

# pro<sup>sense</sup>® Thermocouple Spring-Loaded Probes with Hex Nipple

THMJ & K - HXXL01-02

## Overview



CHSC-AL-1



CHTB-2

Accessories

- 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
- 316 SS, 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

Thermocouple Spring-Loaded Probes with Hex Nipple - Types J and K								
Part Number	Pcs/Pkg	Wt (lb)	Price	Type	Probe Diameter (O.D.)	Probe Length	Temperature Sensing Range	Mounting
THMJ-H04L01-02	1	0.5	\$43.00	J	1/4"	4"	0 to 720°C (32 to 1330°F)	Integral 1/2" x 1/2" NPT Hex Nipple, 316 SS
THMJ-H06L01-02			\$46.00	J		6"		
THMJ-H12L01-02			\$49.50	J		12"		
THMK-H04L01-02			\$43.00	K		4"	0 to 927°C (32 to 1700°F)	
THMK-H06L01-02			\$46.00	K		6"		
THMK-H12L01-02			\$49.50	K		12"		

Technical Specifications	
Junction Type	Ungrounded
ASTM E230 Standard Limits of Error	±2.2°C (±4.0°F) or 0.75%, whichever is greater
Probe	ø1/4", 316 stainless steel sheath, single thermocouple element is embedded in MgO powder
Response Time	2.9 seconds, 63.2% of a 25-77°C step change per method ASTM E839
Wiring	3 inch stranded 24 AWG wire leads with terminal pins, Teflon insulation

Note: See end of section for thermowells to fit these units.



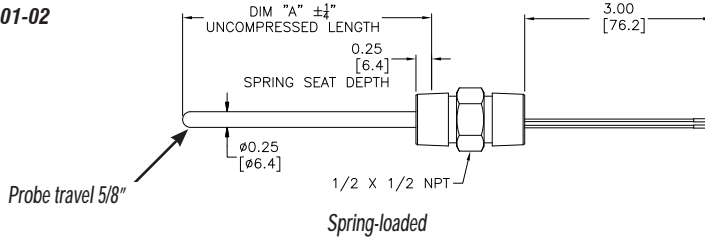
NOTE: CHECK THE CHEMICAL COMPATIBILITY OF THE SENSOR'S WETTED PARTS WITH THE MEDIUM TO BE MEASURED.

# proSense® Thermocouple Spring-Loaded Probes with Hex Nipple

## Dimensions

inches [mm]

THMJ & K - HXXL01-02

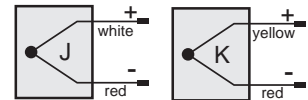


PART NUMBER	DIM "A"
THMJ-H04L01-02	4.00[101.6]
THMJ-H06L01-02	6.00[152.4]
THMJ-H12L01-02	12.00[304.8]
THMK-H04L01-02	4.00[101.6]
THMK-H06L01-02	6.00[152.4]
THMK-H12L01-02	12.00[304.8]

## Wiring Information

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

- Must use thermocouple extension lead wire
- Observe polarity when making connections
- Do not use standard wire nuts



## Accessories

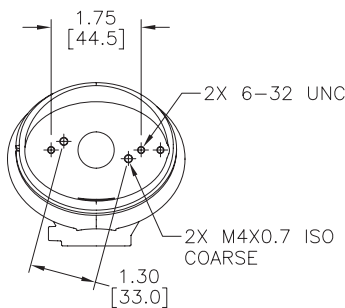
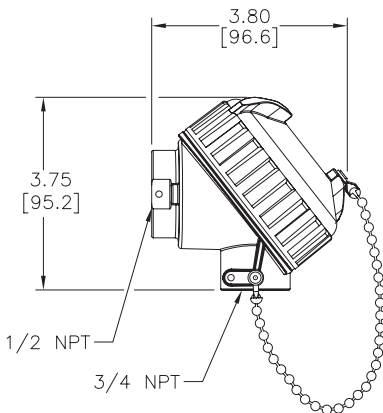
Part No.	Description	Pcs/Pkg	Price
<b>CHSC-AL-1</b>	ProSense general purpose screw cover connection head for temperature probes, die-cast aluminum, 1/2 inch NPT process opening, 3/4 inch NPT conduit opening, NEMA 4X, IP66 rated, graphite gasket, maximum temperature rating of 825°F (440°C). Order probe and terminal base separately.	1	\$16.50
<b>CHTB-2</b>	ProSense ceramic terminal base, two brass terminals with stainless steel screws, for use with ProSense temperature probe connection heads, two mounting screws included.	1	\$4.50

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

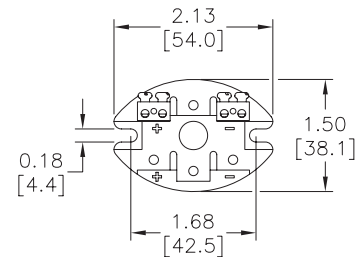
## Dimensions

inches [mm]

CHSC-AL-1



CHTB-2



# proSense® 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
THMJ-SP	1	0.5	\$3.50	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
THMJ-SJ	1	0.5	\$4.50		Standard round pin jack				-
THMJ-SPJ	1	0.5	\$8.50		Standard round direct mount jack			40 AWG (0.08 mm) to 20 AWG maximum (0.8 mm)	WCB-M
THMJ-MP	1	0.5	\$3.25		Miniature flat pin plug				-
THMJ-MJ	1	0.5	\$3.75		Miniature flat pin jack				WCB-S
THMJ-MPJ	1	0.5	\$5.50		Miniature round direct mount jack				
THMK-SP	1	0.5	\$4.00	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
THMK-SJ	1	0.5	\$4.75		Standard round pin jack				-
THMK-SPJ	1	0.5	\$8.25		Standard round direct mount jack			40 AWG (0.08 mm) to 20 AWG maximum (0.8 mm)	WCB-M
THMK-MP	1	0.5	\$3.50		Miniature flat pin plug				-
THMK-MJ	1	0.5	\$3.75		Miniature flat pin jack				WCB-S
THMK-MPJ	1	0.5	\$6.00		Miniature round direct mount jack				
THMK-HSP	1	0.5	\$9.25	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
THMK-HSJ	1	0.5	\$11.00		Standard hi-temp round pin jack				
THMT-SP	1	0.5	\$3.75	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
THMT-SJ	1	0.5	\$5.00		Standard round pin jack				
THMT-SPJ	1	0.5	\$8.25		Standard round direct mount jack			40 AWG (0.08 mm) to 20 AWG maximum (0.8 mm)	WCB-M
THMT-MP	1	0.5	\$3.50		Miniature flat pin plug				-
THMT-MJ	1	0.5	\$4.00		Miniature flat pin jack				WCB-S
THMT-MPJ	1	0.5	\$6.25		Miniature round direct mount jack				
RTD-SP	1	0.5	\$7.25	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
RTD-SJ	1	0.5	\$9.25		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

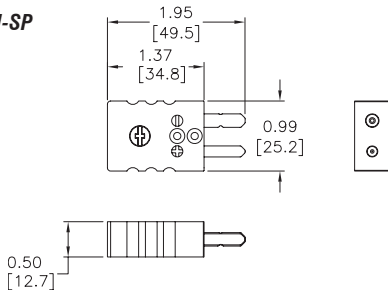


# pro<sup>ense</sup> Thermocouple and RTD Connectors

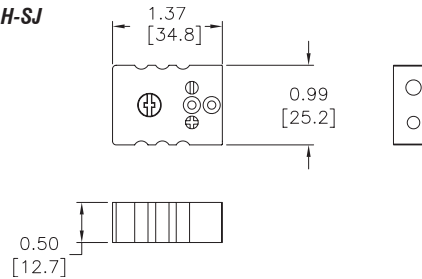
## Dimensions

inches [mm]

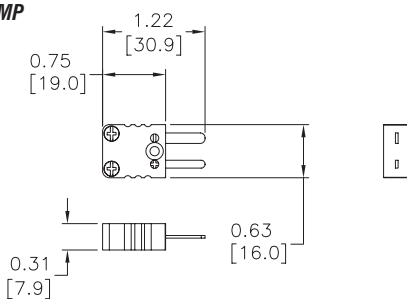
**THMJ, K, T, & H-SP**



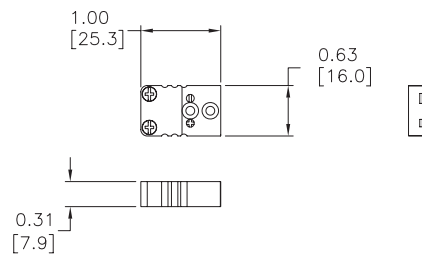
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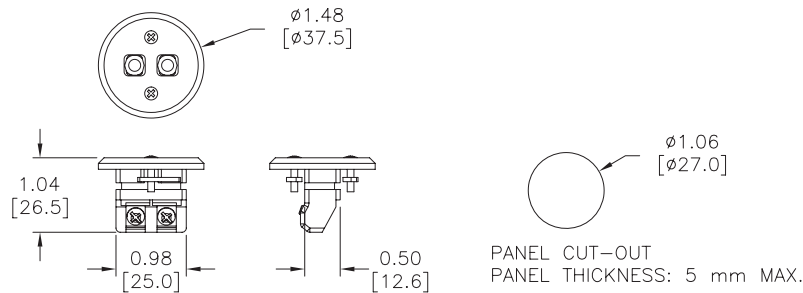
**THMJ, K, & T-MP**



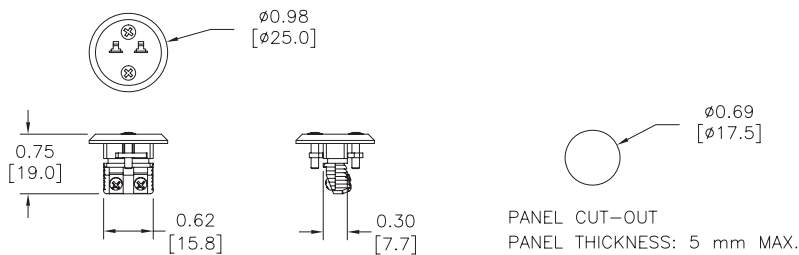
**THMJ, K, & T-MJ**



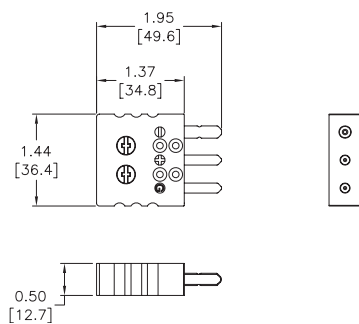
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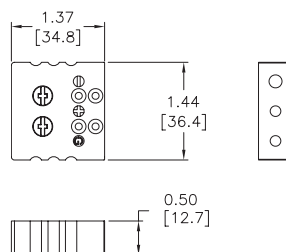
**THMJ, K, & T-MPJ**



**RTD-SP**



**RTD-SJ**



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

**WCB-S**



**WCB-M**



**WCB-S Application**



**WCB-M Application**

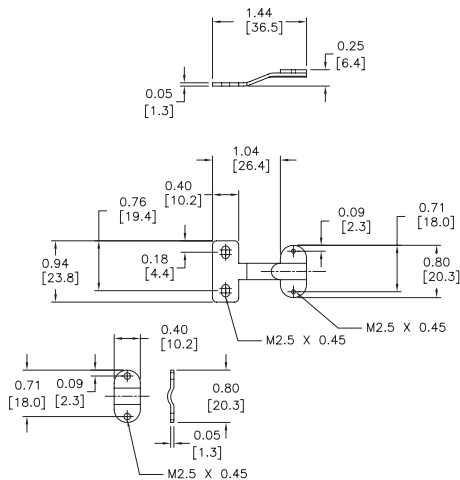


Thermocouple and RTD Connectors Accessories				
Part Number	Pcs/ Pkg	Wt(lb)	Price	Description
WCB-S	4	0.5	\$5.50	Wire / cable clamp bracket for use with standard thermocouple and RTD connectors.
WCB-M	4	0.5	\$5.50	Wire / cable clamp bracket for use with miniature thermocouple connectors.

## Dimensions

inches [mm]

**WCB-S**



**WCB-M**

