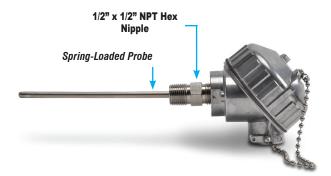
# Probes with Connection Head

THMJ & K - CXX-03



Open head



#### **Overview**

- 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	Туре	Probe Diameter (O.D.)	Probe Length	Temperature Sensing Range	Mounting			
THMJ-C04-03	1	1.3	\$76.00	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, puchased separately)			
THMJ-C06-03			\$80.00	J		6"					
<u>THMJ-C12-03</u>			\$84.00	J		12"					
THMK-C04-03			\$76.00	К		4"					
<u>THMK-C06-03</u>			\$80.00	К		6"	0 to 927°C (32 to 1700°F)				
<u>THMK-C12-03</u>			\$84.00	К		12"					

www.automationdirect.com Temperature Sensors tTRS-22

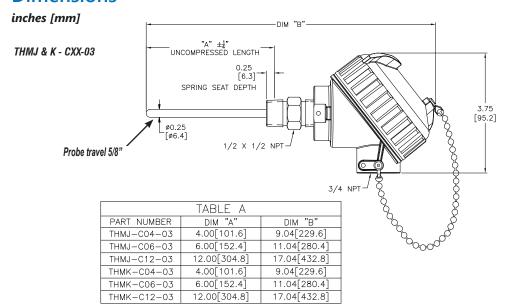
### **Tolerande** Thermocouple Spring-Loaded **Probes with Connection Head**

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						
Connection Head	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)						
Response Time	2.9 seconds, 63.2% of a 25-77°C step change per method ASTM E839						
Wiring	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**



#### **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
- Recommended screw terminal tightening torque 3-4 lb-in







## Or Sense Thermocouple Spring-Loaded Probes with Connection **Head - Accessories**

#### **Accessories**

Part No.	Description	Pcs/Pkg	Price
<u>TW04-01</u>	ProSense thermowell, 1/2in female NPT probe connection, 1/2in male NPT process connection, 304 stainless steel body, 4-1/4in overall length, 0.260in bore.	1	\$34.00
<u>TW04-02</u>	ProSense thermowell, 1/2in female NPT probe connection, 3/4in male NPT process connection, 304 stainless steel body, 4-1/4in overall length, 0.260in bore.	1	\$34.00
<u>TW04-03</u>	ProSense thermowell, 1/2in female NPT probe connection, 1/2in male NPT process connection, 316 stainless steel body, 4-1/4in overall length, 0.260in bore.	1	\$42.50
TW04-04	ProSense thermowell, 1/2in female NPT probe connection, 3/4in male NPT process connection, 316 stainless steel body, 4-1/4in overall length, 0.260in bore.	1	\$42.50
TW06-01	ProSense thermowell, 1/2in female NPT probe connection, 1/2in male NPT process connection, 304 stainless steel body, 6-1/4in overall length, 0.260in bore.	1	\$46.00
TW06-02	ProSense thermowell, 1/2in female NPT probe connection, 3/4in male NPT process connection, 304 stainless steel body, 6-1/4in overall length, 0.260in bore.	1	\$46.00
TW06-03	ProSense thermowell, 1/2in female NPT probe connection, 1/2in male NPT process connection, 316 stainless steel body, 6-1/4in overall length, 0.260in bore.	1	\$54.00
TW06-04	ProSense thermowell, 1/2in female NPT probe connection, 3/4in male NPT process connection, 316 stainless steel body, 6-1/4in overall length, 0.260in bore.	1	\$54.00
<u>TW12-01</u>	ProSense thermowell, 1/2in female NPT probe connection, 1/2in male NPT process connection, 304 stainless steel body, 12-1/4in overall length, 0.260in bore.	1	\$74.00
TW12-02	ProSense thermowell, 1/2in female NPT probe connection, 3/4in male NPT process connection, 304 stainless steel body, 12-1/4in overall length, 0.260in bore.	1	\$74.00
<u>TW12-03</u>	ProSense thermowell, 1/2in female NPT probe connection, 1/2in male NPT process connection, 316 stainless steel body, 12-1/4in overall length, 0.260in bore.	1	\$93.00
TW12-04	ProSense thermowell, 1/2in female NPT probe connection, 3/4in male NPT process connection, 316 stainless steel body, 12-1/4in overall length, 0.260in bore.	1	\$93.00
<u>STW04-01</u>	ProSense sanitary thermowell, 1/2in female NPT probe connection, 1-1/2in sanitary tri-clamp process connection, 316 stainless steel body, 4-1/4in overall length, 0.260in bore.	1	\$101.00
<u>STW06-01</u>	ProSense sanitary thermowell, 1/2in female NPT probe connection, 1-1/2in sanitary tri-clamp process connection, 316 stainless steel body, 6-1/4in overall length, 0.260in bore.	1	\$108.00
STW12-01	ProSense sanitary thermowell, 1/2in female NPT probe connection, 1-1/2in sanitary tri-clamp process connection, 316 stainless steel body, 12-1/4in overall length, 0.260in bore.	1	\$150.00
STW04-02	ProSense sanitary thermowell, 1/2in female NPT probe connection, 2in sanitary tri-clamp process connection, 316 stainless steel body, 4-1/4in overall length, 0.260in bore.	1	\$112.00
STW06-02	ProSense sanitary thermowell, 1/2in female NPT probe connection, 2in sanitary tri-clamp process connection, 316 stainless steel body, 6-1/4in overall length, 0.260in bore.	1	\$120.00
STW12-02	ProSense sanitary thermowell, 1/2in female NPT probe connection, 2in sanitary tri-clamp process connection, 316 stainless steel body, 12-1/4in overall length, 0.260in bore.	1	\$156.00

Note: Full listing of accessories and dimension information available at the end of this section. Thermocouple extension lead wire available at www.automationdirect.com.

### **Spring-Loaded Thermocouple Probe** and Thermowell Assembly Example



- Spring-loaded probe design ensures positive tip contact with the bottom of the
- Integral probe hex nipple threads directly into thermowell. No additional probe mounting fittings are required.