

proSense™ RTD Bolt-On Ring Sensors

by AUTOMATIONDIRECT



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



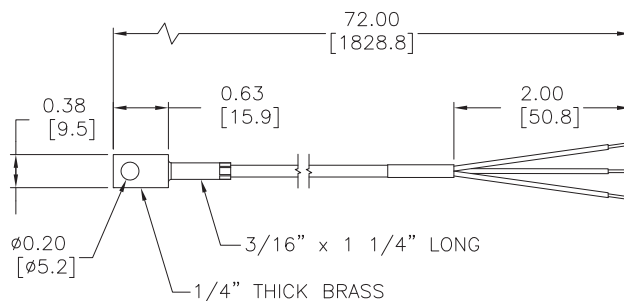
RTD Probes with Leadwire Transition							
Part Number	Pcs/Pkg	Wt (lb)	Price	Type	Ring Material	Temperature Sensing Range	Mounting
RTD1-B01L06-01	1	0.4	<--->	PT 100, 3-wire	Brass	-50 to 300°C (-58 to 572°F)	Bolt on #6-#10 (4mm-5mm) screw or bolt size

Technical Specifications	
Sensing Element	Single 100 ohm platinum (Pt 100), 3-wire; TCR = 0.00385 ohm/ohm/°C
Initial Accuracy	Class A ±[0.15 +0.002 t] °C
Response Time	7 seconds, 63% of a 25 to 77°C step change (ASTM E1137)
Wiring	6 foot stranded conductor lead wires 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.
www.automationdirect.com/static/specs/prosensechemresistance.pdf

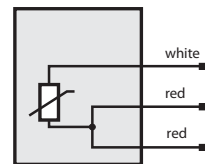
Dimensions

RTD1-TXXL06-01



Dimensions shown inches [mm]

Wiring Information



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 available at the end of this section.
 See end of section for full listing of accessories and dimension information.

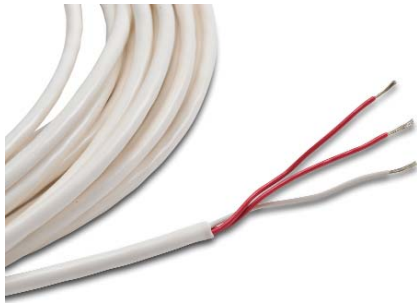
proSense™ RTD Extension Wire

by AUTOMATIONDIRECT



- Company Information
- Systems Overview
- Programmable Controllers
- Field I/O
- Software
- C-more & other HMI
- Drives
- Soft Starters
- Motors & Gearbox
- Steppers/ Servos
- Motor Controls
- Proximity Sensors
- Photo Sensors
- Limit Switches
- Encoders
- Current Sensors
- Pressure Sensors
- Temperature Sensors
- Pushbuttons/ Lights
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- Comm.
- Terminal Blocks & Wiring
- Power
- Circuit Protection
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- Tools
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- Appendix
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- Part # Index

RTDW-XX-01



RTDW-XX-02



Overview

- Specialized construction for use as RTD extension wire offers superior performance compared to “off-the-shelf” cable
- Available insulation types include PVC and FEP Teflon with aluminum Mylar shield and copper drain wire
- Convenient 50 and 100 foot lengths



RTD Extension Wire												
Part Number	Wt (lb)	Price	Type	Length (ft)/Pkg	Gauge, AWG	Conductors	Insulation Type / Color			Ohms/Triple Foot@68°F (20°C)	Continuous Temperature Rating	Nominal Size (inches)
							Each Conductor	Inner Jacket	Outer Jacket			
RTDW-50-01	0.9	<--->	RTD	50	22	3, stranded tinned copper	PVC, 2 red, 1 white	None	PVC, white	0.044	-20°F to 221°F (-29°C to 105°C)	0.160 O.D.
RTDW-100-01	1.5	<--->		100								
RTDW-50-02	0.9	<--->		50	24	3, twisted, stranded tinned copper	FEP Teflon, 2 red, 1 white	Aluminum Mylar shield and copper drain wire	FEP Teflon, white	0.066	-328°F to 400°F (-200°C to 204°C)	0.150 O.D.
RTDW-100-02	1.5	<--->		100								



NOTE: MAXIMUM RECOMMENDED DISTANCE BETWEEN RTD AND CONTROL DEVICE IS 300 FEET.

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

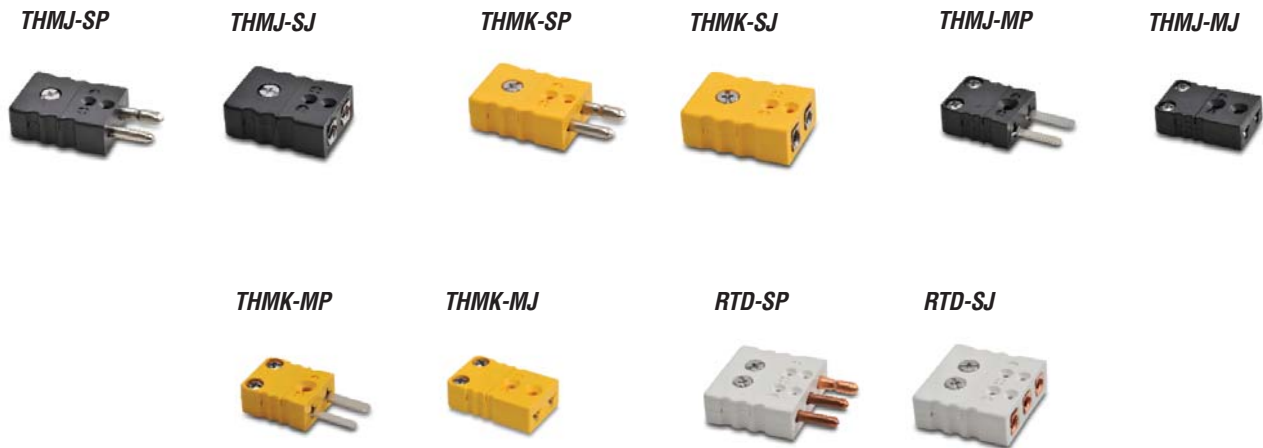
- Stainless steel screws with combination head (Slotted and Phillips)
- 3-Pin standard connectors have a third pin for ground or continuous shield, or for three wire RTDs



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	<--->	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	<--->		Standard round pin jack					
THMK-SP	1	0.5	<--->	K	Standard round pin plug		Yellow			
THMK-SJ	1	0.5	<--->		Standard round pin jack					
THMJ-MP	1	0.5	<--->	J	Miniature flat pin plug		Black	40 AWG (0.08 mm) to 20 AWG maximum (0.6 mm)		WCB-M
THMJ-MJ	1	0.5	<--->		Miniature flat pin jack					
THMK-MP	1	0.5	<--->	K	Miniature flat pin plug				Yellow	
THMK-MJ	1	0.5	<--->		Miniature flat pin jack					
RTD-SP	1	0.5	<--->	RTD	Standard round pin plug		White	32 AWG (0.2 mm) to 14 AWG maximum (2.0 mm)	WCB-S	
RTD-SJ	1	0.5	<--->		Standard round pin jack					



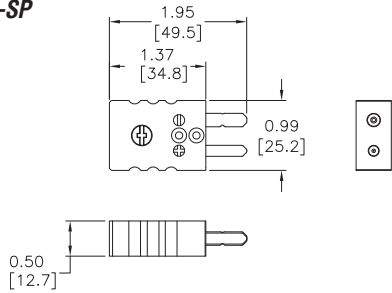
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www.automationdirect.com/static/specs/prosensechemresistance.pdf



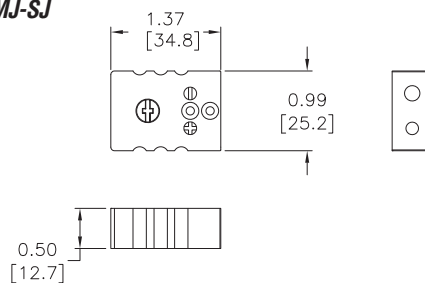
Thermocouple and RTD Connectors

Dimensions

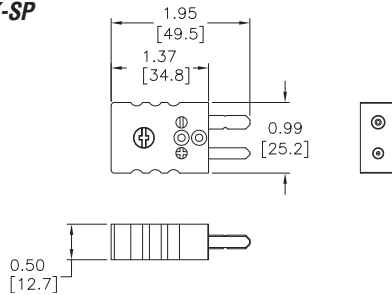
THMJ-SP



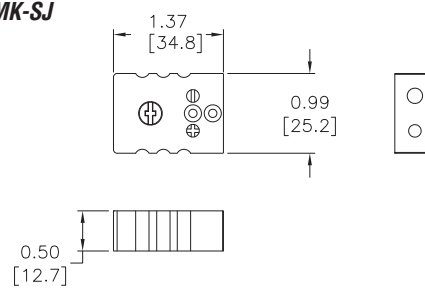
THMJ-SJ



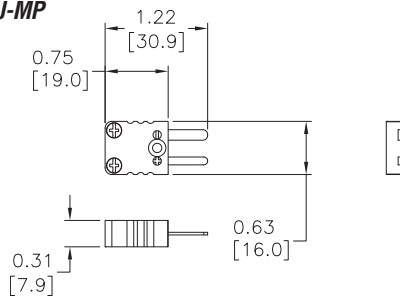
THMK-SP



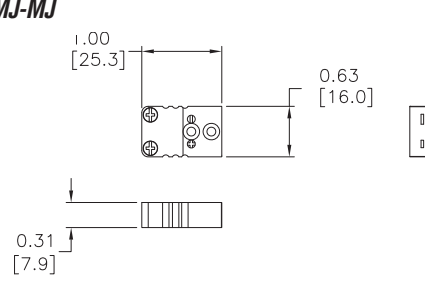
THMK-SJ



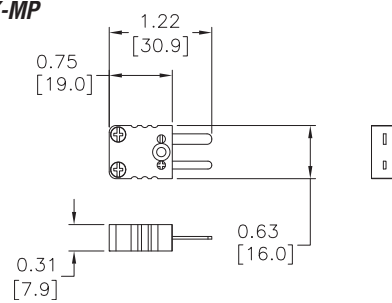
THMJ-MP



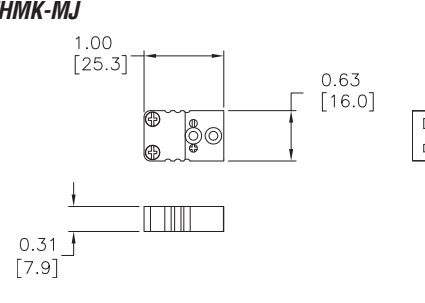
THMJ-MJ



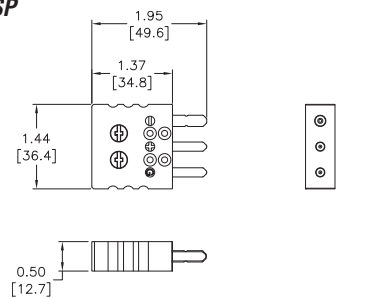
THMK-MP



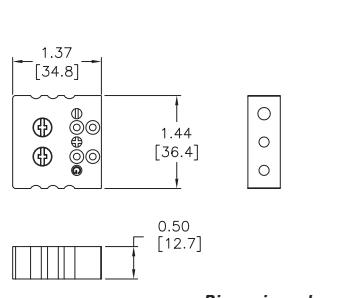
THMK-MJ



RTD-SP



RTD-SJ



Dimensions shown inches [mm]

proSense™ Thermocouple and RTD Connectors

by AUTOMATIONDIRECT

WCB-S

WCB-M

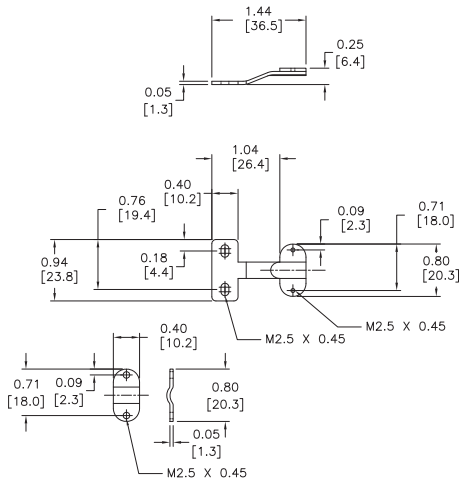
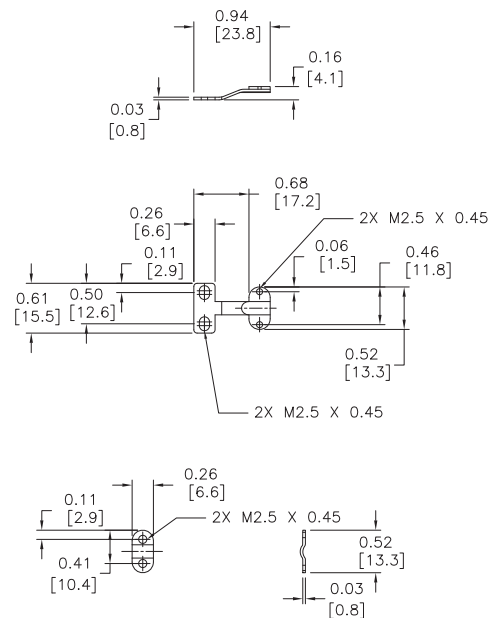
WCB-S Application

WCB-M Application


Thermocouple and RTD Connectors Accessories

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

Dimensions

WCB-S

WCB-M


Dimensions shown inches [mm]