

# proSense® 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"         |                    |                      |                     |                                |

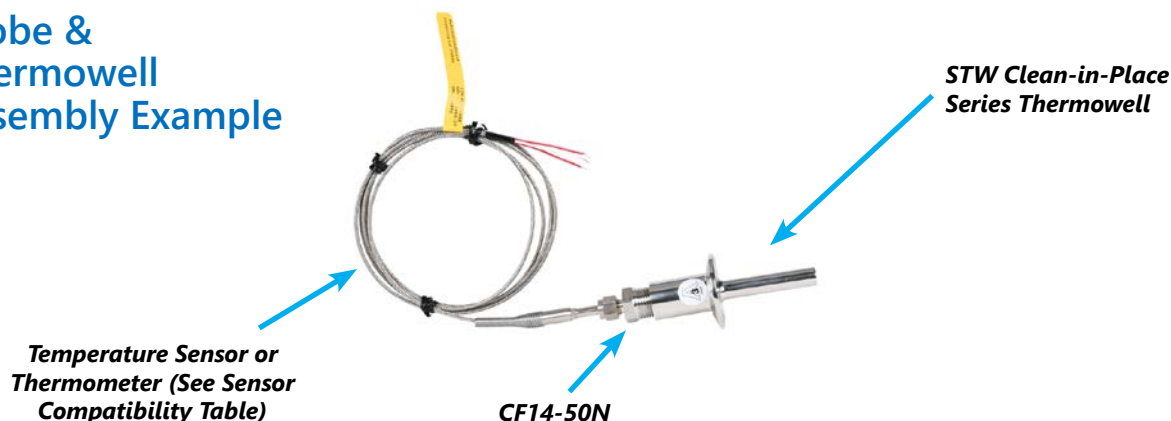


Note: Check the chemical compatibility of the thermowell's wetted parts with the medium to be measured.



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



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## 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

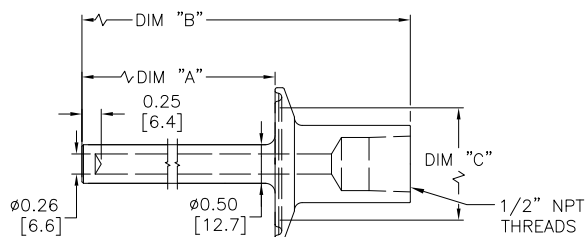


TABLE A

| 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] |



# Thermowells Sanitary Clean-in-Place (CIP)

| Thermowells Sanitary Clean-in-Place (CIP) Sensors Compatibility Table |                                                                                   |                                                                                   |                                                                                   |                                                                                                                         |                                                                                                 |                                                                                                                                                                                                                                         |                                                                                                                                |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
|                                                                       | Junction Box                                                                      | Connection Head Sensor                                                            | Hex Nipple Sensor                                                                 | Attached Plug Sensor                                                                                                    | Lead Wire Transition Sensor                                                                     | M12 Sensor                                                                                                                                                                                                                              | Thermometer                                                                                                                    |
| <b>Thermowell</b>                                                     |  |  |  |                                        |               |                                                                                                                                                      |                                             |
| <b>STW04-01</b>                                                       | NTC10K3-JB04-03                                                                   | RTD1-C04-03<br>THMJ-C04-03<br>THMK-C04-03<br>NTC10K3-C04-03                       | RTD1-H04L01-02<br>THMJ-H04L01-02<br>THMK-H04L01-02<br>NTC10K3-H04L01-02           | RTD1-P06-01 w/<br>CF14-50N<br>THMJ-P06-02 w/<br>CF14-50N<br>THMK-P06-02 w/<br>CF14-50N<br>NTC10K3-P06-02 w/<br>CF14-50N | RTD1-T06L06-01 w/<br>CF14-50N<br>THMJ-T06L06-02 w/<br>CF14-50N<br>THMK-T06L06-02 w/<br>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>STW06-01</b>                                                       | NTC10K3-JB06-03                                                                   | RTD1-C06-03<br>THMJ-C06-03<br>THMK-C06-03<br>NTC10K3-C06-03                       | RTD1-H06L01-02<br>THMJ-H06L01-02<br>THMK-H06L01-02<br>NTC10K3-H06L01-02           | RTD1-P12-01 w/<br>CF14-50N<br>THMJ-P12-02 w/<br>CF14-50N<br>THMK-P12-02 w/<br>CF14-50N<br>NTC10K3-P12-02 w/<br>CF14-50N | RTD1-T12L06-01 w/<br>CF14-50N<br>THMJ-T12L06-02 w/<br>CF14-50N<br>THMK-T12L06-02 w/<br>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>STW12-01</b>                                                       | NTC10K3-JB12-03                                                                   | RTD1-C12-03<br>THMJ-C12-03<br>THMK-C12-03<br>NTC10K3-C12-03                       | RTD1-H12L01-02<br>THMJ-H12L01-02<br>THMK-H12L01-02<br>NTC10K3-H12L01-02           | RTD1-P18-01 w/<br>CF14-50N<br>THMJ-P18-02 w/<br>CF14-50N<br>THMK-P18-02 w/<br>CF14-50N<br>NTC10K3-P18-02 w/<br>CF14-50N | RTD1-T18L06-01 w/<br>CF14-50N<br>THMJ-T18L06-02 w/<br>CF14-50N<br>THMK-T18L06-02 w/<br>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>STW04-02</b>                                                       | NTC10K3-JB04-03                                                                   | RTD1-C04-03<br>THMJ-C04-03<br>THMK-C04-03<br>NTC10K3-C04-03                       | RTD1-H04L01-02<br>THMJ-H04L01-02<br>THMK-H04L01-02<br>NTC10K3-H04L01-02           | RTD1-P06-01 w/<br>CF14-50N<br>THMJ-P06-02 w/<br>CF14-50N<br>THMK-P06-02 w/<br>CF14-50N<br>NTC10K3-P06-02 w/<br>CF14-50N | RTD1-T06L06-01 w/<br>CF14-50N<br>THMJ-T06L06-02 w/<br>CF14-50N<br>THMK-T06L06-02 w/<br>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>STW06-02</b>                                                       | NTC10K3-JB06-03                                                                   | RTD1-C06-03<br>THMJ-C06-03<br>THMK-C06-03<br>NTC10K3-C06-03                       | RTD1-H06L01-02<br>THMJ-H06L01-02<br>THMK-H06L01-02<br>NTC10K3-H06L01-02           | RTD1-P12-01 w/<br>CF14-50N<br>THMJ-P12-02 w/<br>CF14-50N<br>THMK-P12-02 w/<br>CF14-50N<br>NTC10K3-P12-02 w/<br>CF14-50N | RTD1-T12L06-01 w/<br>CF14-50N<br>THMJ-T12L06-02 w/<br>CF14-50N<br>THMK-T12L06-02 w/<br>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>STW12-02</b>                                                       | NTC10K3-JB12-03                                                                   | RTD1-C12-03<br>THMJ-C12-03<br>THMK-C12-03<br>NTC10K3-C12-03                       | RTD1-H12L01-02<br>THMJ-H12L01-02<br>THMK-H12L01-02<br>NTC10K3-H12L01-02           | RTD1-P18-01 w/<br>CF14-50N<br>THMJ-P18-02 w/<br>CF14-50N<br>THMK-P18-02 w/<br>CF14-50N<br>NTC10K3-P18-02 w/<br>CF14-50N | RTD1-T18L06-01 w/<br>CF14-50N<br>THMJ-T18L06-02 w/<br>CF14-50N<br>THMK-T18L06-02 w/<br>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.