

# pro<sup>o</sup>sense® RTD Bolt-On Ring Sensors



## Overview

- All temperature sensors are pre-built stock items
- Ideal for many surface mount sensing applications
- 100 ohm platinum RTD 3-wire element
- Class A accuracy
- Brass ring construction
- 6-foot lead wires with Kapton insulation and stainless steel overbraid
- Made in the USA

RTD Probes with Leadwire Transition							
Part Number	Pcs/Pkg	Wt (lb)	Price	Type	Ring Material	Temperature Sensing Range	Mounting
RTD1-B01L06-01	1	0.4		PT 100, 3-wire	Brass	-50 to 300°C (-58 to 572°F)	Bolt on #6-#10 (4mm-5mm) screw or bolt size
RTD1-B02L06-01	1	0.4		PT 100, 3-wire	Brass	-50 to 300°C (-58 to 572°F)	Bolt on #12, 1/4 to 5/16 inch (5mm - 8mm) screw or bolt size

Technical Specifications	
<b>Sensing Element</b>	Single 100 ohm platinum (Pt 100), 3-wire; TCR = 0.00385 ohm/ohm/°C
<b>Initial Accuracy</b>	Class A ±[0.15 +0.002  t ] °C
<b>Response Time</b>	7 seconds, 63% of a 25 to 77°C step change (ASTM E1137)
<b>Wiring</b>	6 foot stranded 24 AWG wire leads with stripped ends, Kapton insulation and stainless steel overbraid

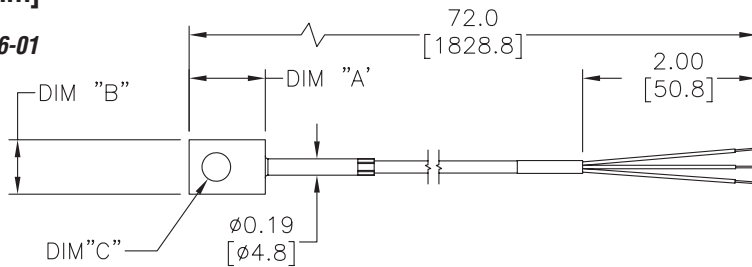


**NOTE: CHECK THE CHEMICAL COMPATIBILITY OF THE SENSOR'S WETTED PARTS WITH THE MEDIUM TO BE MEASURED.**

## Dimensions

inches [mm]

RTD1-BOXL06-01



## Wiring Information

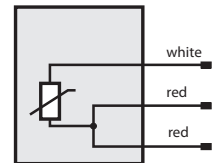


TABLE A			
PART NUMBER	DIM "A"	DIM "B"	DIM "C"
RTD1-B01L06-01	0.63[15.9]	0.38[9.5]	∅0.20[∅5.2]
RTD1-B02L06-01	0.88[22.2]	0.63[15.9]	∅0.33[∅8.3]

## Accessories

Part No.	Description	Pcs/Pkg	Price
RTD-SP	RTD 3-pin connector, standard round pin plug, maximum continuous temperature 400 F (200 C), white body, copper pins, 14 AWG maximum (2.0 mm) wire size	1	
RTD-SJ	RTD 3-pin connector, standard round pin jack, maximum continuous temperature 400 F (200 C), white body, copper pins, 14 AWG maximum (2.0 mm) wire size	1	
WCB-S	Wire / cable clamp bracket for use with standard thermocouple and RTD connectors.	4	

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

# 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**



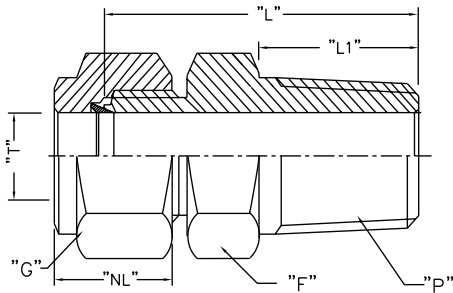
**CF18-50N**



**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**



# proSense® 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

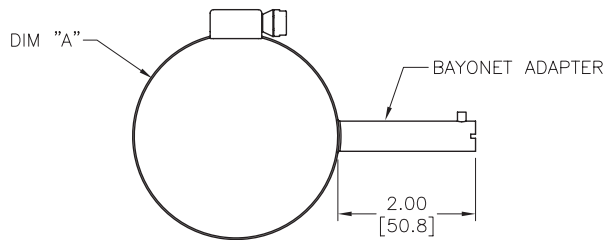


Shown with optional adjustable immersion sensor

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	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**

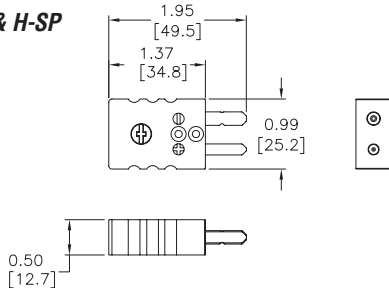


# pro<sup>sense</sup> Thermocouple and RTD Connectors

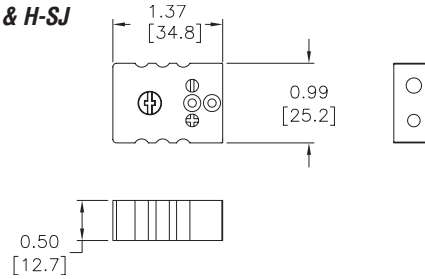
## Dimensions

inches [mm]

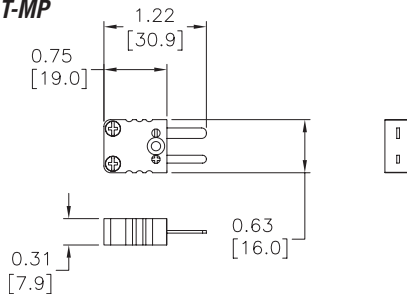
**THMJ, K, T, & H-SP**



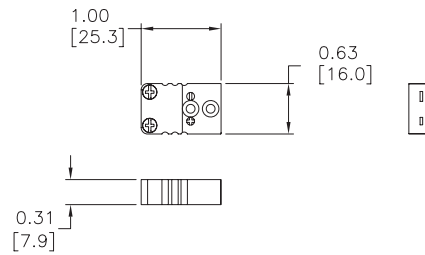
**THMJ, K, T, & H-SJ**



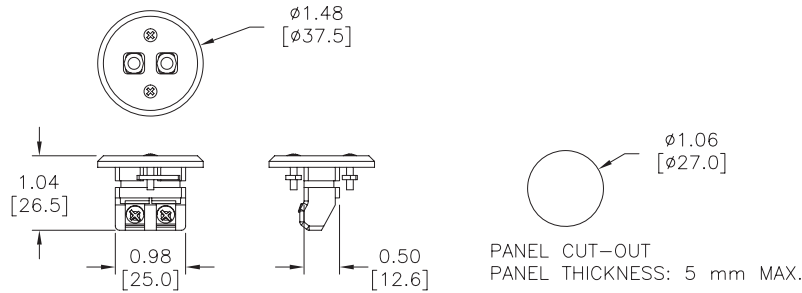
**THMJ, K, & T-MP**



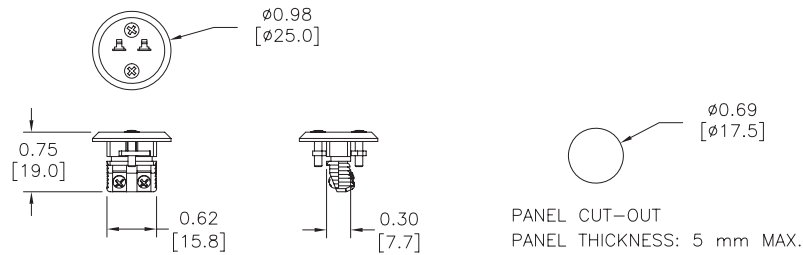
**THMJ, K, & T-MJ**



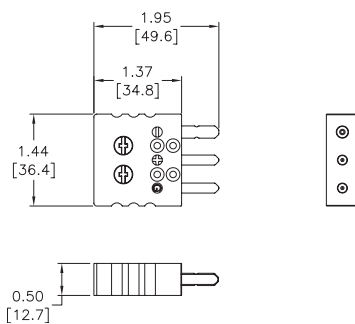
**THMJ, K, & T-SPJ**



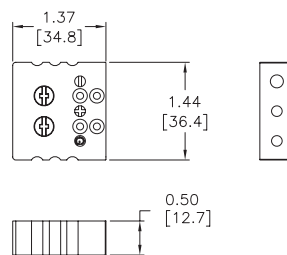
**THMJ, K, & T-MPJ**



**RTD-SP**



**RTD-SJ**



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

**WCB-S**



**WCB-M**



**WCB-S Application**



**WCB-M Application**

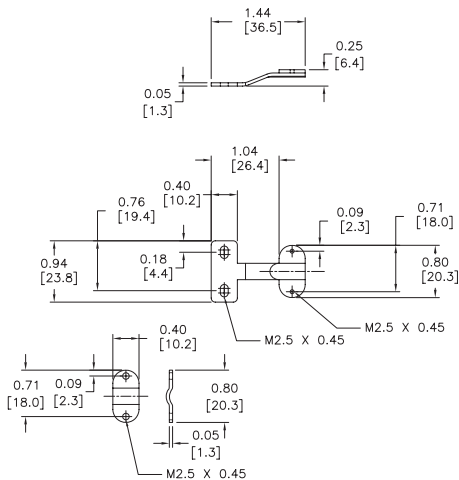


Thermocouple and RTD Connectors Accessories				
Part Number	Pcs/ Pkg	Wt(lb)	Price	Description
<b>WCB-S</b>	4	0.5		Wire / cable clamp bracket for use with standard thermocouple and RTD connectors.
<b>WCB-M</b>	4	0.5		Wire / cable clamp bracket for use with miniature thermocouple connectors.

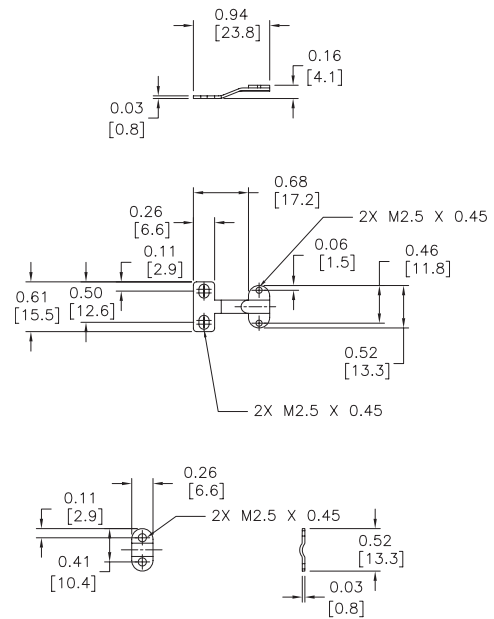
## Dimensions

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		
THMK-T06L06-03	32 to 2100°F (0 to 1149°C) lead wire transition rated to 204°C (400°F)	
THMK-T12L06-03		
THMK-T18L06-03		
TTD25C-20-0300F-H	0 to 300°F (-17.8 to 148.9°C)	
TTD25N-20-0300F-H		
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	32 to 900°F (0 to 482°C)	
THMK-P18-01		
THMK-P18-02	-328 to 700°F (-200 to 371°C) plug rated to 400 °F (204 °C)	
THMK-B02L06-01		
THMK-B02L06-02		
THMT-P06-01	-328 to 700°F (-200 to 371°C) lead wire transition rated to 400 °F (204 °C)	
THMT-P12-01		
THMT-P18-01		
THMT-T06L06-01	32 to 212°F (0 to 100°C)	
THMT-T12L06-01		
THMT-T18L06-01		
TTD25C-20-0100C-H	-4 to 284°F (-20 to 140°C)	
TTD25N-20-0100C-H		
TSD25N-0P-0284-H		

RTD Temperature Range		
RTD1-R01-01	40 to 185°F (-40 to 85°C)	
RTD1-S04-01		
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)	
RTD1-C18-02		
RTD1-H04L01-02		
RTD1-H06L01-01		
RTD1-H06L01-02		
RTD1-H12L01-01		
RTD1-H12L01-02		
RTD1-H18L01-01		
RTD1-P06-01		
RTD1-P12-01		
RTD1-P18-01		
RTD1-D08L10-01		-58 to 572°F (-50 to 300°C) Plug rated to 400°F (204°C)
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	-