

# prosense® RTD Probes with Hex Nipple

## RTD1-HXXL01-01



### CHSC-AL-1

### CHTB-3

#### Accessories

## Overview

- 100 ohm platinum RTD 3-wire element
- Class A accuracy
- 1/4" diameter, 316 sealed stainless steel sheath to protect against harsh environments
- RTD element encased in alumina powder insulation provides excellent vibration dampening and heat transfer
- 6", 12", or 18" probe length
- 1/2" x 1/2" NPT hex nipple allows easy replacement of existing probes and connection to a wiring junction box
- Made in the USA

## RTD Probes with Hex Nipple

| Part Number                    | Pcs/Pkg | Wt (lb) | Price   | Type           | Probe Diameter (O.D.) | Probe Length | Temperature Sensing Range      | Mounting                                    |
|--------------------------------|---------|---------|---------|----------------|-----------------------|--------------|--------------------------------|---------------------------------------------|
| <a href="#">RTD1-H06L01-01</a> | 1       | 0.5     | \$70.00 | PT 100, 3-wire | 1/4"                  | 6"           | -50 to 300°C<br>(-58 to 572°F) | Integral 1/2" x 1/2" NPT Hex Nipple, 316 SS |
| <a href="#">RTD1-H12L01-01</a> |         |         | \$75.00 |                |                       | 12"          |                                |                                             |
| <a href="#">RTD1-H18L01-01</a> |         |         | \$81.00 |                |                       | 18"          |                                |                                             |

## Technical Specifications

|                                   |                                                                             |
|-----------------------------------|-----------------------------------------------------------------------------|
| <b>Sensing Element</b>            | Single 100Ω platinum (Pt 100), 3-wire; TCR = 0.00385 Ω/Ω/°C                 |
| <b>Initial Accuracy</b>           | Class A $\pm[0.15 + 0.002  t ]$ °C                                          |
| <b>Probe</b>                      | ø1/4", 316 stainless steel sheath, single RTD is embedded in alumina powder |
| <b>Minimum Installation Depth</b> | 3" (76 mm)                                                                  |
| <b>Response Time</b>              | 7 seconds, 63% of a 25 to 77°C step change (ASTM E1137)                     |
| <b>Wiring</b>                     | 3-inch stranded 24 AWG wire leads with terminal pins, Kapton insulated      |



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

## Dimensions

inches [mm]

### RTD1-HXXL01-01

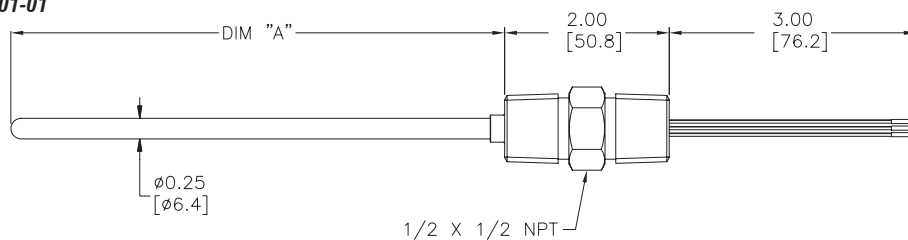
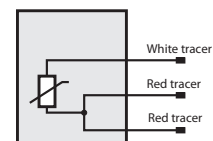


TABLE A

| PART NUMBER    | DIM "A"      |
|----------------|--------------|
| RTD1-H06L01-01 | 6.00[152.4]  |
| RTD1-H12L01-01 | 12.00[304.8] |
| RTD1-H18L01-01 | 18.00[457.2] |

## Wiring Information



# prosense® RTD Probes with Hex Nipple

## Accessories

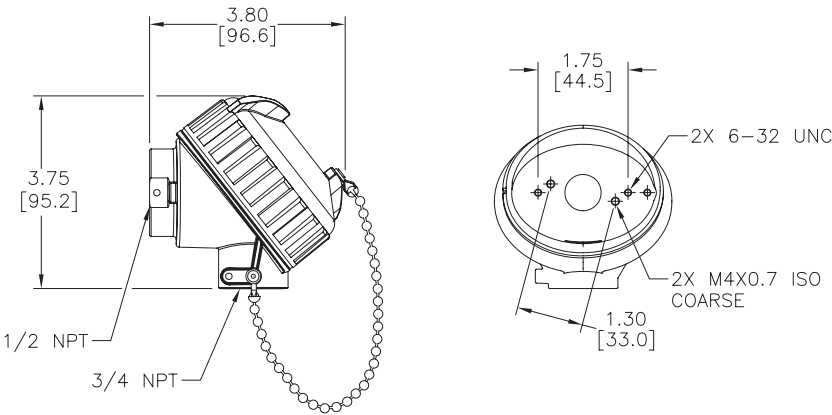
| Part No.                | Description                                                                                                                                                                                                                                                                              | Pcs/Pkg | Price   |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|
| <b><u>CHSC-AL-1</u></b> | ProSense general purpose screw cover connection head for temperature probes, die-cast aluminum, 1/2 inch NPT process opening, 3/4 inch NPT conduit opening, NEMA 4X, IP66 rated, graphite gasket, maximum temperature rating of 825°F (440°C). Order probe and terminal base separately. | 1       | \$23.00 |
| <b><u>CHTB-3</u></b>    | ProSense ceramic terminal base, three brass terminals with stainless steel screws, for use with ProSense temperature probe connection heads, two mounting screws included.                                                                                                               | 1       | \$7.00  |

Note: Full listing of accessories available at the end of this section. RTD extension lead wire available at [www.automationdirect.com](http://www.automationdirect.com)

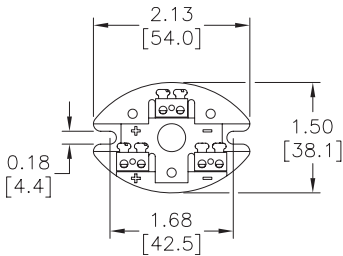
## Dimensions

inches [mm]

**CHSC-AL-1**



**CHTB-3**



# proSense® Thermowells



## Overview

- Thermowells designed for use with ProSense thermocouple and RTD probes or ProSense Thermometers eliminate the need for a separate probe mounting fitting or adapter

### RTDTW Series Thermowells

- Welded 316 stainless steel construction
- 1/2" NPT male process threads
- 3-year warranty

### TW Series Thermowells

- Drilled bar stock one piece construction (no welds) from 304 or 316 stainless steel
- 1/2" and 3/4" NPT male process threads available
- Designs and fabrication comply with ASME B31.1 and boiler and pressure vessel codes
- Material complies with NACE MR 0175 / ISO 15156
- CRN registered for all Canadian provinces
- 1-year warranty



| Thermowells for Thermocouples -TW Series |             |        |         |       |                                 |                         |                         |                    |                                                                                  |                                   |
|------------------------------------------|-------------|--------|---------|-------|---------------------------------|-------------------------|-------------------------|--------------------|----------------------------------------------------------------------------------|-----------------------------------|
| Part Number                              | Pcs/<br>Pkg | Wt(lb) | Price   | I.D.  | Overall<br>Length/"U"<br>Length | Male Process<br>Threads | Female Probe<br>Threads | Wetted<br>Material | Temperature/<br>Pressure<br>Rating                                               | Use With Probe or<br>Thermometer  |
| <a href="#">TW025-01</a>                 | 1           | 0.4    | \$29.50 | 0.26" | 2-3/4" / 1"                     | 1/2" NPT                | 1/2" NPT                | 304 SS             | 304SS: 1000°F<br>max; 3400psi<br>max<br><br>316SS: 1000°F<br>max; 5200psi<br>max | See Sensor<br>Compatibility Table |
| <a href="#">TW025-03</a>                 | 1           | 0.4    | \$34.50 |       |                                 | 1/2" NPT                |                         | 316 SS             |                                                                                  |                                   |
| <a href="#">TW04-01</a>                  | 1           | 0.5    | \$34.00 |       | 4-1/4" / 2-1/2"                 | 1/2" NPT                |                         | 304 SS             |                                                                                  |                                   |
| <a href="#">TW04-02</a>                  | 1           | 0.5    | \$34.00 |       |                                 | 3/4" NPT                |                         | 304 SS             |                                                                                  |                                   |
| <a href="#">TW04-03</a>                  | 1           | 0.5    | \$42.50 |       |                                 | 1/2" NPT                |                         | 316 SS             |                                                                                  |                                   |
| <a href="#">TW04-04</a>                  | 1           | 0.5    | \$42.50 |       |                                 | 3/4" NPT                |                         | 316 SS             |                                                                                  |                                   |
| <a href="#">TW06-01</a>                  | 1           | 0.7    | \$46.00 |       | 6-1/4" / 4-1/2"                 | 1/2" NPT                |                         | 304 SS             |                                                                                  |                                   |
| <a href="#">TW06-02</a>                  | 1           | 0.7    | \$46.00 |       |                                 | 3/4" NPT                |                         | 304 SS             |                                                                                  |                                   |
| <a href="#">TW06-03</a>                  | 1           | 0.7    | \$54.00 |       |                                 | 1/2" NPT                |                         | 316 SS             |                                                                                  |                                   |
| <a href="#">TW06-04</a>                  | 1           | 0.7    | \$54.00 |       |                                 | 3/4" NPT                |                         | 316 SS             |                                                                                  |                                   |
| <a href="#">TW09-01</a>                  | 1           | 1.0    | \$67.00 |       | 9-1/4" / 7-1/2"                 | 1/2" NPT                |                         | 304 SS             |                                                                                  |                                   |
| <a href="#">TW09-03</a>                  | 1           | 1.0    | \$78.00 |       |                                 | 1/2" NPT                |                         | 316 SS             |                                                                                  |                                   |
| <a href="#">TW12-01</a>                  | 1           | 1.2    | \$74.00 |       | 12-1/4" / 10-1/2"               | 1/2" NPT                |                         | 304 SS             |                                                                                  |                                   |
| <a href="#">TW12-02</a>                  | 1           | 1.2    | \$74.00 |       |                                 | 3/4" NPT                |                         | 304 SS             |                                                                                  |                                   |
| <a href="#">TW12-03</a>                  | 1           | 1.2    | \$93.00 |       |                                 | 1/2" NPT                |                         | 316 SS             |                                                                                  |                                   |
| <a href="#">TW12-04</a>                  | 1           | 1.2    | \$93.00 |       |                                 | 3/4" NPT                |                         | 316 SS             |                                                                                  |                                   |

# prosense® Thermowells

| Thermowells for Thermocouples -RTDTW Series |             |        |         |                  |                   |                         |                         |                    |                                               |                                                                                           |
|---------------------------------------------|-------------|--------|---------|------------------|-------------------|-------------------------|-------------------------|--------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------|
| Part Number                                 | Pcs/<br>Pkg | Wt(lb) | Price   | I.D.             | Overall<br>Length | Male Process<br>Threads | Female Probe<br>Threads | Wetted<br>Material | Temperature/<br>Pressure<br>Rating            | Use With                                                                                  |
| <a href="#"><u>RTDTW-06-010-50N</u></a>     | 1           | 0.10   | \$34.00 | 7 mm<br>(0.28")  | 113mm (4.4")      | 1/2" NPT                | 1/4" NPT                | 316 SS             | 600°F (315°C)<br>max; 232 psi (16<br>bar) max | XTP-160-N40140F<br>XTP-160-0300F<br>XTP-160-0100C<br>RTD0100-06-010-H<br>CF06-25N fitting |
| <a href="#"><u>RTDTW-06-020-50N</u></a>     | 1           | 0.20   | \$36.50 |                  | 213mm (8.4")      |                         |                         |                    |                                               | XTP-260-N40140F<br>XTP-260-0300F<br>XTP-260-0100C<br>RTD0100-06-020-H<br>CF06-25N fitting |
| <a href="#"><u>RTDTW-06-030-50N</u></a>     | 1           | 0.30   | \$40.00 |                  | 313mm (12.3")     |                         |                         |                    |                                               | XTP-360-N40140F<br>XTP-360-0300F<br>XTP-360-0100C<br>RTD0100-06-030-H<br>CF06-25N fitting |
| <a href="#"><u>RTDTW-10-010-50N</u></a>     | 1           | 0.10   | \$34.00 | 11 mm<br>(0.43") | 92mm (3.62")      | 1/2" NPT                | 1/2" NPT                |                    |                                               | RTD0100-10-010-H<br>CF10-50N fitting                                                      |
| <a href="#"><u>RTDTW-10-030-50N</u></a>     | 1           | 0.22   | Retired |                  | 292mm (11.48")    |                         |                         |                    |                                               | CF10-50N fitting                                                                          |

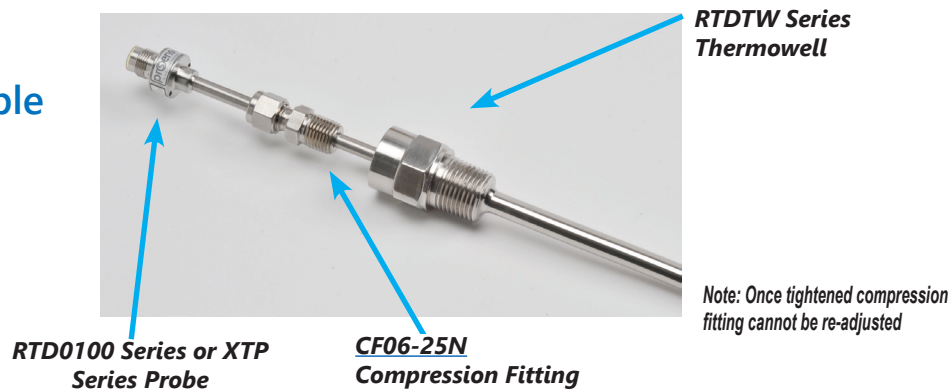


Note: Check the chemical compatibility of the thermowell's wetted parts with the medium to be measured.

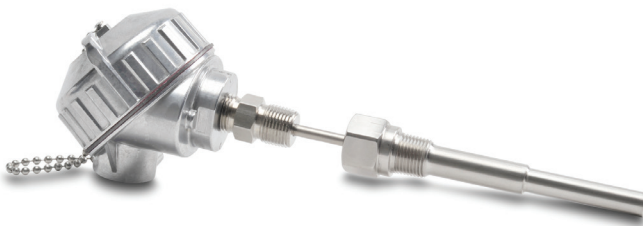


Note: Response time will be slower when installed in a thermowell. Be sure to install the probe so that it contacts the end of the thermowell for faster response. Thermal compound may be used depending on application

## Probe & Thermowell Assembly Example



## Spring-loaded Thermocouple or RTD and Thermowell Assembly Example



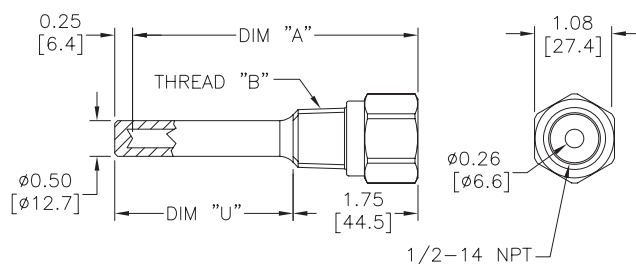
- Using spring-loaded probe design ensures positive tip contact with the bottom of the thermowell.
- Probes with hex nipple thread directly into thermowell. No additional probe mounting fittings are required.

# prosense® Thermowells

## Dimensions

inches [mm]

TW04-XX & TW025-XX



| TABLE A     |             |                |            |
|-------------|-------------|----------------|------------|
| PART NUMBER | DIM "A"     | THREAD "B" NPT | DIM "U"    |
| TW025-01    | 2.50[63.5]  | 1/2-14         | 1.00[25.5] |
| TW025-03    | 2.50[63.5]  | 1/2-14         |            |
| TW04-01     | 4.00[101.6] | 1/2-14         | 2.50[63.5] |
| TW04-02     | 4.00[101.6] | 3/4-14         |            |
| TW04-03     | 4.00[101.6] | 1/2-14         |            |
| TW04-04     | 4.00[101.6] | 3/4-14         |            |

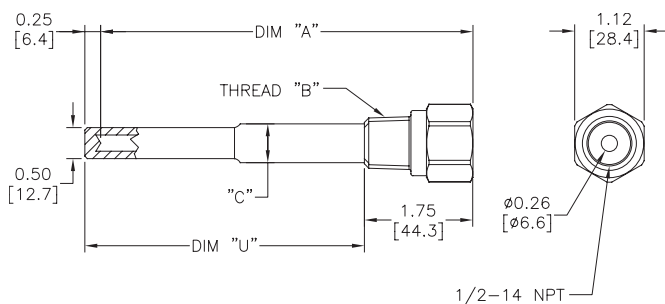
## Dimensions

inches [mm]

TW06-XX

TW09-XX

TW12-XX



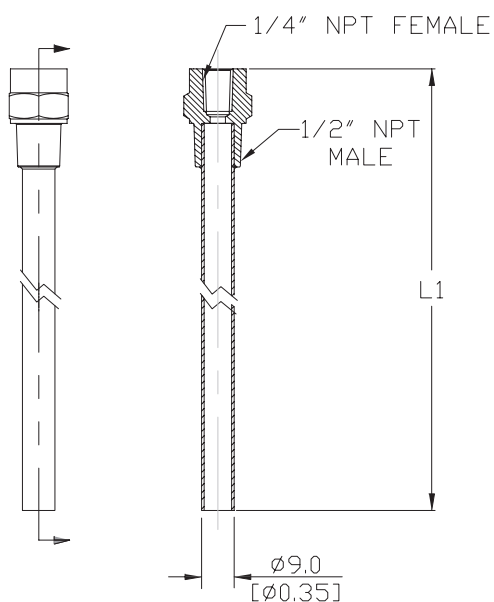
| TABLE A     |              |                |            |              |
|-------------|--------------|----------------|------------|--------------|
| PART NUMBER | DIM "A"      | THREAD "B" NPT | DIM "C"    | DIM "U"      |
| TW06-01     | 6.00[152.4]  | 1/2-14         | 0.63[15.9] | 4.50[114.3]  |
| TW06-02     | 6.00[152.4]  | 3/4-14         | 0.75[19.1] |              |
| TW06-03     | 6.00[152.4]  | 1/2-14         | 0.63[15.9] |              |
| TW06-04     | 6.00[152.4]  | 3/4-14         | 0.75[19.1] | 7.50[190.5]  |
| TW09-01     | 9.00[228.6]  | 1/2-14         | 0.63[15.9] |              |
| TW09-03     | 9.00[228.6]  | 1/2-14         | 0.63[15.9] | 10.50[266.7] |
| TW12-01     | 12.00[304.8] | 1/2-14         | 0.63[15.9] |              |
| TW12-02     | 12.00[304.8] | 3/4-14         | 0.75[19.1] |              |
| TW12-03     | 12.00[304.8] | 1/2-14         | 0.63[15.9] |              |
| TW12-04     | 12.00[304.8] | 3/4-14         | 0.75[19.1] |              |

# prosense® Thermowells

## Dimensions

mm [inches]

### RTDTW-06 Series

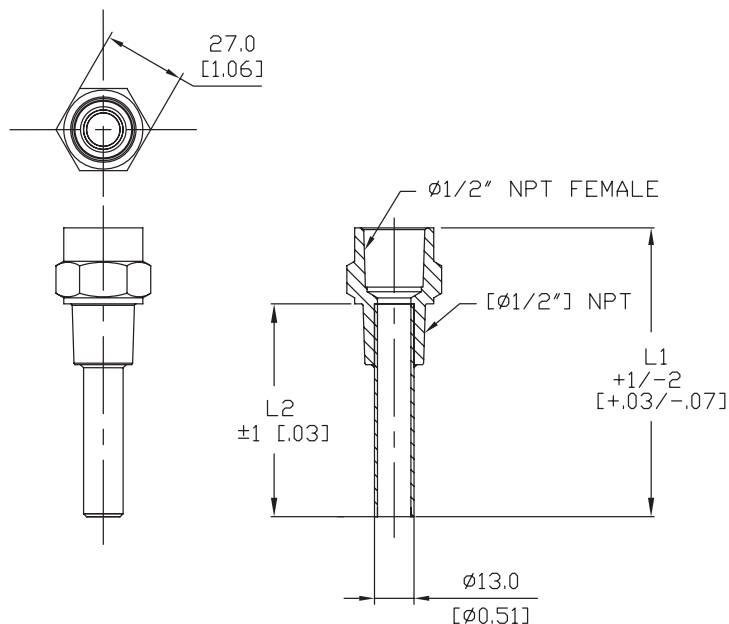


| Part Number                      | L1           |
|----------------------------------|--------------|
| <a href="#">RTDTW-06-010-50N</a> | 113mm [4.4]  |
| <a href="#">RTDTW-06-020-50N</a> | 213mm [8.4]  |
| <a href="#">RTDTW-06-030-50N</a> | 313mm [12.3] |

Torque threads to 40 lb-ft [54.23 Nm]\*

\* Torque values are for reference. Actual torque required for a proper seal of NPT threads is influenced by tolerance, sealant, lubricant, etc.

### RTDTW-10 Series



| Part Number                      | L1            | L2           |
|----------------------------------|---------------|--------------|
| <a href="#">RTDTW-10-030-50N</a> | 92mm [3.62]   | 70mm [2.75]  |
| <a href="#">RTDTW-10-050-50N</a> | 292mm [11.48] | 270mm [10.6] |

Torque threads to 40 lb-ft [54.23 Nm]\*

# prosense® Thermowells

## TW Series Thermowells Sensor Compatibility Table

|                                                                                                  | Connection Head                                                                   | Hex Nipple                                                                        | Attached Plug                                                                     | Lead Wire Transition                                                                | M12                                                                                                                                                                                                                                    | Thermometer                                                                                                                            |
|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Thermowell</b>                                                                                |  |  |  |    |                                                                                                                                                     |                                                     |
| <b><u>TW025-01</u></b><br><b><u>TW025-03</u></b>                                                 | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                   | -                                                                                                                                                                                                                                      | T30-N40160-25C<br>T30-0250-25C<br>T30-50500-25C<br>T30-150750-25C<br>T50-N40160-25A<br>T50-0250-25A<br>T50-50500-25A<br>T50-150750-25A |
| <b><u>TW04-01</u></b><br><b><u>TW04-02</u></b><br><b><u>TW04-03</u></b><br><b><u>TW04-04</u></b> | RTD1-C04-03<br>THMJ-C04-03<br>THMK-C04-03                                         | RTD1-H04L01-02<br>THMJ-H04L01-02<br>THMK-H04L01-02                                | RTD1-P06-01 w/CF14-50N<br>THMJ-P06-02 w/CF14-50N<br>THMK-P06-02 w/CF14-50N        | RTD1-T06L06-01 w/CF14-50N<br>THMJ-T06L06-02 w/CF14-50N<br>THMK-T06L06-02 w/CF14-50N | RTD1-50N-100-H<br>RTD100-06-010-H w/CF14-50N<br>XTP-160-N40140F w/CF14-50N<br>XTP-160-0300F w/CF14-50N<br>XTP-160-0100C w/CF14-50N<br>XTP50N-100-N40140F<br>XTP50N-100-0300F<br>XTP50N-100-0100C<br>ETS50N-100-1001<br>ETS50N-100-1003 | T30-N40160-4C<br>T30-0250-4C<br>T30-50500-4C<br>T30-150750-4C<br>T50-N40160-4A<br>T50-0250-4A<br>T50-50500-4A<br>T50-150750-4A         |
| <b><u>TW06-01</u></b><br><b><u>TW06-02</u></b><br><b><u>TW06-03</u></b><br><b><u>TW06-04</u></b> | RTD1-C06-03<br>THMJ-C06-03<br>THMK-C06-03                                         | RTD1-H06L01-02<br>THMJ-H06L01-02<br>THMK-H06L01-02                                | RTD1-P12-01 w/CF14-50N<br>THMJ-P12-02 w/CF14-50N<br>THMK-P12-02 w/CF14-50N        | RTD1-T12L06-01 w/CF14-50N<br>THMJ-T12L06-02 w/CF14-50N<br>THMK-T12L06-02 w/CF14-50N | RTD1-50N-150-H<br>RTD100-06-020-H w/CF14-50N<br>XTP-260-N40140F w/CF14-50N<br>XTP-260-0300F w/CF14-50N<br>XTP-260-0100C w/CF14-50N<br>XTP50N-150-N40140F<br>XTP50N-150-0300F<br>XTP50N-150-0100C<br>ETS50N-150-1001<br>ETS50N-150-1003 | T30-N40160-6C<br>T30-0250-6C<br>T30-50500-6C<br>T30-150750-6C<br>T50-N40160-6A<br>T50-0250-6A<br>T50-50500-6A<br>T50-150750-6A         |
| <b><u>TW09-01</u></b><br><b><u>TW09-03</u></b>                                                   | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                   | -                                                                                                                                                                                                                                      | T50-N40160-9A<br>T50-0250-9A<br>T50-50500-9A<br>T50-150750-9A                                                                          |
| <b><u>TW12-01</u></b><br><b><u>TW12-02</u></b><br><b><u>TW12-03</u></b><br><b><u>TW12-04</u></b> | RTD1-C12-03<br>THMJ-C12-03<br>THMK-C12-03                                         | RTD1-H12L01-02<br>THMJ-H12L01-02<br>THMK-H12L01-02                                | RTD1-P18-01 w/CF14-50N<br>THMJ-P18-02 w/CF14-50N<br>THMK-P18-02 w/CF14-50N        | RTD1-T18L06-01 w/CF14-50N<br>THMJ-T18L06-02 w/CF14-50N<br>THMK-T18L06-02 w/CF14-50N | RTD100-06-030-H w/CF14-50N<br>XTP-360-N40140F w/CF14-50N<br>XTP-360-0300F w/CF14-50N<br>XTP-360-0100C w/CF14-50N                                                                                                                       | -                                                                                                                                      |



Note: Response time will be slower when installed in a thermowell. Be sure to install the probe so that it contacts the end of the thermowell for faster response. Thermal compound may be used depending on application



# Thermowells Sanitary Clean-in-Place (CIP)



STW06-01

## Overview

- Sanitary Clean-In-Place 3-A approved thermowells allow the use of standard temperature sensors in hygienic applications
- All wetted parts are 316 stainless steel
- Surface finish that meets or exceeds 32µin Ra
- Up to 1500/1200 psi (103/83 bar) at 70/250 °F (21/121 °C) dependent on clamp and seal assembly.
- Bore diameter of 0.260" to accommodate sensing probes with a 0.252" maximum diameter
- Probes with integral 1/2" male NPT process threads mount directly into the thermowell. Probes without threads require a compression fitting with 1/2" male NPT threads.



| Thermowells Sanitary Clean-in-Place (CIP) |         |        |          |        |                           |                    |                      |                     |                                |
|-------------------------------------------|---------|--------|----------|--------|---------------------------|--------------------|----------------------|---------------------|--------------------------------|
| Part Number                               | Pcs/Pkg | Wt(lb) | Price    | I.D.   | Overall Length/"U" Length | Process Connection | Female Probe Threads | Wetted Material     | Use With                       |
| <a href="#"><u>STW04-01</u></a>           | 1       | 0.75   | \$101.00 | ø0.260 | 4-1/4" / 2-1/2"           | 1-1/2" tri-clamp   | 1/2" NPT             | 316 stainless steel | See Sensor Compatibility Table |
| <a href="#"><u>STW06-01</u></a>           | 1       | 0.88   | \$108.00 |        | 6-1/4" / 4-1/2"           |                    |                      |                     |                                |
| <a href="#"><u>STW12-01</u></a>           | 1       | 1.13   | \$150.00 |        | 12-1/4" / 10-1/2"         |                    |                      |                     |                                |
| <a href="#"><u>STW04-02</u></a>           | 1       | 0.75   | \$112.00 |        | 4-1/4" / 2-1/2"           | 2" tri-clamp       |                      |                     |                                |
| <a href="#"><u>STW06-02</u></a>           | 1       | 0.88   | \$120.00 |        | 6-1/4" / 4-1/2"           |                    |                      |                     |                                |
| <a href="#"><u>STW12-02</u></a>           | 1       | 1.13   | \$156.00 |        | 12-1/4" / 10-1/2"         |                    |                      |                     |                                |

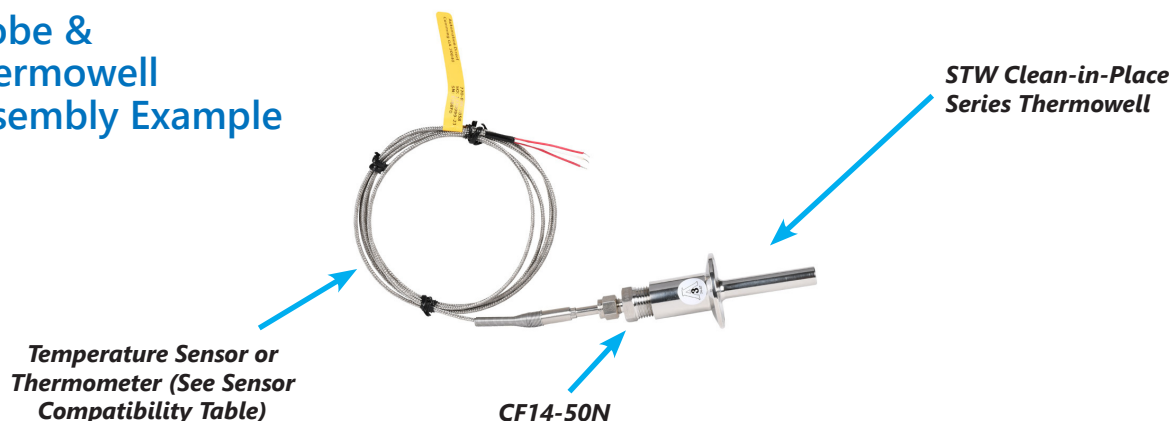


Note: Check the chemical compatibility of the thermowell's wetted parts with the medium to be measured.



Note: Response time will be slower when installed in a thermowell. Be sure to install the probe so that it contacts the end of the thermowell for faster response. Thermal compound may be used depending on application

## Probe & Thermowell Assembly Example



# proSense® Thermowells Sanitary Clean-in-Place (CIP)

## Spring-loaded Thermocouple or RTD and Thermowell Assembly Example



- Using spring-loaded probe design ensures positive tip contact with the bottom of the thermowell.
- Probes with hex nipple thread directly into thermowell. No additional probe mounting fittings are required.

## Dimensions

inches [mm]

STWXX-XX

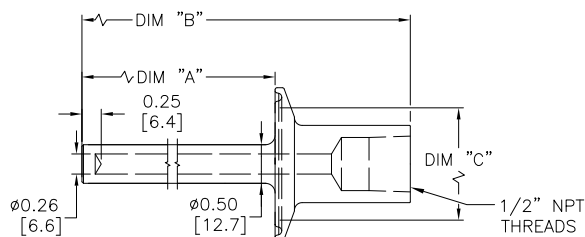


TABLE A

| PART NUMBER | DIM "A"      | DIM "B"      | DIM "C"    |
|-------------|--------------|--------------|------------|
| STW04-01    | 2.50[63.5]   | 4.25[108.0]  | 1.50[38.1] |
| STW06-01    | 4.50[114.3]  | 6.25[158.8]  | 1.50[38.1] |
| STW12-01    | 10.50[266.8] | 12.25[311.3] | 1.50[38.1] |
| STW04-02    | 2.50[63.5]   | 4.25[108.0]  | 2.00[50.8] |
| STW06-02    | 4.50[114.3]  | 6.25[158.5]  | 2.00[50.8] |
| STW12-02    | 10.50[266.8] | 12.25[311.3] | 2.00[50.8] |

# pro<sup>sense</sup> Thermowells Sanitary Clean-in-Place (CIP)

| Thermowells Sanitary Clean-in-Place (CIP) Sensors Compatibility Table |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                                                                                                                                                                         |                                                                                                                                |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
|                                                                       | Connection Head Sensor                                                            | Hex Nipple Sensor                                                                 | Attached Plug Sensor                                                              | Lead Wire Transition Sensor                                                         | M12 Sensor                                                                                                                                                                                                                              | Thermometer                                                                                                                    |
| <b>Thermowell</b>                                                     |  |  |  |    |                                                                                                                                                        |                                              |
| <b><u>STW04-01</u></b>                                                | RTD1-C04-03<br>THMJ-C04-03<br>THMK-C04-03                                         | RTD1-H04L01-02<br>THMJ-H04L01-02<br>THMK-H04L01-02                                | RTD1-P06-01 w/CF14-50N<br>THMJ-P06-02 w/CF14-50N<br>THMK-P06-02 w/CF14-50N        | RTD1-T06L06-01 w/CF14-50N<br>THMJ-T06L06-02 w/CF14-50N<br>THMK-T06L06-02 w/CF14-50N | RTD1-50N-100-H<br>RTD0100-06-010-H w/CF14-50N<br>XTP-160-N40140F w/CF14-50N<br>XTP-160-0300F w/CF14-50N<br>XTP-160-0100C w/CF14-50N<br>XTP50N-100-N40140F<br>XTP50N-100-0300F<br>XTP50N-100-0100C<br>ETS50N-100-1001<br>ETS50N-100-1003 | T30-N40160-4C<br>T30-0250-4C<br>T30-50500-4C<br>T30-150750-4C<br>T50-N40160-4A<br>T50-0250-4A<br>T50-50500-4A<br>T50-150750-4A |
| <b><u>STW06-01</u></b>                                                | RTD1-C06-03<br>THMJ-C06-03<br>THMK-C06-03                                         | RTD1-H06L01-02<br>THMJ-H06L01-02<br>THMK-H06L01-02                                | RTD1-P12-01 w/CF14-50N<br>THMJ-P12-02 w/CF14-50N<br>THMK-P12-02 w/CF14-50N        | RTD1-T12L06-01 w/CF14-50N<br>THMJ-T12L06-02 w/CF14-50N<br>THMK-T12L06-02 w/CF14-50N | RTD1-50N-150-H<br>RTD0100-06-020-H w/CF14-50N<br>XTP-260-N40140F w/CF14-50N<br>XTP-260-0300F w/CF14-50N<br>XTP-260-0100C w/CF14-50N<br>XTP50N-150-N40140F<br>XTP50N-150-0300F<br>XTP50N-150-0100C<br>ETS50N-150-1001<br>ETS50N-150-1003 | T30-N40160-6C<br>T30-0250-6C<br>T30-50500-6C<br>T30-150750-6C<br>T50-N40160-6A<br>T50-0250-6A<br>T50-50500-6A<br>T50-150750-6A |
| <b><u>STW12-01</u></b>                                                | RTD1-C12-03<br>THMJ-C12-03<br>THMK-C12-03                                         | RTD1-H12L01-02<br>THMJ-H12L01-02<br>THMK-H12L01-02                                | RTD1-P18-01 w/CF14-50N<br>THMJ-P18-02 w/CF14-50N<br>THMK-P18-02 w/CF14-50N        | RTD1-T18L06-01 w/CF14-50N<br>THMJ-T18L06-02 w/CF14-50N<br>THMK-T18L06-02 w/CF14-50N | RTD0100-06-030-H w/CF14-50N<br>XTP-360-N40140F w/CF14-50N<br>XTP-360-0300F w/CF14-50N<br>XTP-360-0100C w/CF14-50N                                                                                                                       | —                                                                                                                              |
| <b><u>STW04-02</u></b>                                                | RTD1-C04-03<br>THMJ-C04-03<br>THMK-C04-03                                         | RTD1-H04L01-02<br>THMJ-H04L01-02<br>THMK-H04L01-02                                | RTD1-P06-01 w/CF14-50N<br>THMJ-P06-02 w/CF14-50N<br>THMK-P06-02 w/CF14-50N        | RTD1-T06L06-01 w/CF14-50N<br>THMJ-T06L06-02 w/CF14-50N<br>THMK-T06L06-02 w/CF14-50N | RTD1-50N-100-H<br>RTD0100-06-010-H w/CF14-50N<br>XTP-160-N40140F w/CF14-50N<br>XTP-160-0300F w/CF14-50N<br>XTP-160-0100C w/CF14-50N<br>XTP50N-100-N40140F<br>XTP50N-100-0300F<br>XTP50N-100-0100C<br>ETS50N-100-1001<br>ETS50N-100-1003 | T30-N40160-4C<br>T30-0250-4C<br>T30-50500-4C<br>T30-150750-4C<br>T50-N40160-4A<br>T50-0250-4A<br>T50-50500-4A<br>T50-150750-4A |
| <b><u>STW06-02</u></b>                                                | RTD1-C06-03<br>THMJ-C06-03<br>THMK-C06-03                                         | RTD1-H06L01-02<br>THMJ-H06L01-02<br>THMK-H06L01-02                                | RTD1-P12-01 w/CF14-50N<br>THMJ-P12-02 w/CF14-50N<br>THMK-P12-02 w/CF14-50N        | RTD1-T12L06-01 w/CF14-50N<br>THMJ-T12L06-02 w/CF14-50N<br>THMK-T12L06-02 w/CF14-50N | RTD1-50N-150-H<br>RTD0100-06-020-H w/CF14-50N<br>XTP-260-N40140F w/CF14-50N<br>XTP-260-0300F w/CF14-50N<br>XTP-260-0100C w/CF14-50N<br>XTP50N-150-N40140F<br>XTP50N-150-0300F<br>XTP50N-150-0100C<br>ETS50N-150-1001<br>ETS50N-150-1003 | T30-N40160-6C<br>T30-0250-6C<br>T30-50500-6C<br>T30-150750-6C<br>T50-N40160-6A<br>T50-0250-6A<br>T50-50500-6A<br>T50-150750-6A |
| <b><u>STW12-02</u></b>                                                | RTD1-C12-03<br>THMJ-C12-03<br>THMK-C12-03                                         | RTD1-H12L01-02<br>THMJ-H12L01-02<br>THMK-H12L01-02                                | RTD1-P18-01 w/CF14-50N<br>THMJ-P18-02 w/CF14-50N<br>THMK-P18-02 w/CF14-50N        | RTD1-T18L06-01 w/CF14-50N<br>THMJ-T18L06-02 w/CF14-50N<br>THMK-T18L06-02 w/CF14-50N | RTD0100-06-030-H w/CF14-50N<br>XTP-360-N40140F w/CF14-50N<br>XTP-360-0300F w/CF14-50N<br>XTP-360-0100C w/CF14-50N                                                                                                                       | —                                                                                                                              |



Note: Response time will be slower when installed in a thermowell. Be sure to install the probe so that it contacts the end of the thermowell for faster response. Thermal compound may be used depending on application



# Connection Head and Ceramic Terminal Bases



## Overview

- 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
- Made in the USA

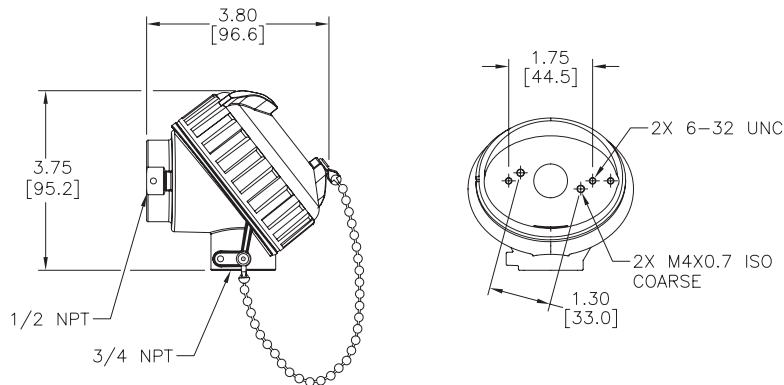
### ProSense Aluminum Connection Head

| Part Number                      | Description                                                                                                                                                                                                                         | Pcs/ Pkg | Wt(lb) | Price   |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------|---------|
| <a href="#"><u>CHSC-AL-1</u></a> | ProSense general purpose screw cover connection head for temperature probes, die-cast aluminum, 1/2 NPT process opening, 3/4 NPT conduit opening, NEMA 4X, IP66 rated, graphite gasket, maximum temperature rating of 825°F (440°C) | 1        | 1.0    | \$23.00 |

## Dimensions

inches [mm]

[CHSC-AL-1](#)



[CHTB-2](#)



[CHTB-3](#)

## Overview

- Available with two terminals for thermocouples or three terminals for RTDs
- Fits [CHSC-AL-1](#) connection heads
- Ceramic base with brass terminals and stainless steel screws
- Accepts up to 12 AWG wire

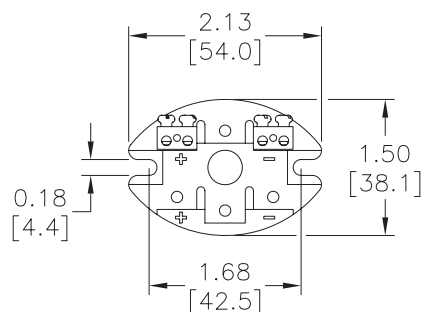
### Terminal Base for Connection Heads

| Part Number                   | Description                                                                                                                                                                | Pcs/ Pkg | Wt(lb) | Price  |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------|--------|
| <a href="#"><u>CHTB-2</u></a> | ProSense ceramic terminal base, two brass terminals with stainless steel screws, for use with ProSense temperature probe connection heads, two mounting screws included.   | 1        | 1.0    | \$6.00 |
| <a href="#"><u>CHTB-3</u></a> | ProSense ceramic terminal base, three brass terminals with stainless steel screws, for use with ProSense temperature probe connection heads, two mounting screws included. | 1        | 1.0    | \$7.00 |

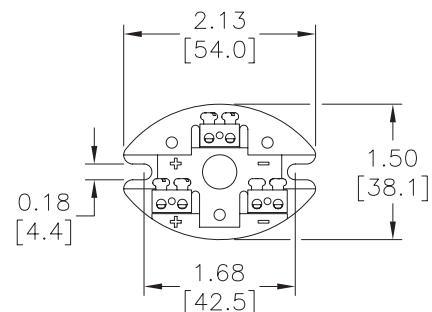
## Dimensions

inches [mm]

[CHTB-2](#)



[CHTB-3](#)



# pro<sup>sense</sup>® Compression Mounting Fittings for Temperature Probes

| Compression Mounting Fittings for Temperature Probes |                                                                                                              |             |        |         |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------|--------|---------|
| Part Number                                          | Description                                                                                                  | Pcs/<br>Pkg | Wt(lb) | Price   |
| <a href="#"><u>BCF18-125N</u></a>                    | Compression fitting, brass, for 1/8 inch diameter temperature probes, 1/8 inch NPT male thread               | 1           | 0.5    | \$3.25  |
| <a href="#"><u>BCF14-125N</u></a>                    | Compression fitting, brass, for 1/4 inch diameter temperature probes, 1/8 inch NPT male thread               | 1           | 0.5    | \$3.25  |
| <a href="#"><u>BCF18-25N</u></a>                     | Compression fitting, brass, for 1/8 inch diameter temperature probes, 1/4 inch NPT male thread               | 1           | 0.5    | \$4.25  |
| <a href="#"><u>BCF14-25N</u></a>                     | Compression fitting, brass, for 1/4 inch diameter temperature probes, 1/4 inch NPT male thread               | 1           | 0.5    | \$4.25  |
| <a href="#"><u>BCF18-50N</u></a>                     | Compression fitting, brass, for 1/8 inch diameter temperature probes, 1/2 inch NPT male thread               | 1           | 0.5    | \$6.00  |
| <a href="#"><u>BCF14-50N</u></a>                     | Compression fitting, brass, for 1/4 inch diameter temperature probes, 1/2 inch NPT male thread               | 1           | 0.5    | \$6.50  |
| <a href="#"><u>CF18-125N</u></a>                     | Compression fitting, 316 stainless steel, for 1/8 inch diameter temperature probes, 1/8 inch NPT male thread | 1           | 0.5    | \$8.00  |
| <a href="#"><u>CF14-125N</u></a>                     | Compression fitting, 316 stainless steel, for 1/4 inch diameter temperature probes, 1/8 inch NPT male thread | 1           | 0.5    | \$8.00  |
| <a href="#"><u>CF18-25N</u></a>                      | Compression fitting, 316 stainless steel, for 1/8 inch diameter temperature probes, 1/4 inch NPT male thread | 1           | 0.5    | \$9.25  |
| <a href="#"><u>CF14-25N</u></a>                      | Compression fitting, 316 stainless steel, for 1/4 inch diameter temperature probes, 1/4 inch NPT male thread | 1           | 0.5    | \$9.25  |
| <a href="#"><u>CF18-50N</u></a>                      | Compression fitting, 316 stainless steel, for 1/8 inch diameter temperature probes, 1/2 inch NPT male thread | 1           | 0.5    | \$13.50 |
| <a href="#"><u>CF14-50N</u></a>                      | Compression fitting, 316 stainless steel, for 1/4 inch diameter temperature probes, 1/2 inch NPT male thread | 1           | 0.5    | \$14.00 |
| <a href="#"><u>CFTF-18**</u></a>                     | Teflon™ ferrule for brass or stainless steel compression fittings and 1/8 diameter temperature probes        | 5           | 0.5    | \$7.25  |
| <a href="#"><u>CFTF-14**</u></a>                     | Teflon ferrule for brass or stainless steel compression fittings and 1/4 diameter temperature probes         | 5           | 0.5    | \$7.75  |
| <a href="#"><u>CF06-25N</u></a>                      | 1/4 NPT stainless steel compression fitting for 0.24 inch (6 mm) diameter RTD probe with M12 connector.      | 1           | 0.18   | \$28.50 |
| <a href="#"><u>CF10-50N</u></a>                      | 1/2 NPT stainless steel compression fitting for 10 mm (0.4 inch) diameter RTD probe with M12 connector.      | 1           | 0.20   | \$30.00 |
| <a href="#"><u>CF18-BC</u></a>                       | Bayonet compression fitting, for 1/8" diameter probe sheath sensors                                          | 1           | 0.1    | \$10.00 |
| <a href="#"><u>BB125N-50N</u></a>                    | Reducing bushing, brass, 1/2 MNPT x 1/8 FNPT, hex head                                                       | 1           | 0.1    | \$5.75  |



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

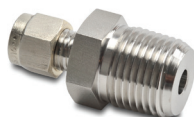
\* Working pressure of compression fitting should not exceed 500 psi. However we recommend any pressure application use a thermowell

\*\* Teflon has a max working temperature range of -400 to 500°F (-240 to 260°C)

[CF14-125N](#)



[CF14-50N](#)



[CF14-25N](#)



[CF18-BC](#)



[CF06-25N](#)



[CF10-50N](#)



[BCF18-125N](#)



[BCF18-25N](#)



[BCF18-50N](#)



[BB125N-50N](#)



[CFTF-14](#)



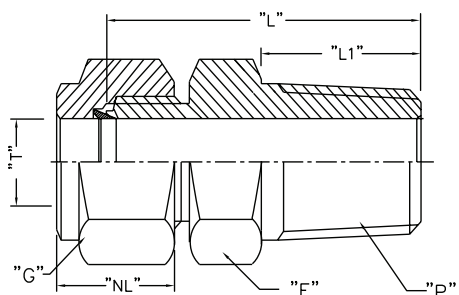
[CFTF-18](#)



# pro<sup>sense</sup>® Compression Mounting Fittings for Temperature Probes

**BCF14-125N****BCF14-25N****BCF14-50N****CF18-25N****CF18-50N****CF18-125N**

## Dimensions



*Note: All threaded connections should be hand tightened and then turned 1 to 2 full turns for proper sealing.*

*Actual torque required for a proper seal of NPT threads is influenced by tolerance, sealant, lubricant, etc.*

| ProSense Compression Fittings |             |                        |               |             |                  |                      |                |               |                   |
|-------------------------------|-------------|------------------------|---------------|-------------|------------------|----------------------|----------------|---------------|-------------------|
| Part No.                      | Weight (lb) | Description            | "T" Tube O.D. | "P" NPT(M)  | "L" Body Length* | "L1" Thread Length** | "F" Body Hex** | "G" Nut Hex** | "NL" Nut Length** |
| <b>BCF18-125N/CF18-125N</b>   | 0.5         | 1/8" OD x 1/8" NPT(M)  | 0.128/0.132   | 1/8" NPT(M) | 0.909"           | 0.393"               | 0.5"           | 0.433"        | 0.492"            |
| <b>BCF14-125N/CF14-125N</b>   | 0.5         | 1/4" OD x 1/8" NPT(M)  | 0.253/0.257   | 1/8" NPT(M) | 1.0"             | 0.393"               | 0.5"           | 0.559"        | 0.5"              |
| <b>BCF18-25N/CF18-25N</b>     | 0.5         | 1/8" OD x 1/4" NPT(M)  | 0.128/0.132   | 1/4" NPT(M) | 1.114"           | 0.551"               | 0.551"         | 0.433"        | 0.492"            |
| <b>BCF14-25N/CF14-25N</b>     | 0.5         | 1/4" OD x 1/4" NPT(M)  | 0.253/0.257   | 1/4" NPT(M) | 1.188"           | 0.551"               | 0.551"         | 0.559"        | 0.5"              |
| <b>BCF18-50N/CF18-50N</b>     | 0.5         | 1/8" OD x 1/2" NPT(M)  | 0.128/0.132   | 1/2" NPT(M) | 1.377"           | 0.748"               | 0.866"         | 0.433"        | 0.492"            |
| <b>BCF14-50N/CF14-50N</b>     | 0.5         | 1/4" OD x 1/2" NPT(M)  | 0.253/0.257   | 1/2" NPT(M) | 1.437"           | 0.748"               | 0.866"         | 0.559"        | 0.5"              |
| <b>CF06-25N</b>               | 0.18        | 6 mm OD x 1/4" NPT(M)  | 0.236/0.240   | 1/4" NPT(M) | 1.174"           | 0.59"                | 0.67"          | 0.55"         | 0.587"            |
| <b>CF10-50N</b>               | 0.20        | 10 mm OD x 1/2" NPT(M) | 0.394/0.399   | 1/2" NPT(M) | 1.458"           | 0.55"                | 1.06"          | 0.75"         | 0.608"            |

*Note: All dimensions are in inches*

\* w 0.07

\*\* w 0.03

*Note: Once the compression fitting has been fully tightened on the probe, the ferrule will be locked onto the probe and cannot be removed or reused.*

*\*Working pressure of compression fitting should not exceed 500 psi. However we recommend any pressure application use a thermowell*



Scan the QR Code or click to view the CF06 & CF10 Compression Fitting Installation Instructions



# Bayonet Mounting Adapter for Temperature Sensors

| Bayonet Mounting Adapter for Temperature Sensors |                                                                                                        |                       |             |        |         |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------|-------------|--------|---------|
| Part Number                                      | Description                                                                                            | Material              | Pcs/<br>Pkg | Wt(lb) | Price   |
| <a href="#"><u>BA-078</u></a>                    | Bayonet adapter, 7/8 inch long, 7/16 inch outside diameter, 9/32 inch inside diameter, 1/8 inch MNPT   | Stainless Steel (304) | 1           | 0.5    | \$1.75  |
| <a href="#"><u>BA-100</u></a>                    | Bayonet adapter, 1 inch long, 7/16 inch outside diameter, 9/32 inch inside diameter, 1/8 inch MNPT     |                       | 1           | 0.5    | \$1.75  |
| <a href="#"><u>BA-114</u></a>                    | Bayonet adapter, 1-1/4 inch long, 7/16 inch outside diameter, 9/32 inch inside diameter, 1/8 inch MNPT |                       | 1           | 0.5    | \$2.25  |
| <a href="#"><u>BA-112</u></a>                    | Bayonet adapter, 1-1/2 inch long, 7/16 inch outside diameter, 9/32 inch inside diameter, 1/8 inch MNPT |                       | 1           | 0.5    | \$2.25  |
| <a href="#"><u>BA-200</u></a>                    | Bayonet adapter, 2 inch long, 7/16 inch outside diameter, 9/32 inch inside diameter, 1/8 inch MNPT     |                       | 1           | 0.5    | \$2.50  |
| <a href="#"><u>BA-212</u></a>                    | Bayonet adapter, 2-1/2 inch long, 7/16 inch outside diameter, 9/32 inch inside diameter, 1/8 inch MNPT |                       | 1           | 0.5    | \$2.75  |
| <a href="#"><u>BA-300</u></a>                    | Bayonet adapter, 3 inch long, 7/16 inch outside diameter, 9/32 inch inside diameter, 1/8 inch MNPT     |                       | 1           | 0.5    | \$3.00  |
| <a href="#"><u>BA-312</u></a>                    | Bayonet adapter, 3-1/2 inch long, 7/16 inch outside diameter, 9/32 inch inside diameter, 1/8 inch MNPT |                       | 1           | 0.5    | \$3.50  |
| <a href="#"><u>CF18-BC</u></a>                   | Adjustable bayonet compression fitting, for 1/8" diameter probe sheath sensors                         | Brass                 | 1           | 0.1    | \$10.00 |
| <a href="#"><u>BB125N-50N</u></a>                | Reducing bushing, 1/2 MNPT x 1/8 FNPT, hex head                                                        |                       | 1           | 0.1    | \$5.75  |



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

[BA-078](#)[BA-100](#)[BA-114](#)[CF18-BC](#)[BA-300](#)[BA-112](#)[BB125N-50N](#)[BA-312](#)[BA-200](#)[BA-212](#)