

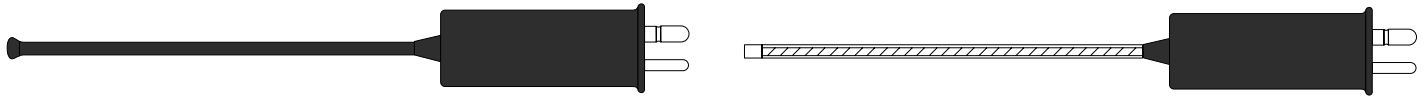
# SPECIAL PURPOSE CHEMICAL RESISTANT and INSULATED WIRE TYPE THERMOCOUPLES

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The two thermocouples listed below are designed for a broad range use in applications that require resistance to corrosion and chemical attack. They provide very good temperature measurement and service life in plating, pickling, and acid bath applications. Both constructions provide a fusion closed 1/4" OD outer protecting tubing of either Teflon® or Tygon®, with a 20 gauge teflon insulated thermocouple element inside. Both the teflon and tygon provide excellent resistance to strong acids, alkalines, and saline solutions. Teflon is a FDA compliant material, while the tygon should not be used with foods, beverages, or drugs. Tygon provides very poor resistance to organic solvents and should not be used in a solvent application.

**Tygon Assembly**

**Teflon Assembly**



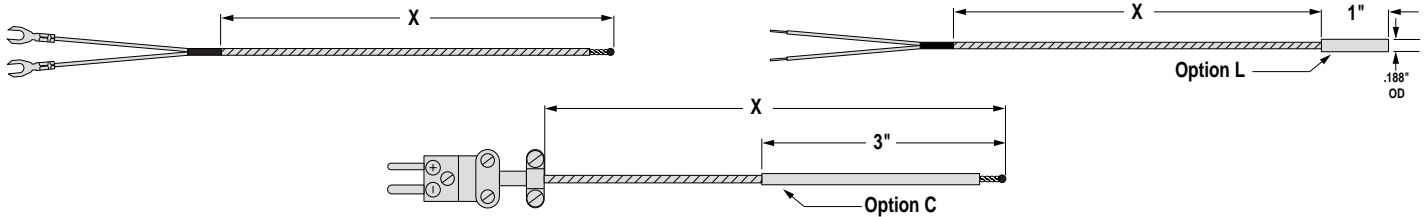
**EXAMPLE ORDER NUMBER:** **J4TEF** - **072** - **4SB**

1 ELEMENT and OUTER TUBING TYPE				2 LENGTH	3 TERMINATIONS	
ORDER CODE	T/C TYPE	OUTER TUBING DESCRIPTION MATERIAL	TEMP. RATING	Insert 3 Digit Length Order Code In Inches	ORDER CODE	DESCRIPTION
J4TEF	J	FEP Teflon	400°F			3
T4TEF	T	FEP Teflon	400°F	4SB		Standard size solid pin thermocouple plug with protective boot
J4TYG	J	R-3400 Tygon	165°F	5SB		Standard size solid pin thermocouple plug and mating jack w/protective boots
T4TYG	T	R-3400 Tygon	165°F	Z		Special construction

® TEFLON: Reg. TM DuPont ® TYGON: Reg. TM Norton Chemical

## INSULATED WIRE THERMOCOUPLES

The multiple purpose thermocouples listed below are constructed with insulated thermocouple wire and provided with twisted and TIG welded hot junctions. A variety of insulations and overbraids are offered to satisfy many industrial process, furnace certification, load checking, and laboratory test temperature measurement applications.



**EXAMPLE ORDER NUMBER:** **K20 - 1 - S - 304** - **072** - **4L**

1 THERMOCOUPLE and INSULATION TYPE							3 TERMINATIONS and OPTIONS	
ORDER CODE (Insert T/C Type Prefix Letter)	WIRE GA.	COND. TYPE	INSULATION (Note 1)	INSULATION TEMP. RATING °F		LIMIT OF ERROR (Note 2)	ORDER CODE	DESCRIPTION
				CONT.	SINGLE READ.			
(J,K,T,E) 20-1-304	20	Solid	Fiberglass	900	1000	Std.	1	Leads not stripped
(J,K) 20-1-S-304	20	Solid	Fiberglass/SS ovb.	900	1000	Std.	2	Leads stripped 2"
(J,K) 20-3-302	20	Strnd	Fiberglass	900	1000	Std.	3	Leads stripped 2" w/spade lugs
(J,K) 20-3-S-317	20	Strnd	Fiberglass/SS ovb.	900	1000	Std.	4	Standard male plug
(J,K) 20-2-321	20	Solid	Hi-temp fiberglass	1300	1600	Spec.	5	Std. male plug w/mating jack
(J,K,T,E) 20-1-508	20	Solid	Teflon (TFE)	500	600	Spec.	6	Miniature plug
(J,K,T) 20-2-513	20	Solid	Kapton	600	800	Spec.	7	Miniature plug with mating jack
(K) 20-2-301	20	Solid	Vitreous sil. fiber	1600	2000	Spec.	4H	Standard Hi-temp plug (800° F)
(K) 20-2-350	20	Solid	Ceramic fiber	2200	2600	Spec.	5H	Standard Hi-temp plug with mating jack (800° F)
(K) 20-2-N-350	20	Solid	Cer.fiber/Inc. ovb.	2200	2600	Spec.	<b>OPTIONS</b>	
(J,K,T,E) 24-1-304	24	Solid	Fiberglass	900	1000	Std.	L	Ungrounded hot junction
(J,K,T) 24-1-508	24	Solid	Teflon (TFE)	500	600	Std.	C	3" ceramic insulator at hot junction
(J,K,T) 24-2-513	24	Solid	Kapton	600	800	Spec.	<i>Note: Several types of special rings, lugs, and other fasteners are available for T/C hot junctions. Consult factory for specific requests and availability.</i>	
(J,K,T) 30-1-305	30	Solid	Fiberglass	900	1000	Std.		
(J,K,T) 30-1-506	30	Solid	Teflon (TFE)	400	500	Std.		
(J,K,T) 30-2-513	30	Solid	Kapton	600	800	Spec.		

**2 LENGTH**  
Insert 3 Digit Length Order Code in Inches

(1) See catalog wire section, Page W-3, for add'l. insulation specifications  
(2) Consult factory for availability of non-listed Special Limits of Error wire