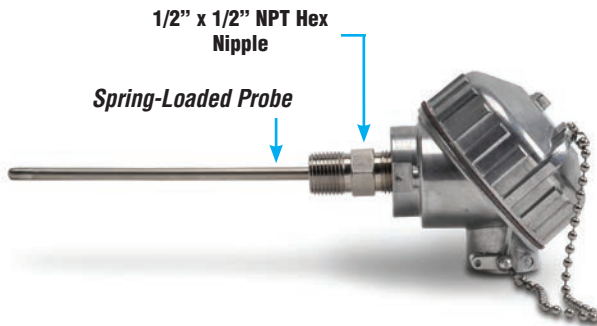


# pro<sup>sense</sup> Thermocouple Spring-Loaded Probes with Connection Head

THMJ & K - CXX-03



THMJ & K - CXXR-03  
Replacement Probe



Open head



## Overview

- All temperature sensors are pre-built stock items
- Probe
  - Spring-loaded for positive tip contact in thermowells
  - Type J or K thermocouple elements to meet many temperature sensing applications
  - 1/4" diameter, 316 SS sheath to protect against harsh environments
  - Magnesium Oxide (MgO) insulation provides vibration dampening and protection against thermal shock
  - 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
  - Ceramic terminal base
  - Brass terminals with stainless steel screws eliminate the need to wrap connections around screws
  - Elevated terminal block for easy wire termination
- Made in the USA



Thermocouple Spring-Loaded Probes with Connection Head - Types J and K								
Part Number	Pcs/Pkg	Wt (lb)	Price	Type	Probe Diameter (O.D.)	Probe Length	Temperature Sensing Range	Mounting
THMJ-C04-03	1	1.3		J	1/4"	4"	0 to 720°C (32 to 1330°F)	Integral 1/2" x 1/2" NPT Hex Nipple, 316 SS, Mount in thermowell (see accessories, purchased separately)
THMJ-C06-03			J	6"				
THMJ-C12-03			J	12"				
THMK-C04-03			K	4"		0 to 927°C (32 to 1700°F)		
THMK-C06-03			K	6"				
THMK-C12-03			K	12"				

Thermocouple Spring-Loaded Replacement Probes - Types J and K								
Part Number	Pcs/Pkg	Wt (lb)	Price	Type	Probe Diameter (O.D.)	Fits Probe Length	Temperature Sensing Range	For Use With
THMJ-C04R-03	1	0.2		J	1/4"	4"	0 to 720°C (32 to 1330°F)	THMJ-C04-03
THMJ-C06R-03			J	6"		THMJ-C06-03		
THMJ-C12R-03			J	12"		THMJ-C12-03		
THMK-C04R-03			K	4"		0 to 927°C (32 to 1700°F)	THMK-C04-03	
THMK-C06R-03			K	6"			THMK-C06-03	
THMK-C12R-03			K	12"			THMK-C12-03	

# pro<sup>sense</sup>® Thermocouple Spring-Loaded Probes with Connection Head

Technical Specifications	
<b>Junction Type</b>	Ungrounded
<b>ASTM E230 Standard Limits of Error</b>	±2.2°C (±4.0°F) or 0.75%, whichever is greater
<b>Probe</b>	ø1/4", 316 stainless steel sheath, single thermocouple element is embedded in MgO powder
<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. 400°F (204°C)
<b>Response Time</b>	2.9 seconds, 63.2% of a 25-77°C step change per method ASTM E839
<b>Wiring</b>	Connection head: Ceramic terminal base with brass terminals and stainless steel screws (Recommended tightening torque 3-4 lb-in) Replacement Probes: 3 inch stranded 24 AWG wire leads

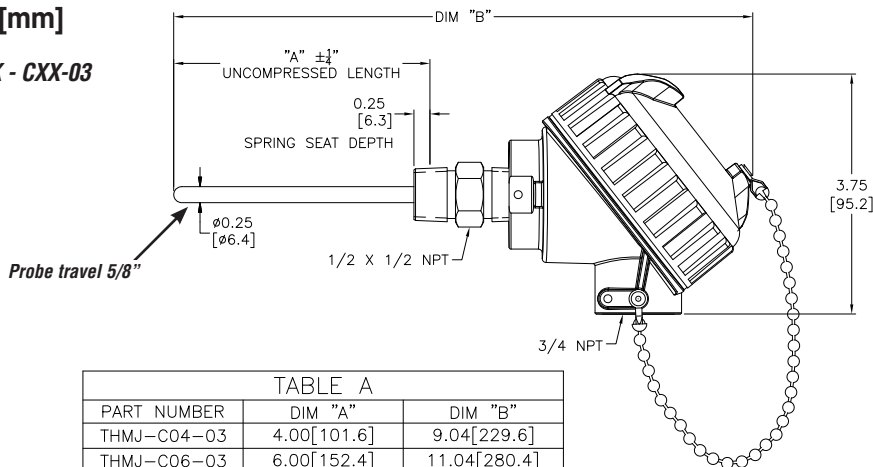


**NOTE: CHECK THE CHEMICAL COMPATIBILITY OF THE SENSOR'S WETTED PARTS WITH THE MEDIUM TO BE MEASURED.**

## Dimensions

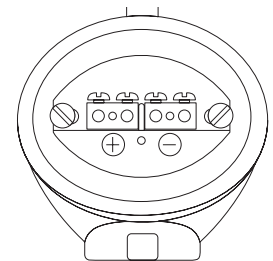
inches [mm]

THMJ & K - CXX-03



PART NUMBER	DIM "A"	DIM "B"
THMJ-C04-03	4.00[101.6]	9.04[229.6]
THMJ-C06-03	6.00[152.4]	11.04[280.4]
THMJ-C12-03	12.00[304.8]	17.04[432.8]
THMK-C04-03	4.00[101.6]	9.04[229.6]
THMK-C06-03	6.00[152.4]	11.04[280.4]
THMK-C12-03	12.00[304.8]	17.04[432.8]

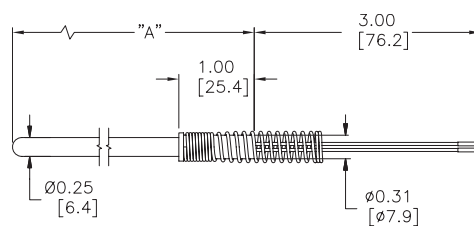
## Wiring Information



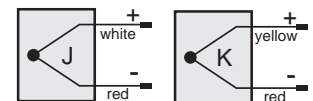
**Type J: (+) white (-) red**  
**Type K: (+) yellow (-) red**

- Must use thermocouple extension lead wire, see end of this section
- Observe polarity when making connections
- Do not use standard wire nuts
- Recommended screw terminal tightening torque 3-4 lb-in

THMJ & K - CXXR-03  
(Replacement Probes)



PART NUMBER	DIM "A"
THMJ-C04R-03	5.00[127.0]
THMJ-C06R-03	7.00[177.8]
THMJ-C12R-03	13.00[330.2]
THMK-C04R-03	5.00[127.0]
THMK-C06R-03	7.00[177.8]
THMK-C12R-03	13.00[330.2]



## Probe Replacement

1. Open top cover.
2. Disconnect wires and remove terminal block.
3. Remove snap ring at bottom of head (snap ring pliers recommended).
4. Slide out old probe and slide new probe in place.
5. While compressing spring, replace snap ring.
6. Replace terminal block and connect probe wires.

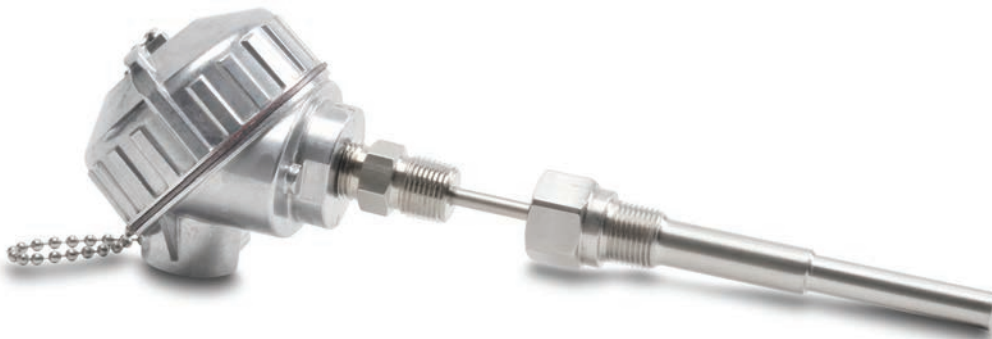
# pro<sup>s</sup>ense<sup>®</sup> Thermocouple Spring-Loaded Probes with Connection Head - Accessories

## Accessories

Part No.	Description	Pcs/Pkg	Price
<b>TW04-01</b>	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	
<b>TW04-02</b>	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	
<b>TW04-03</b>	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	
<b>TW04-04</b>	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	
<b>TW06-01</b>	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	
<b>TW06-02</b>	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	
<b>TW06-03</b>	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	
<b>TW06-04</b>	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	
<b>TW12-01</b>	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	
<b>TW12-02</b>	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	
<b>TW12-03</b>	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	
<b>TW12-04</b>	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	

**Note:** Thermocouple extension lead wire and full listing of accessories and dimension information available at the end of this section.

## Spring-Loaded Thermocouple 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.**



# Thermowells for Spring-Loaded Thermocouples and RTD's or Thermometers

TW06-01



TW06-02



## Overview

- All thermowells are pre-built stock items
- Thermowells designed for use with ProSense spring-loaded thermocouple and RTD probes or ProSense Thermometers eliminate the need for a separate probe mounting fitting or adapter
- 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
- Made in the USA



Thermowells for Spring-Loaded Thermocouples and RTD's or Thermometers										
Part Number	Pcs/Pkg	Wt(lb)	Price	I.D.	Overall Length/"U" Length	Male Process Threads	Female Probe Threads	Wetted Material	Temperature/Pressure Rating	Use With Probe or Thermometer
TW025-01	1	0.4		0.26"	2-3/4" / 1"	1/2" NPT	1/2" NPT	304 SS	304SS: 1000°F max; 3400psi max 316SS: 1000°F max; 5200psi max	T30-XXXX-25C T50-XXXX-25A
TW025-03	1	0.4				1/2" NPT		316 SS		
TW04-01	1	0.5			4-1/4" / 2-1/2"	1/2" NPT		304 SS		THMJ-C04-03 THMK-C04-03 THMJ-H04L01-02 THMK-H04L01-02 RTD1-C04-03 RTD1-H04L01-02 RTD1-50N-100-H T30-XXXX-4C T50-XXXX-4A XTP50N-100-XXXX ETS50N-100-XXXX
TW04-02	1	0.5				3/4" NPT		304 SS		
TW04-03	1	0.5				1/2" NPT		316 SS		
TW04-04	1	0.5				3/4" NPT		316 SS		
TW06-01	1	0.7			6-1/4" / 4-1/2"	1/2" NPT		304 SS		THMJ-C06-03 THMK-C06-03 THMJ-H06L01-02 THMK-H06L01-02 RTD1-C06-03 RTD1-H06L01-02 RTD1-50N-150-H T30-XXXX-6C T50-XXXX-6A XTP50N-150-XXXX ETS50N-150-XXXX
TW06-02	1	0.7				3/4" NPT		304 SS		
TW06-03	1	0.7				1/2" NPT		316 SS		
TW06-04	1	0.7				3/4" NPT		316 SS		
TW09-01	1	1.0			9-1/4" / 7-1/2"	1/2" NPT		304 SS		T50-XXXX-9A
TW09-03	1	1.0				1/2" NPT		316 SS		
TW12-01	1	1.2			12-1/4" / 10-1/2"	1/2" NPT		304 SS		THMJ-C12-03 THMK-C12-03 THMJ-H12L01-02 THMK-H12L01-02 RTD1-C12-03 RTD1-H12L01-02
TW12-02	1	1.2				3/4" NPT		304 SS		
TW12-03	1	1.2				1/2" NPT		316 SS		
TW12-04	1	1.2				3/4" NPT		316 SS		



**NOTE: CHECK THE CHEMICAL COMPATIBILITY OF THE SENSOR'S (OR THERMOWELL'S) WETTED PARTS WITH THE MEDIUM TO BE MEASURED.**



**NOTE: RESPONSE TIME IS REDUCED 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.**

# pro<sup>ense</sup> Thermowells for Spring-Loaded Thermocouples and RTD's or Thermometers

## 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]

TW04-XX & TW025-XX

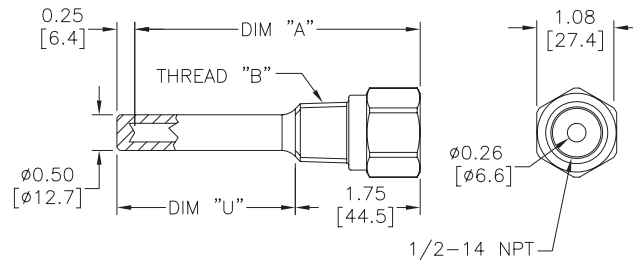


TABLE A

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

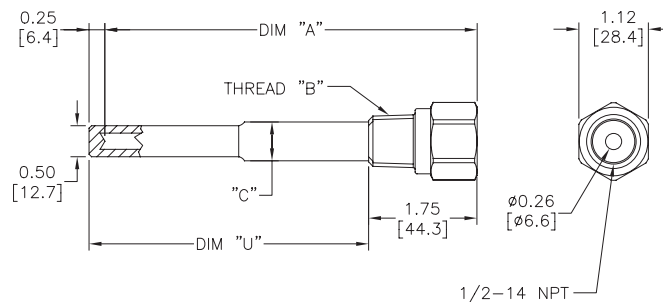


TABLE A

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]	7.50[190.5]
TW06-04	6.00[152.4]	3/4-14	0.75[19.1]	
TW09-01	9.00[228.6]	1/2-14	0.63[15.9]	10.50[266.7]
TW09-03	9.00[228.6]	1/2-14	0.63[15.9]	
TW12-01	12.00[304.8]	1/2-14	0.63[15.9]	10.50[266.7]
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]	

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

Compression Mounting Fittings for Temperature Probes				
Part Number	Description	Pcs/ Pkg	Wt(lb)	Price
<b>BCF18-125N</b>	Compression fitting, brass, for 1/8 inch diameter temperature probes, 1/8 inch NPT male thread	1	0.5	
<b>BCF14-125N</b>	Compression fitting, brass, for 1/4 inch diameter temperature probes, 1/8 inch NPT male thread	1	0.5	
<b>BCF18-25N</b>	Compression fitting, brass, for 1/8 inch diameter temperature probes, 1/4 inch NPT male thread	1	0.5	
<b>BCF14-25N</b>	Compression fitting, brass, for 1/4 inch diameter temperature probes, 1/4 inch NPT male thread	1	0.5	
<b>BCF18-50N</b>	Compression fitting, brass, for 1/8 inch diameter temperature probes, 1/2 inch NPT male thread	1	0.5	
<b>BCF14-50N</b>	Compression fitting, brass, for 1/4 inch diameter temperature probes, 1/2 inch NPT male thread	1	0.5	
<b>CF18-125N</b>	Compression fitting, 316 stainless steel, for 1/8 inch diameter temperature probes, 1/8 inch NPT male thread	1	0.5	
<b>CF14-125N</b>	Compression fitting, 316 stainless steel, for 1/4 inch diameter temperature probes, 1/8 inch NPT male thread	1	0.5	
<b>CF18-25N</b>	Compression fitting, 316 stainless steel, for 1/8 inch diameter temperature probes, 1/4 inch NPT male thread	1	0.5	
<b>CF14-25N</b>	Compression fitting, 316 stainless steel, for 1/4 inch diameter temperature probes, 1/4 inch NPT male thread	1	0.5	
<b>CF18-50N</b>	Compression fitting, 316 stainless steel, for 1/8 inch diameter temperature probes, 1/2 inch NPT male thread	1	0.5	
<b>CF14-50N</b>	Compression fitting, 316 stainless steel, for 1/4 inch diameter temperature probes, 1/2 inch NPT male thread	1	0.5	
<b>CFTF-18</b>	Teflon™ ferrule for brass or stainless steel compression fittings and 1/8 diameter temperature probes	5	0.5	
<b>CFTF-14</b>	Teflon ferrule for brass or stainless steel compression fittings and 1/4 diameter temperature probes	5	0.5	
<b>CF06-25N</b>	1/4 NPT stainless steel compression fitting for 0.24 inch (6 mm) diameter RTD probe with M12 connector.	1	0.18	
<b>CF10-50N</b>	1/2 NPT stainless steel compression fitting for 10 mm (0.4 inch) diameter RTD probe with M12 connector.	1	0.20	
<b>CF18-BC</b>	Bayonet compression fitting, for 1/8" diameter probe sheath sensors	1	0.1	
<b>BB125N-50N</b>	Reducing bushing, brass, 1/2 MNPT x 1/8 FNPT, hex head	1	0.1	



**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*

**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**



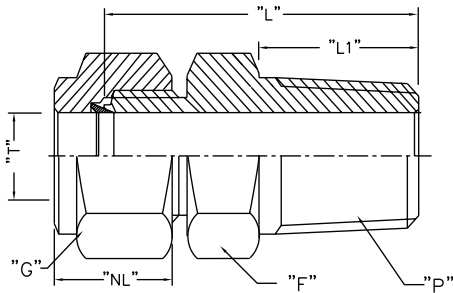
**CF18-50N**



**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*

*\* ± 0.07*

*\*\* ± 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/Pkg	Wt(lb)	Price
<b>BA-078</b>	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	
<b>BA-100</b>	Bayonet adapter, 1 inch long, 7/16 inch outside diameter, 9/32 inch inside diameter, 1/8 inch MNPT		1	0.5	
<b>BA-114</b>	Bayonet adapter, 1-1/4 inch long, 7/16 inch outside diameter, 9/32 inch inside diameter, 1/8 inch MNPT		1	0.5	
<b>BA-112</b>	Bayonet adapter, 1-1/2 inch long, 7/16 inch outside diameter, 9/32 inch inside diameter, 1/8 inch MNPT		1	0.5	
<b>BA-200</b>	Bayonet adapter, 2 inch long, 7/16 inch outside diameter, 9/32 inch inside diameter, 1/8 inch MNPT		1	0.5	
<b>BA-212</b>	Bayonet adapter, 2-1/2 inch long, 7/16 inch outside diameter, 9/32 inch inside diameter, 1/8 inch MNPT		1	0.5	
<b>BA-300</b>	Bayonet adapter, 3 inch long, 7/16 inch outside diameter, 9/32 inch inside diameter, 1/8 inch MNPT		1	0.5	
<b>BA-312</b>	Bayonet adapter, 3-1/2 inch long, 7/16 inch outside diameter, 9/32 inch inside diameter, 1/8 inch MNPT		1	0.5	
<b>CF18-BC</b>	Adjustable bayonet compression fitting, for 1/8" diameter probe sheath sensors		1	0.1	
<b>BB125N-50N</b>	Reducing bushing, 1/2 MNPT x 1/8 FNPT, hex head	Brass	1	0.1	



**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**





# pro<sup>sense</sup>® Pipe Clamp Adapters



PCA-300

## Overview

- For use with ProSense adjustable immersion thermocouple and RTD sensors
- Available in adjustable diameters from 11/16 to 7 inches
- Provides an easy means of sensing temperature on the outside of a pipe

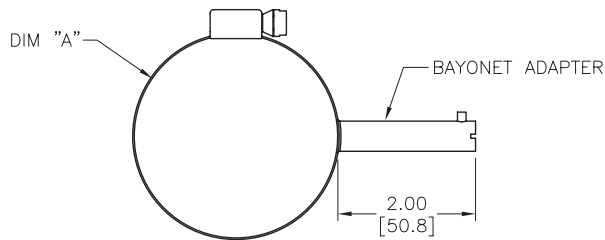


Shown with optional adjustable immersion sensor

Pipe Clamp Adapters for ProSense Adjustable Immersion Sensors				
Part Number	Description	Pcs/ Pkg	Wt(lb)	Price
PCA-125	ProSense pipe clamp adapter, 11/16 to 1-1/4 inch adjustable diameter, 2-inch attached bayonet adapter with 7/16 inch outside diameter and 9/32 inch inside diameter. Use with ProSense adjustable immersion sensors.	1	0.1	
PCA-200	ProSense pipe clamp adapter with 1-1/16 to 2 inch adjustable diameter, 2-inch attached bayonet adapter with 7/16 inch outside diameter and 9/32 inch inside diameter. Use with ProSense adjustable immersion sensors.	1	0.1	
PCA-300	ProSense pipe clamp adapter with 2-1/16 to 3 inch adjustable diameter, 2-inch attached bayonet adapter with 7/16 inch outside diameter and 9/32 inch inside diameter. Use with ProSense adjustable immersion sensors.	1	0.1	
PCA-425	ProSense pipe clamp adapter with 3-5/16 to 4-1/4 inch adjustable diameter, 2-inch attached bayonet adapter with 7/16 inch outside diameter and 9/32 inch inside diameter. Use with ProSense adjustable immersion sensors.	1	0.1	
PCA-500	ProSense pipe clamp adapter with 4-1/8 to 7 inch adjustable diameter, 2-inch attached bayonet adapter with 7/16 inch outside diameter and 9/32 inch inside diameter. Use with ProSense adjustable immersion sensors.	1	0.1	

## Dimensions

inches [mm]



PART NUMBER	DIM "A"	FITS PIPE SIZES
PCA-125	ø0.68–1.25 [ø17.2–31.7]	1/2 TO 3/4 NPS
PCA-200	ø1.06–2.00 [ø26.9–50.8]	1 TO 1-1/2 NPS
PCA-300	ø2.06–3.00 [ø52.3–76.2]	2 TO 2-1/2 NPS
PCA-425	ø3.31–4.25 [ø84.1–108.0]	3 TO 3-1/2 NPS
PCA-500	ø4.12–7.00 [ø104.6–177.8]	4 TO 6 NPS

# pro<sup>sense</sup> Thermocouple and RTD Connectors

## Overview

- Glass-filled high quality thermoplastic body with original thermocouple material pins and spring-loaded inserts
- Polarized pins
- Molded barriers prevent short circuit
- Captive central cover screw for easy assembly
- Easy wire connection pressure plate construction
- Stainless steel screws with combination head (Slotted and Phillips)
- 3-pin standard connectors have a third pin for ground or continuous shield, or for 3-wire RTDs



Thermocouple and RTD Connectors									
Part Number	Pcs/ Pkg	Wt(lb)	Price	Sensor Type	Connector Type	Temperature Rating	Body Color	Wire Size	Wire Cable Clamp Bracket
<b>THMJ-SP</b>	1	0.5		J	Standard round pin plug	Max continuous 400°F (200°C)	Black	32 AWG (0.2 mm) to 14 AWG maximum (2.0 mm)	WCB-S
<b>THMJ-SJ</b>	1	0.5	Standard round pin jack		–				
<b>THMJ-SPJ</b>	1	0.5	Standard round direct mount jack		–				
<b>THMJ-MP</b>	1	0.5	Miniature flat pin plug		40 AWG (0.08 mm) to 20 AWG maximum (0.8 mm)			WCB-M	
<b>THMJ-MJ</b>	1	0.5	Miniature flat pin jack					–	
<b>THMJ-MPJ</b>	1	0.5	Miniature round direct mount jack					–	
<b>THMK-SP</b>	1	0.5		K	Standard round pin plug	Max continuous 662°F (350°C)	Yellow	32 AWG (0.2 mm) to 14 AWG maximum (2.0 mm)	WCB-S
<b>THMK-SJ</b>	1	0.5	Standard round pin jack		–				
<b>THMK-SPJ</b>	1	0.5	Standard round direct mount jack		–				
<b>THMK-MP</b>	1	0.5	Miniature flat pin plug		40 AWG (0.08 mm) to 20 AWG maximum (0.8 mm)			WCB-M	
<b>THMK-MJ</b>	1	0.5	Miniature flat pin jack					–	
<b>THMK-MPJ</b>	1	0.5	Miniature round direct mount jack					–	
<b>THMK-HSP</b>	1	0.5		RTD	Standard hi-temp round pin plug	Max continuous 662°F (350°C)	Brown	32 AWG (0.2 mm) to 14 AWG maximum (2.0 mm)	WCB-S
<b>THMK-HSJ</b>	1	0.5	Standard hi-temp round pin jack		–				
<b>THMT-SP</b>	1	0.5		T	Standard round pin plug	Max continuous 400°F (200°C)	Blue	32 AWG (0.2 mm) to 14 AWG maximum (2.0 mm)	WCB-S
<b>THMT-SJ</b>	1	0.5	Standard round pin jack		–				
<b>THMT-SPJ</b>	1	0.5	Standard round direct mount jack		–				
<b>THMT-MP</b>	1	0.5	Miniature flat pin plug		40 AWG (0.08 mm) to 20 AWG maximum (0.8 mm)			WCB-M	
<b>THMT-MJ</b>	1	0.5	Miniature flat pin jack					–	
<b>THMT-MPJ</b>	1	0.5	Miniature round direct mount jack					–	
<b>RTD-SP</b>	1	0.5		RTD	Standard round pin plug	Max continuous 400°F (200°C)	White	32 AWG (0.2 mm) to 14 AWG maximum (2.0 mm)	WCB-S
<b>RTD-SJ</b>	1	0.5	Standard round pin jack		–				

**THMT-SP**



**THMT-SJ**



**THMK-SP**



**THMK-SJ**



**THMJ-MP**



**THMJ-MJ**



**THMT-SPJ**



**THMT-MPJ**



**RTD-SP**



**RTD-SJ**



**THMK-HSP**



**THMK-HSJ**

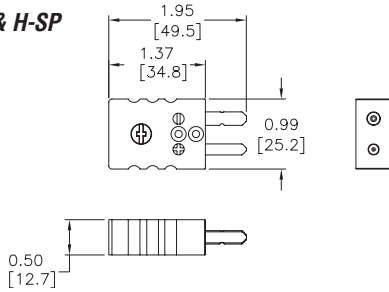


# pro<sup>sense</sup> Thermocouple and RTD Connectors

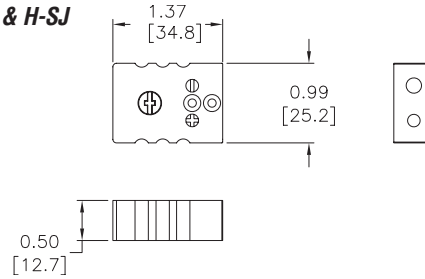
## Dimensions

inches [mm]

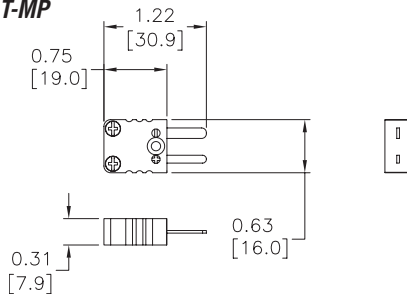
**THMJ, K, T, & H-SP**



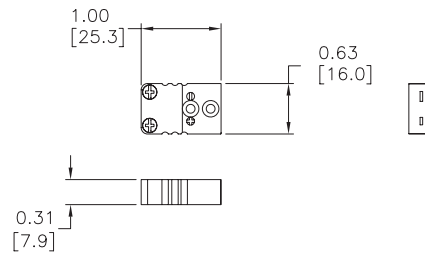
**THMJ, K, T, & H-SJ**



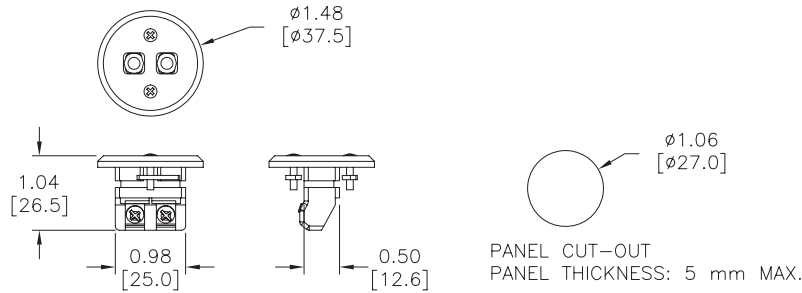
**THMJ, K, & T-MP**



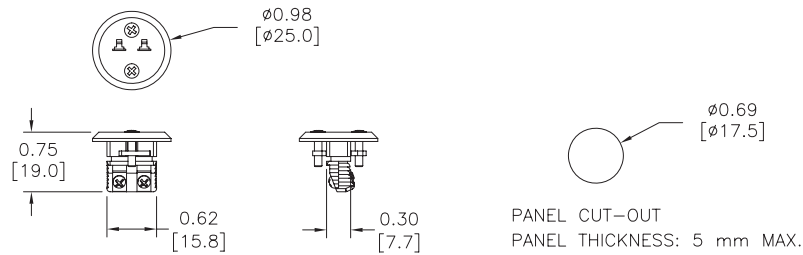
**THMJ, K, & T-MJ**



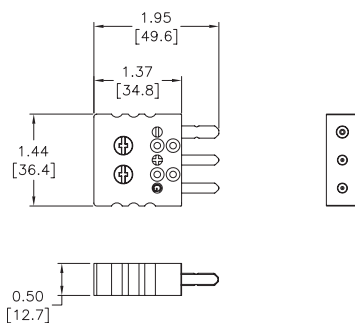
**THMJ, K, & T-SPJ**



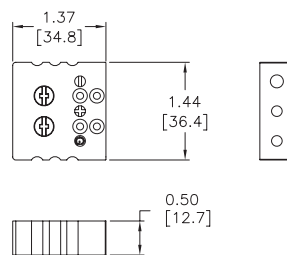
**THMJ, K, & T-MPJ**



**RTD-SP**



**RTD-SJ**



# pro<sup>sense</sup>® Thermocouple and RTD Connectors

**WCB-S**



**WCB-M**



**WCB-S Application**



**WCB-M Application**

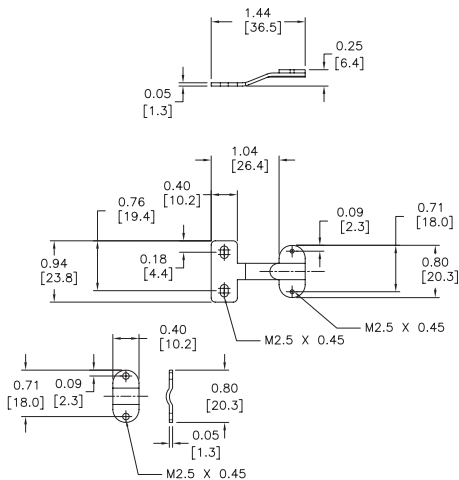


Thermocouple and RTD Connectors Accessories				
Part Number	Pcs/ Pkg	Wt(lb)	Price	Description
<b>WCB-S</b>	4	0.5		Wire / cable clamp bracket for use with standard thermocouple and RTD connectors.
<b>WCB-M</b>	4	0.5		Wire / cable clamp bracket for use with miniature thermocouple connectors.

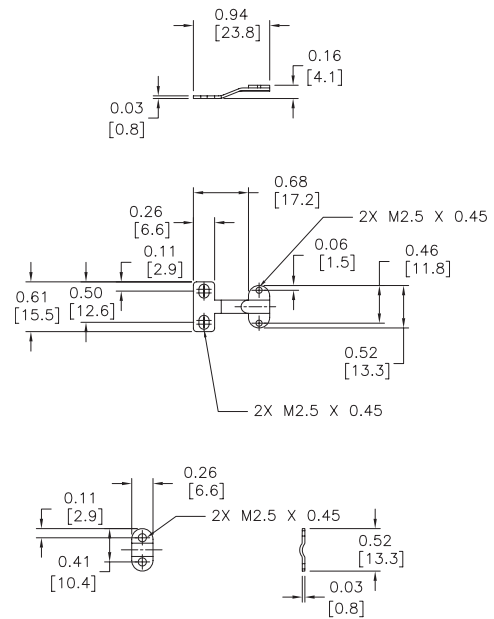
## Dimensions

inches [mm]

**WCB-S**



**WCB-M**



# pro<sup>ense</sup>® Thermocouple and RTD Temperature Range

Thermocouple Temperature Range		
THMK-C06-04	32 to 2100°F (0 to 1149°C)	
THMK-C12-04		
THMK-C18-04		
THMK-H06L01-03		
THMK-H12L01-03		
THMK-H18L01-03	32 to 2100°F (0 to 1149°C) lead wire transition rated to 204°C (400°F)	
THMK-T06L06-03		
THMK-T12L06-03		
THMK-T18L06-03		
TTD25C-20-0300F-H		
TTD25N-20-0300F-H	0 to 300°F (-17.8 to 148.9°C)	
THMJ-A01L04-01	32 to 900°F (0 to 482°C)	
THMJ-A01L06-01		
THMJ-A01L10-01		
THMJ-A01L10-02		
THMJ-B01L06-01		
THMJ-B01L06-02		
THMJ-B02L06-01		
THMJ-B02L06-02		
THMJ-D08L04-01		
THMJ-D08L06-01		
THMJ-D08L10-01		
THMJ-D08L10-02		
THMK-A01L04-01		
THMK-A01L06-01		
THMK-A01L10-01		
THMK-A01L10-02		
THMK-B01L06-01		
THMK-B01L06-02		
THMK-D08L04-01		
THMK-D08L06-01		
THMK-D08L10-01		
THMK-D08L10-02		
THMJ-T06L06-01		32 to 970°F (0 to 521°C), lead wire transition rated to 400 °F (204 °C)
THMJ-T12L06-01		
THMJ-T18L06-01		
THMJ-P06-01	32 to 970°F (0 to 521°C), plug rated to 400 °F (204 °C)	
THMJ-P12-01		
THMJ-P18-01		
THMJ-C04-03	32 to 1330°F (0 to 720°C)	
THMJ-C04R-03		
THMJ-C06-01		
THMJ-C06-02		
THMJ-C06-03		
THMJ-C06R-03		
THMJ-C12-01		
THMJ-C12-02		
THMJ-C12-03		
THMJ-C12R-03		
THMJ-C18-01		
THMJ-C18-02		
THMJ-H04L01-02		
THMJ-H06L01-01		
THMJ-H06L01-02		
THMJ-H12L01-01		
THMJ-H12L01-02		
THMJ-H18L01-01		

Thermocouple Temperature Range		
THMJ-T06L06-02	32 to 1330°F (0 to 720°C) lead wire transition rated to 400 °F (204 °C)	
THMJ-T12L06-02		
THMJ-T18L06-02	32 to 1330°F (0 to 720°C) plug rated to 400 °F (204 °C)	
THMJ-P06-02		
THMJ-P12-02		
THMJ-P18-02	32 to 1700°F (0 to 927°C)	
THMK-C04-03		
THMK-C04R-03		
THMK-C06-01		
THMK-C06-02		
THMK-C06R-03		
THMK-C12-01		
THMK-C12-02		
THMK-C12-03		
THMK-C12R-03		
THMK-C18-01		
THMK-C18-02		
THMK-H04L01-02		
THMK-H06L01-01		
THMK-H06L01-02		
THMK-H12L01-01		
THMK-H12L01-02		
THMK-H18L01-01		
THMK-T06L06-01		32 to 1700°F (0 to 927°C) lead wire transition rated to 400 °F (204 °C)
THMK-T06L06-02		
THMK-T12L06-01		
THMK-T12L06-02		32 to 1700°F (0 to 927°C) plug rated to 400 °F (204 °C)
THMK-T18L06-01		
THMK-T18L06-02		
THMK-P06-01		32 to 1700°F (0 to 927°C) plug rated to 400 °F (204 °C)
THMK-P06-02		
THMK-P12-01		
THMK-P12-02		
THMK-P18-01		
THMK-P18-02	32° to 900°F (0° to 482°C)	
THMK-B02L06-01		
THMK-B02L06-02	-328 to 700°F (-200 to 371°C), plug rated to 400 °F (204 °C)	
THMT-P06-01		
THMT-P12-01		
THMT-P18-01	-328 to 700°F (-200 to 371°C), lead wire transition rated to 400 °F (204 °C)	
THMT-T06L06-01		
THMT-T12L06-01		
THMT-T18L06-01	32 to 212°F (0 to 100°C)	
TTD25C-20-0100C-H		
TTD25N-20-0100C-H	-4 to 284°F (-20 to 140°C)	
TSD25N-0P-0284-H		

RTD Temperature Range	
RTD1-R01-01	40 to 185°F (-40 to 85°C)
RTD1-S04-01	-58 to 572°F (-50 to 300°C)
RTD1-S04-02	
RTD1-S04-03	
RTD1-S04-04	
RTD1-B01L06-01	
RTD1-B02L06-01	
RTD1-C04-03	
RTD1-C04R-03	
RTD1-C06-01	
RTD1-C06-03	
RTD1-C06R-03	
RTD1-C12-01	
RTD1-C12-02	
RTD1-C12-03	
RTD1-C12R-03	
RTD1-C18-01	-58 to 572°F (-50 to 300°C) Plug rated to 400°F (204°C)
RTD1-C18-02	
RTD1-H04L01-02	
RTD1-H06L01-01	-58 to 572°F (-50 to 300°C), lead wire transition rated to 400°F (204°C)
RTD1-H06L01-02	
RTD1-H12L01-01	
RTD1-H12L01-02	
RTD1-H18L01-01	
RTD1-P06-01	
RTD1-P12-01	
RTD1-P18-01	
RTD1-D08L10-01	
RTD1-T06L06-01	
RTD1-T12L06-01	
RTD1-T18L06-01	

## J, K, & T Thermocouple Color Code

	White	+
J	Red	-
	Yellow	+
K	Red	-
	Blue	+
T	Blue	+
	Red	-