thermo sensors corporation

A Leading Manufacturer of Quality Thermocouple and RTD Assemblies Since 1972

Address: P.O. Box 461947 Garland, TX 75046
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Thermocouple Wire

This section has been developed to serve as a guide in the selection of wires to accomplish most all temperature measuring requirements. Featured is a large selection of thermoelements, insulation materials and constructions. Should you need assistance, Thermo Sensors' sales personnel are anxious to help you in selecting the wire to give optimum performance in your application.



Thermo Sensors' thermocouple and extension wires are known for their quality performance and reliability. Careful attention is given to the proper selection and matching of conductors to ensure conformance to standard limits of error as defined in ANSI C96.1. Unless otherwise specified, all wire will be furnished to standard limits of error. Many of the wires are available with special limits of error and must be specified when ordering.

Thermocouple Wire Types, Construction and Characteristics

Type	Single Conductor		Overall		Temperature Rating		ANSI Color Coded	Insulation Properties		Remarks
	Insulation	Impregnation	Insulation	Impregnation	Continuous	Single Reading		Abrasion Resistence	Moisture Resistence	
HtHt	Vitreous Silica Fiber .020"	-	Vitreous Silica Fiber .020"	-	871°C 1600°F	1093°C 2000°F	No	Fair	Fair	
GgG	Double Glass Braid .012" Wall	Modified Silicone	Glass Braid .006"	Modified Silicone	482°C 900°F	538°C 1000°F	Yes	Good	Good	Impregnation retained to 204°C (400°F)
GG	Glass Braid .006"	Modified Silicone	Glass Braid .006"	Modified Silicone	482°C 900°F	538°C 1000°F	Yes	Fair	Good	Impregnation retained to 204°C (400°F)
GwG	Double Glass Wrap .005"	Modified Silicone	Glass Braid .006"	Modified Silicone	482°C 900°F	538°C 1000°F	Yes	Fair	Good	Impregnation retained to 204°C (400°F)

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GnGn	Glass Braid .006"	-	Glass Braid .006"	-	482°C 900°F	538°C 1000°F	No	Fair	Fair	Heat treate to minimize traying & remove binders.
TtGGt	Teflon (TFE) Tape (not fused) .004", (TFE) Coated Glass .006"	-	Teflon (TFE) Coated Glass Braid	-	482°C 900°F	538°C 1000°F	Yes	Good	Excellent	Teflon good to 260°C (500°F)
TtGt	Fused Telfon Tape (TFE) .004"	-	Teflon (TFE) Coated Glass Braid .006"	-	260°C 500°F	316°C 600°F	Yes	Fair	Very Good	
HgHg	High Temp Glass Braid .012"	-	High Temp Glass Braid .012"	Light Lacquer Coating	704°C 1300°F	871°C 1600°F	No	Fair	Fair	Coating is retained to 149°C (300°F)
CtCt	Ceramic Fiber .015"	-	Ceramic Fiber .020"	-	1430°C 2600°F	1430°C 2600°F	No	Good	Fair	
NN	Nylon .010"	-	Nylon .008"-.010"	-	177°C 350°F	-	Yes	Excellent	Fair	Overall jacket is clear
P	Polyvinyl .012"-.014"	-	Rip Cord construction	-	-29 to +105°C -20 to +221°F	-	Yes	Good	Excellent	
TxTx	Teflon (FEP) Extr. .008"	-	Teflon (FEP) Extr. .010"	-	204°C 400°F	316°C 600°F	Yes	Very Good	Excellent	
TfTf	Teflon (TFE) Tape Fused	-	Teflon (FEP) Tape Fused	-	260°C 500°F	316°C 600°F	Yes	Good	Excellent	

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	.008"		.008"							
TxTxZS	Teflon (FEP) Extr. .009"	-	Teflon (FEP) Extruded .010" Twisted; Alum.-Mylar Shield w/ Drain Wire	-	204°C 400°F	316°C 600°F	Yes	Very Good	Excellent	
KZ	Fused Kapton Tape .004"	-	None Twisted	-	316°C 600°F	427°C 800°F	Yes (Tracers)	Excellent	Excellent	FEP binder melts at approx. 260°C (500°F)
KK	Fused Kapton .006" on 24 ga. .004" on 20 ga.	-	Fused Kapton .006" on 24 ga. .004" on 20 ga.	-	316°C 600°F	427°C 800°F	Yes (Tracers)	Excellent	Excellent	FEP binder melts at approx. 260°C (500°F)
*Mylar, Teflon, Kapton - Trade names of E. I. du Pont de Nemours & Co.										

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