 914.4mm) | 1" to custom lengths<br>(25.4mm to custom lengths) | 0.157" to 0.250"<br>(3.9878 to 6.350mm) | 18 AWG to 34 AWG | Various cables and wires | 300 stainless steel series |

**Disclaimer Notice** – Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at [www.littelfuse.com/product-disclaimer](http://www.littelfuse.com/product-disclaimer).