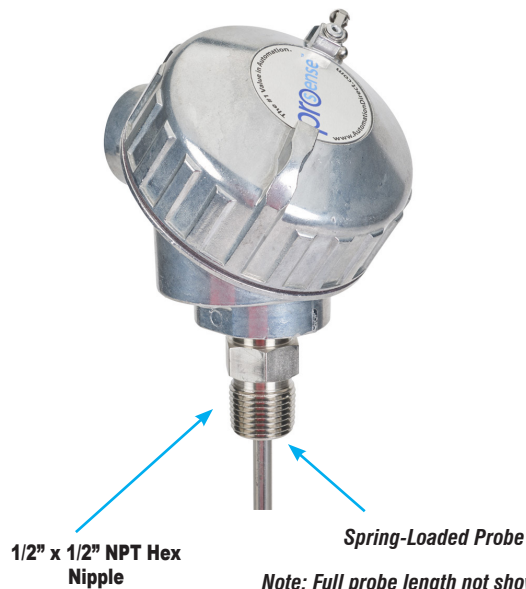


# prosense® 10K-3 Thermistor Spring-Loaded Probes with Connection Head

**NTC10K3-C04-03**



*Note: Full probe length not shown in photo*

## Overview

- Probe
  - Spring-loaded for positive tip contact in thermowells
  - NTC 10k Thermistor Type 3
  - 1/4" diameter, 316 SS sheath to protect against harsh environments
  - 4", 6" or 12" probe length
- Connection Head
  - Cast aluminum NEMA 4X, IP66 screw cover head with captive gasket
  - One turn cover removal & installation eliminates cross threading and saves time
  - 3/4" NPT conduit opening with internal stop to prevent overtightening and installation damage
  - Gripping ribs on cover edge
  - Stainless steel cover chain
- Wiring
  - 2 feet of cable provided with 2 inches of 24AWG wire pre-stripped 1/4 inch and tinned
- Made in the USA



## 10K-3 Thermistor Spring-Loaded Probes with Connection Head

| Part Number                           | Pcs/Pkg | Wt (lb) | Price   | Drawing Link        | Type                     | Probe Diameter (O.D.) | Probe Length | Temperature Sensing Range        | Mounting                                                                                                 |
|---------------------------------------|---------|---------|---------|---------------------|--------------------------|-----------------------|--------------|----------------------------------|----------------------------------------------------------------------------------------------------------|
| <a href="#"><b>NTC10K3-C04-03</b></a> | 1       | 1.1     | \$74.00 | <a href="#">PDF</a> | 10K-AN Type 3 Thermistor | 1/4"                  | 4"           | -40 to 125° C<br>(-40 to 257° F) | Integral 1/2" x 1/2" NPT Hex Nipple, 316 SS. Mount in thermowell (see accessories, purchased separately) |
| <a href="#"><b>NTC10K3-C06-03</b></a> |         | 1.11    | \$75.00 | <a href="#">PDF</a> |                          |                       | 6"           |                                  |                                                                                                          |
| <a href="#"><b>NTC10K3-C12-03</b></a> |         | 1.15    | \$77.00 | <a href="#">PDF</a> |                          |                       | 12"          |                                  |                                                                                                          |

## Technical Specifications

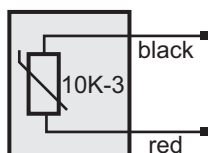
|                                      |                                                                                                                                                         |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Sensing Element</b>               | Epoxy Coated NTC Thermistor                                                                                                                             |
| <b>No-Load Resistance</b>            | 10kΩ at 25°C                                                                                                                                            |
| <b>Accuracy</b>                      | ± 0.2°C from 0°C to 70°C                                                                                                                                |
| <b>Probe</b>                         | ø1/4", 316 stainless steel sheath                                                                                                                       |
| <b>Connection Head</b>               | Die-cast aluminum, screw cover with stainless steel chain, compressed graphite gasket, NEMA 4X, IP66, 3/4" NPT conduit opening, Max Temp. 221°F (105°C) |
| <b>Sensing Element Response Time</b> | Approximately 1 second*                                                                                                                                 |
| <b>Wiring</b>                        | 24 inches of PVC cable inside cover with 2 inches of 24AWG wire stripped 1/4 inch and tinned                                                            |

\* The sensing element has an approximate response time of 1 second in a well stirred liquid bath. Different constructions will have different thermal responses.



*Note: Check the chemical compatibility of the sensor's wetted parts with the medium to be measured.*

## Wiring Information



- No polarity

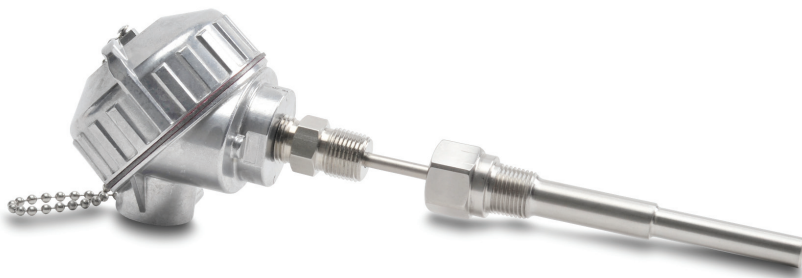
# prosense® 10K-3 Thermistor Spring-Loaded Probes with Connection Head - Accessories

## Accessories

| Part No.                       | Description                                                                                                                                                                                                                                                                                | Pcs/Pkg | Price   |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|
| <a href="#"><u>TW04-01</u></a> | Standard duty threaded thermowell with 1/2 inch NPT male process threads, 304 stainless steel, 4-1/4 inch overall length with 0.260 inch bore diameter, for use with 4-inch long, 1/4 inch diameter spring loaded probes with 1/2 inch NPT threaded fitting, 2-1/2 inch insertion length   | 1       | \$34.00 |
| <a href="#"><u>TW04-02</u></a> | Standard duty threaded thermowell with 3/4 inch NPT male process threads, 304 stainless steel, 4-1/4 inch overall length with 0.260 inch bore diameter for use with 4-inch long, 1/4 inch diameter spring loaded probes with 1/2 inch NPT threaded fitting, 2-1/2 inch insertion length    | 1       | \$34.00 |
| <a href="#"><u>TW04-03</u></a> | Standard duty threaded thermowell with 1/2 inch NPT male process threads, 316 stainless steel, 4-1/4 inch overall length with 0.260 inch bore diameter for use with 4-inch long, 1/4 inch diameter spring loaded probes with 1/2 inch NPT threaded fitting, 2-1/2 inch insertion length    | 1       | \$42.50 |
| <a href="#"><u>TW04-04</u></a> | Standard duty threaded thermowell with 3/4 inch NPT male process threads, 316 stainless steel, 4-1/4 inch overall length with 0.260 inch bore diameter for use with 4-inch long, 1/4 inch diameter spring loaded probes with 1/2 inch NPT threaded fitting, 2-1/2 inch insertion length    | 1       | \$42.50 |
| <a href="#"><u>TW06-01</u></a> | Standard duty threaded thermowell with 1/2 inch NPT male process threads, 304 stainless steel, 6-1/4 inch overall length with 0.260 inch bore diameter for use with 6-inch long, 1/4 inch diameter spring loaded probes with 1/2 inch NPT threaded fitting, 4-1/2 inch insertion length    | 1       | \$46.00 |
| <a href="#"><u>TW06-02</u></a> | Standard duty threaded thermowell with 3/4 inch NPT male process threads, 304 stainless steel, 6-1/4 inch overall length with 0.260 inch bore diameter for use with 6-inch long, 1/4 inch diameter spring loaded probes with 1/2 inch NPT threaded fitting, 4-1/2 inch insertion length    | 1       | \$46.00 |
| <a href="#"><u>TW06-03</u></a> | Standard duty threaded thermowell with 1/2 inch NPT male process threads, 316 stainless steel, 6-1/4 inch overall length with 0.260 inch bore diameter for use with 6-inch long, 1/4 inch diameter spring loaded probes with 1/2 inch NPT threaded fitting, 4-1/2 inch insertion length    | 1       | \$54.00 |
| <a href="#"><u>TW06-04</u></a> | Standard duty threaded thermowell with 3/4 inch NPT male process threads, 316 stainless steel, 6-1/4 inch overall length with 0.260 inch bore diameter for use with 6-inch long, 1/4 inch diameter spring loaded probes with 1/2 inch NPT threaded fitting, 4-1/2 inch insertion length    | 1       | \$54.00 |
| <a href="#"><u>TW12-01</u></a> | Standard duty threaded thermowell with 1/2 inch NPT male process threads, 304 stainless steel, 12-1/4 inch overall length with 0.260 inch bore diameter for use with 12-inch long, 1/4 inch diameter spring loaded probes with 1/2 inch NPT threaded fitting, 10-1/2 inch insertion length | 1       | \$74.00 |
| <a href="#"><u>TW12-02</u></a> | Standard duty threaded thermowell with 3/4 inch NPT male process threads, 304 stainless steel, 12-1/4 inch overall length with 0.260 inch bore diameter for use with 12-inch long, 1/4 inch diameter spring loaded probes with 1/2 inch NPT threaded fitting, 10-1/2 inch insertion length | 1       | \$74.00 |
| <a href="#"><u>TW12-03</u></a> | Standard duty threaded thermowell with 1/2 inch NPT male process threads, 316 stainless steel, 12-1/4 inch overall length with 0.260 inch bore diameter for use with 12-inch long, 1/4 inch diameter spring loaded probes with 1/2 inch NPT threaded fitting, 10-1/2 inch insertion length | 1       | \$93.00 |
| <a href="#"><u>TW12-04</u></a> | Standard duty threaded thermowell with 3/4 inch NPT male process threads, 316 stainless steel, 12-1/4 inch overall length with 0.260 inch bore diameter for use with 12-inch long, 1/4 inch diameter spring loaded probes with 1/2 inch NPT threaded fitting, 10-1/2 inch insertion length | 1       | \$93.00 |

See end of section for full listing of accessories and dimension information.

## Spring-Loaded Probe and Thermowell Assembly Example



- Spring-loaded probe design ensures positive tip contact with the bottom of the thermowell.
- Integral probe hex nipple threads directly into thermowell. No additional probe mounting fittings are required.