



Thermocouple Grade Wire Single Pair - XLPE, XLPE/MICA, Silicone Rubber and Kapton® Insulated

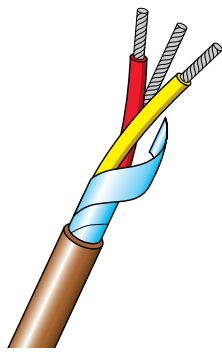


**A range of XLPE (including Intrinsically Safe),
XLPE/MICA, Silicone Rubber and Kapton®
insulated single pair Thermocouple Grade Wire
available from stock**

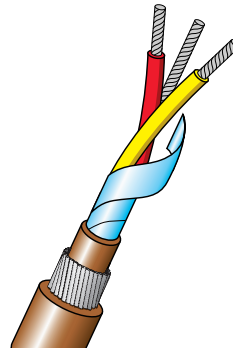
XLPE Thermocouple Grade Wire

XLPE Insulated Twisted with Shield (Low Smoke and Fume) -22°F to +158°F

- Incorporates XLPE (Cross Linked Polyethylene) compound on the cores and Low Smoke and Fume (LSF) material on the bedding and/or outer sheath
- These wire meet the requirements of IEC 60332.3 Category A covering tests on wire in fire conditions
- Ideal for situations where there is a risk of fire and the emission of smoke and gases could threaten life and property
- The acidic gas evolved during combustion is less than 0.5% in accordance with IEC 60754.1: 1996



XLPE insulated, Twisted with Shield (LSF)
One pair of **stranded** conductors. Cores XLPE insulated. Pair twisted, shielded with Mylar® aluminium tape and drain wire. LSF sheathed overall.



XLPE insulated, Twisted with Shield and Armor (LSF)
One pair of **stranded** conductors. Cores XLPE insulated. Pair twisted, shielded with Mylar® aluminium tape and drain wire. LSF bedded. Steel wire armored and LSF sheathed.

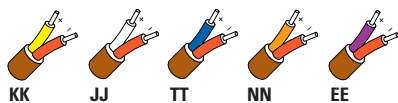
Stock Number		G29	G31	G94	G95
CONDUCTORS	Wire Type (number of strands x AWG)	16x32	24x32	16x32	24x32
	Total Wire Size - AWG (S = Stranded)	20S	18S	20S	18S
	Total Area (mm ²)	0.5	0.75	0.5	0.75
	Insulation	XLPE		XLPE	
PAIRS	Number of Pairs	1		1	
	Conductor Configuration	Twisted		Twisted	
	Shielded*	Yes		Yes	
OVERALL	Insulation	LSF		LSF	
	Insulation Rating (°F)	Continuous		-22 to +158	
		Short Term		+190	
	Color Coding	Yes		Yes	
	Physical Properties	Abrasion Resistance		Good	
		Moisture Resistance		Very Good	
		Typical Weight (lbs/1000ft) (excluding reel)		130	150
	Diameter under Armor (inches)	—		0.22"	0.24"
	Diameter over Armor (inches)	—		0.31"	0.32"
	Overall Diameter† (inches)	0.24"	0.26"	0.41"	0.44"
Notes		Excellent for fire risk areas. Free of halogens. Round section. Rejects electromagnetic and electrostatic interference.		Excellent for fire risk areas. Free of halogens. Round section. Rejects electromagnetic and electrostatic interference. Armored for mechanical strength.	

* Aluminised Mylar® tape in contact throughout by a bare 7/0.3mm diameter tinned copper drainwire.

† These values are nominal and if critical to your application, please request a physical check.

The wire constructions can also be manufactured to any other color coding requirement that you may have, but might be subject to a minimum ordering quantity. If you have any specific requirements regarding wire lengths please let us know so that we may make a satisfactory offer to meet your needs.

Color Codes available Thermocouple Grade to ANSI MC96.1



Order Code - Example

Stock No.	Thermocouple Type	Color Code
G29	- KK	- ANSI

ALSO AVAILABLE as Extension Grade to ANSI MC96.1



Thermocouple wire is available in the following types: KK, JJ, TT, NN or EE. Other less popular thermocouple types are available on request.

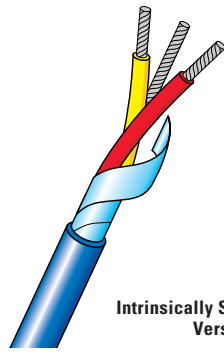
Thermocouple wire is normally available from us for **immediate** delivery from stock to ANSI MC96.1 colour coding.

IEC colors are available on request

XLPE Thermocouple Grade Wire

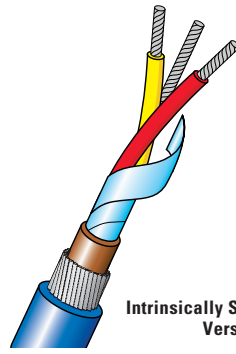
Intrinsically Safe XLPE Insulated Twisted with Shield (Low Smoke and Fume) -22°F to +158°F

- Incorporates XLPE (Cross Linked Polyethylene) compound on the cores and Low Smoke and Fume (LSF) material on the bedding and/or outer sheath
- These wire meet the requirements of IEC 60332.3 Category A covering tests on wire in fire conditions
- Ideal for situations where there is a risk of fire and the emission of smoke and gases could threaten life and property
- The acidic gas evolved during combustion is less than 0.5% in accordance with IEC 60754.1: 1996



Intrinsically Safe Version

XLPE insulated, Twisted with Shield (LSF)
One pair of **stranded** conductors. Cores XLPE insulated. Pair twisted, shielded with Mylar® aluminium tape and drain wire. LSF sheathed overall.



Intrinsically Safe Version

XLPE insulated, Twisted with Shield and Armor (LSF)
One pair of **stranded** conductors. Cores XLPE insulated. Pair twisted, shielded with Mylar® aluminium tape and drain wire. LSF bedded. Steel wire armored and LSF sheathed.

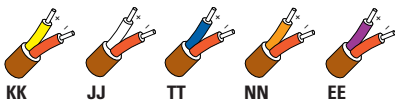
Stock Number		GS29	GS31	GS94	GS95
CONDUCTORS	Wire Type (number of strands x AWG)	16x32	24x32	16x32	24x32
	Total Wire Size - AWG (S = Stranded)	20S	19S	20S	19S
	Total Area (mm ²)	0.5	0.75	0.5	0.75
	Insulation	XLPE		XLPE	
PAIRS	Number of Pairs	1		1	
	Conductor Configuration	Twisted		Twisted	
	Shielded*	Yes		Yes	
OVERALL	Insulation	LSF		LSF	
	Insulation Rating (°F)	Continuous		-22 to +158	
		Short Term		+190	
	Color Coding	Yes		Yes	
	Physical Properties	Abrasion Resistance		Good	
		Moisture Resistance		Very Good	
		Typical Weight (lbs/1000ft) (excluding reel)		Very Good	
	Diameter under Armor (inches)	—		0.22"	0.30"
	Diameter over Armor (inches)	—		0.24"	0.32"
	Overall Diameter† (inches)	0.24"	0.26"	0.41"	0.44"
Notes		Excellent for fire risk areas. Free of halogens. Round section. Rejects electromagnetic and electrostatic interference.		Excellent for fire risk areas. Free of halogens. Round section. Rejects electromagnetic and electrostatic interference. Armored for mechanical strength.	

* Aluminised Mylar® tape in contact throughout by a bare 7/0.3mm diameter tinned copper drainwire.

† These values are nominal and if critical to your application, please request a physical check.

The wire constructions can also be manufactured to any other color coding requirement that you may have, but might be subject to a minimum ordering quantity. If you have any specific requirements regarding wire lengths please let us know so that we may make a satisfactory offer to meet your needs.

Color Codes available Thermocouple Grade to ANSI MC96.1



Order Code - Example

Stock No.	Thermocouple Type	Color Code
GS29	- KK	- ANSI

ALSO AVAILABLE as Extension Grade to ANSI MC96.1



Thermocouple wire is available in the following types: KK, JJ, TT, NN or EE. Other less popular thermocouple types are available on request.

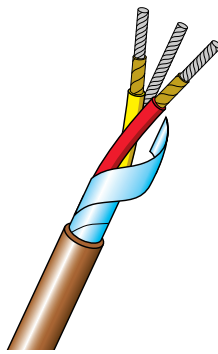
Thermocouple wire is normally available from us for **immediate** delivery from stock to ANSI MC96.1 colour coding.

IEC colors are available on request

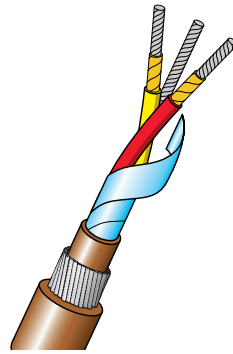
MICA/XLPE Thermocouple Grade Wire

Fire Resistant MICA/XLPE Low Smoke and Fume -22°F to +165°F

- Resistant to a temperature of 750°C for at least three hours in accordance with the flame test requirements of IEC 60331
- Essential for situations where it is of strategic importance to ensure that the cable continues to function during a major crisis involving fire
- The cable incorporates a high temperature rated Mica glass tape with a XLPE (Cross Linked Polyethylene) insulation on the cores and Low Smoke and Fume material on the bedding and/or outer sheath
- Sheathing materials are Halogen free



Mica Taped XLPE insulated, Twisted with Shield (LSF)
One pair of **stranded** conductors Mica taped and XLPE insulated. Pair twisted. Shielded with Mylar® aluminium tape and drainwire. LSF sheathed.



Mica Taped XLPE insulated, Twisted with Shield & Armor (LSF)
One pair of **stranded** conductors Mica taped and XLPE insulated. Pair twisted. shielded with Mylar® aluminium tape and drain wire. LSF bedded. Steel wire armored and LSF sheathed.

Stock Number		G98	G97	G99	G96
CONDUCTORS	Wire Type (number of strands x AWG)	16x32	23x32	16x32	23x32
	Total Wire Size - AWG (S = Stranded)	S20	S19	20S	19S
	Total Area (mm ²)	0.5	0.75	0.5	0.75
	Insulation	MICA and XLPE		MICA and XLPE	
PAIRS	Number of Pairs	1		1	
	Conductor Configuration	Twisted		Twisted	
	Shielded*	Yes		Yes	
OVERALL	Insulation	LSF		LSF	
	Insulation Rating (°F)	Continuous		-22 to +158	
		Short Term		+190	
	Color Coding	Yes		Yes	
	Physical Properties	Abrasion Resistance		Good	
		Moisture Resistance		Very Good	
		Typical Weight (lbs/1000ft) (excluding reel)		Very Good	
	Diameter under Armor (inches)	—		0.28"	0.34"
	Diameter over Armor (inches)	—		0.35"	0.41"
	Overall Diameter† (inches)	0.28"	0.33"	0.47"	0.54"
Notes		Excellent for signal continuity in the event of a fire. Free of halogens. Round section. Rejects electromagnetic and electrostatic interference.		Excellent for signal continuity in the event of a fire. Free of halogens. Round section. Rejects electromagnetic and electrostatic interference. Armored for mechanical strength.	

* Aluminised Mylar® tape in contact throughout by a bare 7/0.3mm diameter tinned copper drainwire.

† These values are nominal and if critical to your application, please request a physical check.

The wire constructions can also be manufactured to any other color coding requirement that you may have, but might be subject to a minimum ordering quantity. If you have any specific requirements regarding wire lengths please let us know so that we may make a satisfactory offer to meet your needs.

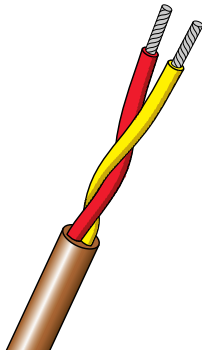
Color Codes available Thermocouple Grade to ANSI MC96.1		Order Code - Example		
 KK JJ TT NN EE		Stock No.	Thermocouple Type	Color Code
		G98	- KK -	ANSI
ALSO AVAILABLE as Extension Grade to ANSI MC96.1		Thermocouple wire is available in the following types: KK, JJ, TT, NN or EE. Other less popular thermocouple types are available on request.		
 KX JX TX NX EX SX RX		Thermocouple wire is normally available from us for immediate delivery from stock to ANSI MC96.1 colour coding.		

IEC colors are available on request

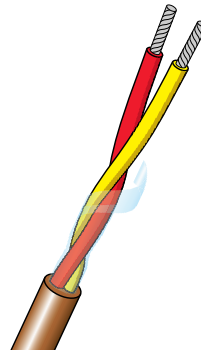
Silicone Rubber Thermocouple Grade Wire

Flame Retardant Silicone Rubber Insulated Single Pairs -40°F to +390°F

- Excellent properties for the reduced propagation of flame by incorporation of flame retardant Silicone Rubber compounds
- Suitable for situations where there is a risk of fire. (See also our range of XLPE/LSF wire shown on page 4)
- Ideal for applications where, for short periods of time, the temperature can fluctuate, which would cause other wire to become inflexible and brittle. These wire also meet the requirements of IEC 60332.1 covering tests on wire under fire conditions



Flame Retardant Silicone Rubber insulated, Twisted Pair
One pair of **stranded** conductors. Cores PFA insulated. Silicone Rubber sheathed.



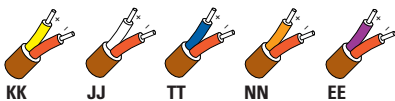
Flame Retardant Silicone Rubber insulated, Twisted Pair with Mylar® Tape
One pair of **stranded** conductors. Cores Silicone Rubber insulated. Pair twisted and Mylar® taped. Silicone Rubber sheathed.

Stock Number			SR30	SR31	SR73	SR77	SR80	
CONDUCTORS	Wire Type (number of strands x AWG)		7x32	7x32	7x28	19x28	16x32	
	Total Wire Size - AWG (S = Stranded)		24S	24S	20S	16S	20S	
			0.22	0.22	0.49	1.34	0.5	
	Insulation		PFA	FR Silicone Rubber	Flame Retardant Silicone Rubber			
PAIRS	Number of Pairs		1		1			
	Conductor Configuration		Twisted		Twisted			
	Shielded*		No		No			
OVERALL	Insulation		Flame Retardant Silicone Rubber		Flame Retardant Silicone Rubber			
	Insulation Rating (°F)	Continuous	-40 to +390		-40 to +390			
		Short Term	-50 to +480		-50 to +480			
	Color Coding		Yes		Yes			
	Physical Properties	Abrasion Resistance		Good		Good		
		Moisture Resistance		Very Good		Very Good		
		Typical Weight (lbs/1000ft) (excluding reel)		7	28	28	55	31
	Diameter under Armor (inches)		—		—			
	Diameter over Armor (inches)		—		—			
Overall Diameter [†] (inches)		0.12”	0.18”	0.28”	0.33”	0.24”		
Notes			Flame retardant. Round section. Rejects electromagnetic interference.		Flame retardant. Round section. Rejects electromagnetic interference.			

† These values are nominal and if critical to your application, please request a physical check.

The wire constructions can also be manufactured to any other color coding requirement that you may have, but might be subject to a minimum ordering quantity. If you have any specific requirements regarding wire lengths please let us know so that we may make a satisfactory offer to meet your needs.

Color Codes available Thermocouple Grade to ANSI MC96.1



ALSO AVAILABLE as Extension Grade to ANSI MC96.1



Order Code - Example

Stock No.	Thermocouple Type	Color Code
SR80	- KK	- ANSI

Thermocouple wire is available in the following types: KK, JJ, TT, NN or EE. Other less popular thermocouple types are available on request.

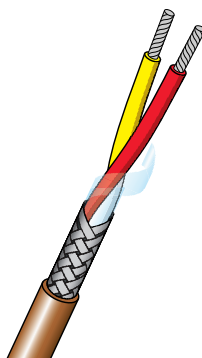
Thermocouple wire is normally available from us for **immediate** delivery from stock to ANSI MC96.1 colour coding.

IEC colors are available on request

Silicone Rubber Thermocouple Grade Wire

Flame Retardant Silicone Rubber Insulated Single Pairs -40°F to +390°F

- Excellent properties for the reduced propagation of flame by incorporation of flame retardant Silicone Rubber compounds
- Suitable for situations where there is a risk of fire. (See also our range of XLPE/LSF wire shown on page 4)
- Ideal for applications where, for short periods of time, the temperature can fluctuate, which would cause other wire to become inflexible and brittle. These wire also meet the requirements of IEC 60332.1 covering tests on wire under fire conditions



Flame Retardant Silicone Rubber, Twisted Pair with Nickel Plated Copper Braid
One pair of stranded conductors. Cores Silicone Rubber insulated. Pair twisted and Mylar® taped with nickel plated copper braid. Silicone Rubber sheathed.

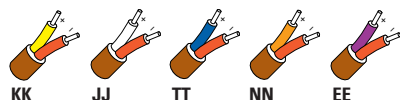
Stock Number		SR35	SR74	SR76	SR78	SR79		
CONDUCTORS	Wire Type (number of strands x AWG)		7x32	7x28	16x32	19x28	48x32	
	Total Wire Size - AWG (S = Stranded)		24S	20S	20S	16S	15S	
	Total Area (mm ²)		0.22	0.49	0.5	1.34	1.5	
	Insulation		Flame Retardant Silicone Rubber					
PAIRS	Number of Pairs		1					
	Conductor Configuration		Twisted					
	Shielded*		Yes					
OVERALL	Insulation		Flame Retardant Silicone Rubber					
	Insulation Rating (°F)	Continuous	-40 to +390					
		Short Term	-50 to +480					
	Color Coding		Yes					
	Physical Properties	Abrasion Resistance		Good				
		Moisture Resistance		Very Good				
		Typical Weight (lbs/1000ft) (excluding reel)		21	43	68	68	75
	Diameter under Armor (inches)		—					
	Diameter over Armor (inches)		—					
Overall Diameter [†] (inches)								
Notes		Flame retardant. Round section. Rejects electromagnetic interference.						

* Where wire incorporate a metal braid, the braid can be used as a shield.

† These values are nominal and if critical to your application, please request a physical check.

The wire constructions can also be manufactured to any other color coding requirement that you may have, but might be subject to a minimum ordering quantity. If you have any specific requirements regarding wire lengths please let us know so that we may make a satisfactory offer to meet your needs.

Color Codes available Thermocouple Grade to ANSI MC96.1



ALSO AVAILABLE as Extension Grade to ANSI MC96.1



Order Code - Example

Stock No.	Thermocouple Type	Color Code
SR76	- KK	- ANSI

Thermocouple wire is available in the following types: KK, JJ, TT, NN or EE. Other less popular thermocouple types are available on request.

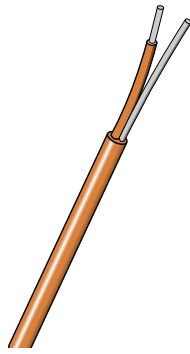
Thermocouple wire is normally available from us for **immediate** delivery from stock to ANSI MC96.1 colour coding.

IEC colors are available on request

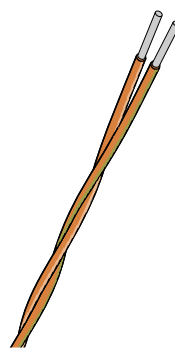
Kapton® Thermocouple Grade Wire

Kapton® Insulated Parallel Construction and Twisted Pair Wire -100°F to +545°F

- Suitable for temperatures ranging from -100°F to +545°F
- Flame retardant with resistance to chemicals and radiation
- Excellent physical, electrical and mechanical properties over high temperatures
- Has high dielectric strength and excellent abrasion resistance



Kapton® Laid Parallel Pair
One pair of **solid** conductors. Negative leg Kapton insulated. Pair laid flat and Kapton sheathed.



Kapton® Twisted Pair
One pair of **solid** or **stranded** Kapton insulated. Pair twisted.

Stock Number		B08	B09	B02
CONDUCTORS	Wire Type (number of strands x AWG)	Solid	Solid	7x32
	Total Wire Size - AWG (S = Stranded)	30	24	24S
	Total Area (mm ²)	0.05	0.2	0.22
	Insulation	Kapton®	Kapton®	
PAIRS	Number of Pairs	1	1	
	Conductor Configuration	Laid Flat	Twisted	
	Shielded	No	No	
OVERALL	Insulation	Kapton®	—	
	Insulation Rating (°F)	Continuous	-100 to +545	
		Short Term	+750	
	Color Coding	No	No	
	Physical Properties	Abrasion Resistance	Very Good	
		Moisture Resistance	Fair	
		Typical Weight (lbs/1000ft) (excluding reel)	<7	
	Diameter under Armor (inches)	—	—	—
	Diameter over Armor (inches)	—	—	—
	Overall Diameter† (inches)	0.03"	0.05"	0.06"
Notes		Egg shaped construction	Rejects electromagnetic interference.	

† These values are nominal and if critical to your application, please request a physical check.

The wire constructions can also be manufactured to any other color coding requirement that you may have, but might be subject to a minimum ordering quantity. If you have any specific requirements regarding wire lengths please let us know so that we may make a satisfactory offer to meet your needs.

Order Code - Example	
Stock No.	Thermocouple Type
B08	- KK
Thermocouple wire is available in the following types: KK, JJ, TT, NN or EE. Other less popular thermocouple types are available on request.	
These cables are normally available from us for immediate delivery from stock.	



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