ProSense® Thermocouple Probes with Lead Wire Transition

THMJ, K & T - TXXL06-01, 02 & 03

Probe shown with optional CF18-BC adjustable bayonet cap compression mounting fitting

Overview

- Type J, K or T thermocouple elements to meet many temperature sensing applications
- 1/8" or 1/4" Diameter, 316 stainless steel or Inconel Alloy 600 sheath to protect against harsh environments
- Magnesium Oxide (MgO) insulation provides vibration dampening and protection against thermal shock
- 6" , 12" or 18" probe length
- Bendable probe to adapt to installation requirements
- Heavy duty lead wire transition with relief spring
- 6-foot lead wires with stainless steel overbraid
- Made in the USA

Thermocouple Probes with Lead Wire Transition - Types J, K and T

Part Number	Pcs/Pkg	Wt (lb)	Price	Type	Probe Diameter (O.D)	Probe Length	Probe Material	Temperature Sensing Range	Mounting
THMJ-T06L06-01	1	0.4	$08hb:	J	1/8"	6"	316 stainless steel	0 to 521°C (32 to 970°F), lead wire transition rated to 400 °F (204 °C)	ProSense compression fitting (see accessories purchased separately)
THMJ-T12L06-01		0.6	$08hd:	J		12"			
THMJ-T18L06-01			$;08hf:	J		18"			
THMK-T06L06-01		0.4	$08hh:	K		6"		0 to 927°C (32 to 1700°F), lead wire transition rated to 400 °F (204 °C)	
THMK-T12L06-01		0.6	$-08hj:	K		12"			
THMK-T18L06-01			$-08hl:	K		18"			
THMT-T06L06-01		0.4	$0d?5:	T		6"		-200 to 371°C (-328 to 700°F), lead wire transition rated to 400 °F (204 °C)	
THMT-T12L06-01		0.6	$0d?6:	T		12"			
THMT-T18L06-01			$0d?7:	T		18"			
THMJ-T06L06-02		0.4	$08hc:	J	1/4"	6"	316 stainless steel	0 to 720°C (32 to 1330°F), lead wire transition rated to 400 °F (204 °C)	
THMJ-T12L06-02		0.6	$08he:	J		12"			
THMJ-T18L06-02			$08hg:	J		18"			
THMK-T06L06-02		0.4	$-08hi:	K		6"		0 to 927°C (32 to 1700°F), lead wire transition rated to 400 °F (204 °C)	
THMK-T12L06-02		0.6	$08hk:	K		12"			
THMK-T18L06-02			$08hn:	K		18"			
THMK-T06L06-03		0.4	$0d?2:	K		6"	Inconel Alloy 600	0 to 1149°C (32 to 2100°F), lead wire transition rated to 400 °F (204 °C)	
THMK-T12L06-03		0.6	$0d?3:	K		12"			
THMK-T18L06-03			$0d?4:	K		18"			

ProSense® Thermocouple Probes with Lead Wire Transition

Technical Specifications	
Junction Type	Ungrounded
ASTM E230 Standard Limits of Error	Types J, K: ± 2.2°C (± 4.0°F); Type T: ± 1°C (± 1.8°F); or 0.75% whichever is greater
Probe	ø1/8" or ø1/4", 316 stainless steel or Inconel Alloy 600 sheath, single thermocouple element is embedded in MgO powder
Probe Minimum Bend Radius	2 x sheath diameter
Minimum Installation Depth	1/8" O.D.: 1.75" (44.5 mm), 1/4" O.D.: 3" (76 mm)
Response Time	2.9 seconds, 63.2% of a 25-77°C step change per method ASTM E839
Wiring	6 foot stranded 20 AWG wire leads with stripped ends, fiberglass 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]

THMJ, K & T - TXXL06-01, 02 & 03

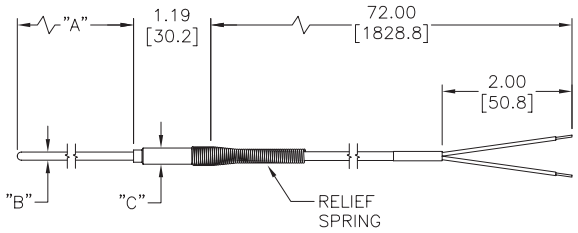
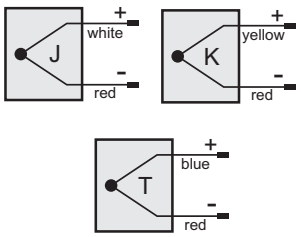


TABLE A			
PART NUMBER	DIM "A"	DIM "B"	DIM "C"
THMJ–T06L06–01	6.00[152.4]	0.13[3.3]	0.25[6.35]
THMJ–T12L06–01	12.00[304.8]	0.13[3.3]	0.25[6.35]
THMJ–T18L06–01	18.00[457.2]	0.13[3.3]	0.25[6.35]
THMT–T06L06–01	6.00[152.4]	0.13[3.3]	0.25[6.35]
THMT–T12L06–01	12.00[304.8]	0.13[3.3]	0.25[6.35]
THMT–T18L06–01	18.00[457.2]	0.13[3.3]	0.25[6.35]
THMK–T06L06–01	6.00[152.4]	0.13[3.3]	0.25[6.35]
THMK–T12L06–01	12.00[304.8]	0.13[3.3]	0.25[6.35]
THMK–T18L06–01	18.00[457.2]	0.13[3.3]	0.25[6.35]
THMJ–T06L06–02	6.00[152.4]	0.25[6.35]	0.38[9.67]
THMJ–T12L06–02	12.00[304.8]	0.25[6.35]	0.38[9.67]
THMJ–T18L06–02	18.00[457.2]	0.25[6.35]	0.38[9.67]
THMK–T06L06–02	6.00[152.4]	0.25[6.35]	0.38[9.67]
THMK–T12L06–02	12.00[304.8]	0.25[6.35]	0.38[9.67]
THMK–T18L06–02	18.00[457.2]	0.25[6.35]	0.38[9.67]
THMK–T06L06–03	6.00[152.4]	0.25[6.35]	0.38[9.67]
THMK–T12L06–03	12.00[304.8]	0.25[6.35]	0.38[9.67]
THMK–T18L06–03	18.00[457.2]	0.25[6.35]	0.38[9.67]

Wiring Information

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

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



ProSense® Thermocouple Probes with Lead Wire Transition

Accessories

Part No.	Description	Pcs/Pkg	Price
BCF18-125N	Compression fitting, brass, for 1/8 inch diameter temperature probes,1/8 inch NPT male thread	1	$eku:
BCF14-125N	Compression fitting, brass, for 1/4 inch diameter temperature probes,1/8 inch NPT male thread	1	$ekq:
BCF18-25N	Compression fitting, brass, for 1/8 inch diameter temperature probes,1/4 inch NPT male thread	1	$ekv:
BCF14-25N	Compression fitting, brass, for 1/4 inch diameter temperature probes,1/4 inch NPT male thread	1	$eks:
BCF18-50N	Compression fitting, brass, for 1/8 inch diameter temperature probes,1/2 inch NPT male thread	1	$ekx:
BCF14-50N	Compression fitting, brass, for 1/4 inch diameter temperature probes,1/2 inch NPT male thread	1	$;ekt:
CF18-125N	Compression fitting, 316 stainless steel, for 1/8 inch diameter temperature probes,1/8 inch NPT male thread	1	$ek#:
CF14-125N	Compression fitting, 316 stainless steel, for 1/4 inch diameter temperature probes,1/8 inch NPT male thread	1	$;ek]:
CF18-25N	Compression fitting, 316 stainless steel, for 1/8 inch diameter temperature probes,1/4 inch NPT male thread	1	$;ek!:
CF14-25N	Compression fitting, 316 stainless steel, for 1/4 inch diameter temperature probes,1/4 inch NPT male thread	1	$;ek[:
CF18-50N	Compression fitting, 316 stainless steel, for 1/8 inch diameter temperature probes,1/2 inch NPT male thread	1	$0ek?:
CF14-50N	Compression fitting, 316 stainless steel, for 1/4 inch diameter temperature probes,1/2 inch NPT male thread	1	$0ek_:
CFTF-18	Teflon ferrule for brass or stainless steel compression fittings and 1/8 diameter temperature probes	5	$ea?:
CFTF-14	Teflon ferrule for brass or stainless steel compression fittings and 1/4 diameter temperature probes	5	$;ea!:
CF18-BC	Bayonet adapter, 7/8 inch long, 7/16 inch outside diameter, 9/32 inch inside diameter, 1/8 inch MNPT	1	$0ea#:
THMJ-SP	Thermocouple connector, Type J, standard round pin plug, maximum continuous temperature 400°F (200°C), glass filled thermoplastic black body, thermocouple material pins, 14 AWG maximum (2.0 mm) wire size	1	$-43i:
THMJ-SJ	Thermocouple connector, Type J, standard round pin jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic black body, thermocouple material pins, 14 AWG maximum (2.0 mm) wire size	1	$43h:
THMK-SP	Thermocouple connector, Type K, standard round pin plug, maximum continuous temperature 400°F (200°C), glass filled thermoplastic yellow body, thermocouple material pins, 14 AWG maximum (2.0 mm) wire size	1	$43s:
THMK-SJ	Thermocouple connector, Type K, standard round pin jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic yellow body, thermocouple material pins, 14 AWG maximum (2.0 mm) wire size	1	$43q:
THMK-HSP	Thermocouple connector, Type K, high-temperature standard round pin plug, maximum continuous temperature 662°F (350°C), thermoset brown body, thermocouple material pins, 14 AWG (2.0 mm) maximum wire size	1	$-043l:
THMK-HSJ	Thermocouple connector, Type K, high-temperature standard round pin jack, maximum continuous temperature 662°F (350°C), thermoset brown body, thermocouple material pins, 14 AWG (2.0 mm) maximum wire size	1	$043k:
THMT-SP	Thermocouple connector, Type T, standard round pin plug, maximum continuous temperature 400°F (200°C), glass filled thermoplastic blue body, thermocouple material pins, 14 AWG (2.0 mm) maximum wire size	1	$43z:
THMT-SJ	Thermocouple connector, Type T, standard round pin jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic blue body, thermocouple material pins, 14 AWG (2.0 mm) maximum wire size	1	$43y:
THMJ-MP	Thermocouple connector, Type J, miniature flat pin plug, maximum continuous temperature 400°F (200°C), glass filled thermoplastic black body, thermocouple material pins, 20 AWG maximum (0.8 mm) wire size	1	$;43f:
THMJ-MJ	Thermocouple connector, Type J, miniature flat pin jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic black body, thermocouple material pins, 20 AWG maximum (0.8 mm) wire size	1	$43e:
THMK-MP	Thermocouple connector, Type K, miniature flat pin plug, maximum continuous temperature 400°F (200°C), glass filled thermoplastic yellow body, thermocouple material pins, 20 AWG maximum (0.8 mm) wire size	1	$43o:
THMK-MJ	Thermocouple connector, Type K, miniature flat pin jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic yellow body, thermocouple material pins, 20 AWG maximum (0.8 mm) wire size	1	$43n:
THMT-MP	Thermocouple connector, Type T, miniature flat pin plug, maximum continuous temperature 400°F (200°C), glass filled thermoplastic blue body, thermocouple material pins, 20 AWG (0.8 mm) maximum wire size	1	$43v:
THMT-MJ	Thermocouple connector, Type T, miniature flat pin jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic blue body, thermocouple material pins, 20 AWG (0.8 mm) maximum wire size	1	$43u:
WCB-S	Wire / cable clamp bracket for use with standard thermocouple and RTD connectors	4	$05hp:
WCB-M	Wire / cable clamp bracket for use with miniature thermocouple connectors	4	$05ho:
THMJ-SPJ	Thermocouple connector, Type J, standard round pin panel jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic black body, thermocouple material pins, 14 AWG (2.0 mm) maximum wire size	1	$-043j:
THMK-SPJ	Thermocouple connector, Type K, standard round pin panel jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic yellow body, thermocouple material pins, 14 AWG (2.0 mm) maximum wire size	1	$;043t:
THMT-SPJ	Thermocouple connector, Type T, standard round pin panel jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic blue body, thermocouple material pins, 14 AWG (2.0 mm) maximum wire size	1	$;043]:
THMJ-MPJ	Thermocouple connector, Type J, miniature flat pin panel jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic black body, thermocouple material pins, 14 AWG (2.0 mm) maximum wire size	1	$43g:
THMK-MPJ	Thermocouple connector, Type K, miniature flat pin panel jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic yellow body, thermocouple material pins, 14 AWG (2.0 mm) maximum wire size	1	$43p:
THMT-MPJ	Thermocouple connector, Type T, miniature flat pin panel jack, maximum continuous temperature 400°F (200°C), glass filled thermoplastic blue body, thermocouple material pins, 14 AWG (2.0 mm) maximum wire size	1	$43x:

Note: Thermocouple extension lead wire available at www.automationdirect.com.
See end of section for full listing of accessories and dimension information.
**Working pressure of compression fitting should not exceed 500 psi. However we recommend any pressure application use a thermowell*

THMJ-SPJ

CF14-25N

BCF18-125N