

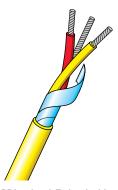
XLPE, XLPE/MICA, Silicone Rubber and Kapton® Insulated Thermocouple Cables - Single Pairs and Multipairs



XLPE Insulated Single Pair Thermocouple Cable

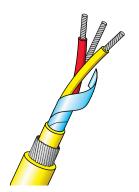
XLPE Insulated Twisted with Screen (Low Smoke and Fume) -30°C to +70°C

- Incorporates XLPE (Cross Linked Polyethylene) compound on the cores and Low Smoke and Fume (LSF) material on the bedding and/or outer sheath
- These cables meet the requirements of BS4066 Part 3/IEC 60332.3 Category A covering tests on cables 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 BS6425 Pt 1 1990 and IEC 60754.1: 1996



XLPE insulated, Twisted with Screen (LSF)

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

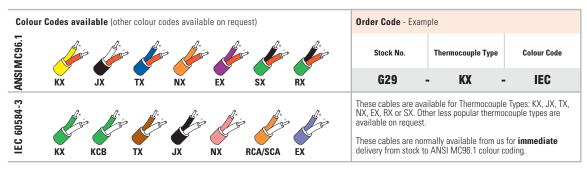


XLPE insulated, Twisted with Screen and Armour (LSF)

One pair of **stranded** conductors. Cores XLPE insulated. Pair twisted, screened with Mylar® aluminium tape and drain wire. LSF bedded. Steel wire armoured

		Stock Number	G29	G31	G94	G95	
S	Conductor Style		Strai	nded	Stra	nded	
CONDUCTORS	No. of Strands / S	trand Diameter (mm)	16/0.2	23/0.2	16/0.2	23/0.2	
)nc	Total Area (mm²)		0.5	0.75	0.5	0.75	
ONI	Total AWG (S = S	tranded)	20S	18S	20S	18S	
Ö	Insulation		XL	PE	XL	PE	
S	Number of Pairs		1			1	
PAIRS	Laid Flat or Twist	ed	Twi	sted	Twi	sted	
Δ.	Screen*		Ye	es	Yes		
	Insulation		LS	SF	LSF		
	Insulation	Continuous	-30 to	o +70	-30 to +70		
	Rating (°C)	Short Term	+90		+5	90	
_	Colour Coding		Ye	es	Yes		
OVERALL		Abrasion Resistance	Go	od	Good		
VE	Physical Properties	Moisture Resistance	Very Good		Very Good		
J		Typical Weight (Kg/100m) (excluding reel)	4	5	19	22	
	Diameter under A	rmour (mm)	_	_	5.5	6.0	
	Diameter over Armour (mm)		_	_	7.5	8.0	
	Overall Diameter	† (mm)	6.0	6.5	10.5	11.0	
Notes			Excellent for fire risk halogens. Round sec electromagnetic and interference.	ction. Rejects	Excellent for fire rist halogens. Round see electromagnetic and interference. Armou strength.	ction. Rejects d electrostatic	

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

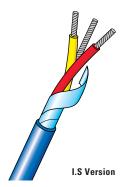


[†] These values are nominal and if critical to your application, please request a physical check.

XLPE Insulated Single Pair Thermocouple Cable

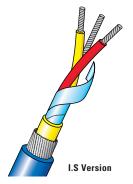
Intrinsically Safe XLPE Insulated Twisted with Screen (Low Smoke and Fume) -30°C to +70°C

- Incorporates XLPE (Cross Linked Polyethylene) compound on the cores and Low Smoke and Fume (LSF) material on the bedding and/or outer sheath
- These cables meet the requirements of BS4066 Part 3/IEC 60332.3 Category A covering tests on cables 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 BS6425 Pt 1 1990 and IEC 60754.1: 1996



XLPE insulated, Twisted with Screen (LSF)

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

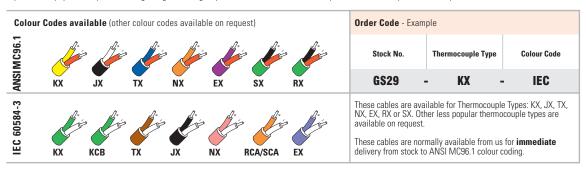


XLPE insulated, Twisted with Screen and Armour (LSF)

One pair of **stranded** conductors. Cores XLPE insulated. Pair twisted, screened with Mylar® aluminium tape and drain wire. LSF bedded. Steel wire armoured and LSF sheathed.

		Stock Number	GS29	GS31	GS94	GS95	
S	Conductor Style		Stra	nded	Stra	nded	
CONDUCTORS	No. of Strands / S	trand Diameter (mm)	16/0.2	23/0.2	16/0.2	23/0.2	
000	Total Area (mm²)		0.5	0.75	0.5	0.75	
ONC	Total AWG (S = S	tranded)	20S	18S	20S	18S	
2	Insulation		XL	.PE	XL	PE	
S	Number of Pairs			1		1	
PAIRS	Laid Flat or Twist	ted	Twi	sted	Twi	sted	
4	Screen*		Υ	es	Yes		
	Insulation		L	SF	LSF		
	Insulation	Continuous	-30 t	o +70	-30 to +70		
	Rating (°C)	Short Term	+90		+5	90	
_	Colour Coding		Υ	es	Yes		
OVERALL		Abrasion Resistance	Go	ood	Good		
VE	Physical Properties	Moisture Resistance	Very	Good	Very Good		
0		Typical Weight (Kg/100m) (excluding reel)	4	4	19	22	
	Diameter under A	Armour (mm)	_	_	5.5	6.0	
	Diameter over Armour (mm)		_	_	7.5	8.0	
	Overall Diameter	† (mm)	6.0	6.5	10.5	11.0	
		Notes	Excellent for fire ris halogens. Round se electromagnetic and interference.	ction. Rejects	Excellent for fire rist halogens. Round see electromagnetic and interference. Armou strength.	ction. Rejects I electrostatic	

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

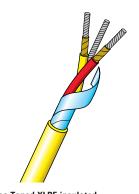


[†] These values are nominal and if critical to your application, please request a physical check.

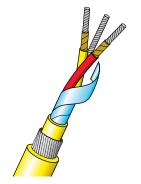
MICA/XLPE Insulated Single Pair Thermocouple Cable

Fire Resistant MICA/XLPE Low Smoke and Fume -30°C to +70°C

- 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



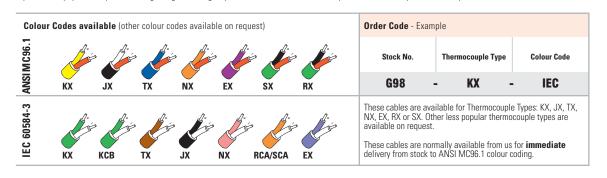
Mica Taped XLPE insulated, Twisted with Screen (LSF) One pair of stranded conductors Mica taped and XLPE insulated. Pair twisted. Screened with Mylar aluminium tape and drainwire. LSF sheathed.



Mica Taped XLPE insulated, Twisted with Screen & Armour (LSF) One pair of stranded conductors Mica taped and XLPE insulated. Pair twisted. Screened with Mylar® aluminium tape and drain wire. LSF bedded. Steel wire armoured and LSF sheathed.

Stock Number		G98	G 97	G99	G 96		
S	Conductor Style		Stra	nded	Stranded		
CONDUCTORS	No. of Strands / S	trand Diameter (mm)	16/0.2	23/0.2	16/0.2	23/0.2	
.00	Total Area (mm²)		0.5	0.75	0.5	0.75	
OND	Total AWG (S = S	tranded)	20S	18S	20S	18S	
2	Insulation		MICA a	nd XLPE	MICA a	nd XLPE	
S	Number of Pairs			1		1	
PAIRS	Laid Flat or Twist	ed	Twi	sted	Twi	sted	
Д.	Screen*		Y	es	Yes		
	Insulation		L	SF	LSF		
	Insulation	Continuous	-30 t	o +70	-30 to +70		
	Rating (°C)	Short Term	+	90	+	90	
_	Colour Coding		Y	es	Yes		
OVERALL		Abrasion Resistance	Go	ood	Good		
VE	Physical Properties	Moisture Resistance	Very Good		Very	Good	
0		Typical Weight (Kg/100m) (excluding reel)	5	6.7	16.6	23	
	Diameter under A	rmour (mm)	_	_	7.0	8.6	
	Diameter over Armour (mm)		_	_	9.0	10.4	
	Overall Diameter [†] (mm)		7.0	8.4	12.0	13.6	
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 Free of halogens. Round section. Rejects electromagnetic and electrostatic interference. Armoured for mechanical strength.			

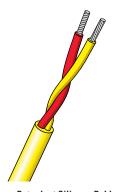
Aluminised Mylar® tape in contact throughout by a bare 7/0.3mm diameter tinned copper drainwire.
 These values are nominal and if critical to your application, please request a physical check.



Silicone Rubber Insulated Thermocouple Cable

Flame Retardant Silicone Rubber Insulated Single Pairs -40°C to +200°C

- 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 cables shown on page 4)
- Ideal for applications where, for short periods of time, the temperature can fluctuate, which would cause other cables to become inflexible and brittle. These cables also meet the requirements of BS4066 Pt1 / IEC 60332.1 covering tests on cables under fire conditions



Flame Retardant Silicone Rubber insulated, Twisted Pair

One pair of **stranded** conductors. Cores PFA insulated. Silicone Rubber sheathed.

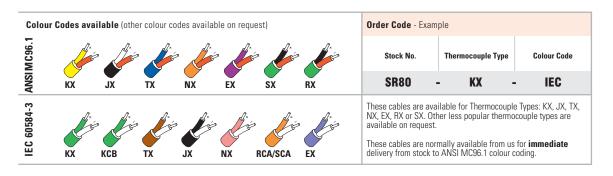


Flame Retardant Silicone Rubber insulated, Twisted Pair with Mylar® Tape

One pair of **stranded** conductors. Cores Silicone Rubber insulated. Pair twisted and Mylar® taped. Silicone Rubber sheathed.

		Stock Number	SR30	SR31	SR73	SR77	SR80
so.	Conductor Style		Str	anded	Stranded		
CONDUCTORS	No. of Strands /	Strand Diameter (mm)	7/0.2	7/0.2	7/0.3	16/0.3	16/0.2
20	Total Area (mm	²)	0.22	0.22	0.49	1.34	0.5
2	Total AWG (S =		24S	24\$	21\$	16S	20S
3	Insulation		PFA	FR Silicone Rubber			
_	Number of Pairs	3		1		1	
SUL	Laid Flat or Twi	sted	Tv	visted		Twisted	
	Screen			No	No		
	Insulation		Flame Retarda	nt Silicone Rubber	Flame Retardant Silicone Rubber		
	Insulation	Continuous	-40	to +200	-40 to +200		
	Rating (°C)	Short Term	-50	to +250	-50 to +250		
	Colour Coding			Yes	Yes		
H		Abrasion Resistance	(Good	Good		
JVERALL	Physical Properties	Moisture Resistance	Very Good			Very Good	
>		Typical Weight (Kg/100m) (excluding reel)	1	4	4	8	4.5
	Diameter under	Diameter under Armour (mm)		_			
	Diameter over A	Armour (mm)		_			
	Overall Diamete	er [†] (mm)	3.0	4.5	7.0	8.5	6
		Notes	Flame retardant. F electromagnetic in	Round section. Rejects nterference.	Flame retardant. Ro interference.	und section. Rejects e	lectromagnetic

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



Silicone Rubber Insulated Thermocouple Cable

Flame Retardant Silicone Rubber Insulated Single Pairs -40°C to +200°C

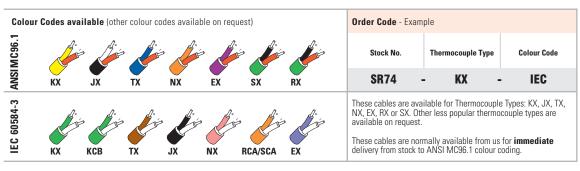
- Excellent properties for the reduced propagation of flame by incorporation of flame retardant Silicone Rubber compounds
- Suitable for situations where there is a risk of fire. (See also our range of XLPE/LSF cables shown on page 4)
- Ideal for applications where, for short periods of time, the temperature can fluctuate, which would cause other cables to become inflexible and brittle. These cables also meet the requirements of BS4066 Pt1 / IEC 60332.1 covering tests on cables 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		
۲۵.	Conductor Style		Stranded						
CONDUCTORS	No. of Strands / S	trand Diameter (mm)	7/0.2	7/0.3	16/0.2	19/0.3	48/0.2		
5	Total Area (mm²)		0.22	0.49	0.5	1.34	1.5		
	Total AWG (S = S	tranded)	24S	21S	20S	16S	15S		
ວັ	Insulation			Flame R	etardant Silicone	Rubber			
S	Number of Pairs				1				
PAIRS	Laid Flat or Twist	ed			Twisted				
₽.	Screen*		Yes						
	Insulation		Flame Retardant Silicone Rubber						
	Insulation	Continuous	-40 to +200						
	Rating (°C)	Short Term	-50 to +250						
_	Colour Coding		Yes						
3AL		Abrasion Resistance			Good				
OVERALL	Physical Properties	Moisture Resistance			Very Good				
0		Typical Weight (Kg/100m) (excluding reel)	3	6.3	10	10	11		
	Diameter under A	rmour (mm)			_				
	Diameter over Ar	mour (mm)			_				
	Overall Diameter	† (mm)	4.5	6.5	6.5	8	8		
		Notes	Flame retardant. Ro	und section. Rejects e	lectromagnetic interf	erence.			

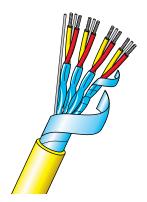
* Aluminised Mylar® tape in contact throughout by a bare 7/0.3mm diameter tinned copper drainwire. Where cables incorporate a metal braid, the braid can be used as a screen.
† These values are nominal and if critical to your application, please request a physical check.



Silicone Rubber Insulated Thermocouple Cable

Non Armoured Flame Retardant Silicone Rubber Insulated Multipairs -40°C to +200°C

- Extremely useful where there is a need to run a number of thermocouple signals back to instrumentation
- 16/0.2mm (0.5mm²) diameter conductors with an individual and collective screen. Cores, bedding and overall sheath in flame retardant Silicone Rubber
- Ideal for applications where, for short periods of time, the temperature can fluctuate, which would cause other cables to become inflexible and brittle. These cables also meet the requirements of BS4066 Pt1 / IEC 60332.1 covering tests on cables under fire conditions

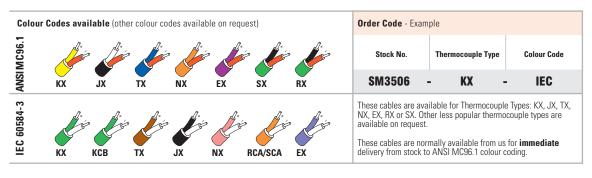


Non Armoured Flame Retardant Silicone Rubber Multipair

Multipairs of stranded 16/0.2mm diameter conductors FR Silicone Rubber insulated. Pairs numbered, twisted and individually screened with Mylar® aluminium tape with a drainwire. Pairs laid up, overall screened with Mylar® aluminium tape with a drainwire. Flame Retardant Silicone Rubber sheathed.

		Stock Number	SM3502	SM3504	SM3506			
တ	Conductor Style			Stranded				
CONDUCTORS	No. of Strands / S	trand Diameter (mm)	16/0.2	16/0.2	16/0.2			
	Total Area (mm²)		0.5	0.5	0.5			
	Total AWG (S = S	tranded)	20S	20\$	20\$			
5	Insulation		Fla	ame Retardant Silicone Rubb	er			
,	Number of Pairs		2	4	6			
PAIRS	Laid Flat or Twist	ed		Twisted				
۶ ج	Screen*		Ye	s - Individually Screened Pa	irs			
	Insulation		Flame Retardant Silicone Rubber					
	Insulation	Continuous						
	Rating (°C) Short Term		-50 to +250					
	Colour Coding		Yes					
ן :	Screen*		Y	Yes - Collective, Overall Screen				
		Abrasion Resistance		Good				
	Physical Properties	Moisture Resistance	Very Good					
	•	Typical Weight (Kg/100m) (excluding reel)	9 13		20			
- 1	Diameter under Armour (mm)		_					
	Diameter over Ar	mour (mm)		_				
Overall Diameter [†] (mm)		9.8	10.8	13				

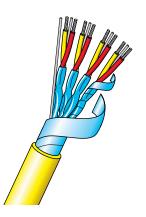
Aluminised Mylar® tape in contact throughout by a bare 7/0.3mm diameter tinned copper drainwire. These values are nominal and if critical to your application, please request a physical check.



XLPE Insulated Multipair Thermocouple Cable

16/0.2mm Non Armoured Flame Retardant XLPE Insulated Multipairs -30°C to +70°C

- These cables meet the requirements of BS4066 Part 3/IEC 60332.3 Category A covering tests on cables under fire conditions and are ideal for situations where there is a risk of fire and the emission of smoke and gases could threaten life and property
- The sheathing materials used are Halogen
- The acidic gas which is evolved during combustion is less than 0.5% in accordance with BS6425 Pt 1 and IEC 60754 Pt 1
- The Oxygen Index Value is not less than 30 in accordance with BS2782:2007 Part 1 Method

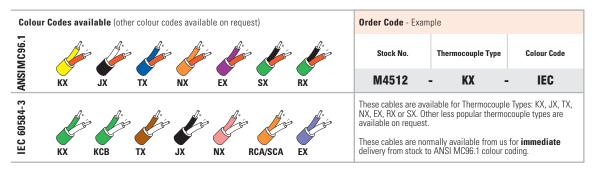


Non Armoured XLPE Multipair

Multipairs of stranded 16/0.2mm dia conductors XLPE insulated. Pairs numbered, twisted and individually screened with Mylar® aluminium tape with a drainwire. Pairs laid up, overall screened with Mylar® aluminium tape with a drainwire. LSF sheathed.

		Stock Number	M4502	M4504	M4506	M4508	M4512	M4516	M4520	M4524	M4536	
S	Conductor Style		Stranded									
TOR	No. of Strands /	Strand Diameter (mm)	16/0.2	16/0.2	16/0.2	16/0.2	16/0.2	16/0.2	16/0.2	16/0.2	16/0.2	
CONDUCTORS	Total Area (mm²)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
ON C	Total AWG (S = S	Stranded)	20S	20S	20S	20S	20S	20S	20S	20S	20S	
2	Insulation						XLPE					
S	Number of Pairs		2	4	6	8	12	16	20	24	36	
PAIRS	Laid Flat or Twis	Laid Flat or Twisted			Twisted							
Δ.	Screen*					Yes - Indiv	idually Scre	ened Pairs				
	Insulation		LSF									
	Insulation	Insulation Continuous		-30 to +70								
	Rating (°C)	Short Term	+90									
	Colour Coding		Yes									
=	Screen*					Yes - Coll	ective, Over	all Screen				
OVERALL		Abrasion Resistance	Good									
0	Physical Properties	Moisture Resistance					Very Good					
		Typical Weight (Kg/100m) (excluding reel)	11	17	23	31	45	60	74	89	120	
	Diameter under	Armour (mm)					_					
	Diameter over A	rmour (mm)					_					
	Overall Diamete	r [†] (mm)	10.5	12.5	15.2	16.1	20.4	22.8	24.9	28.4	33.2	

Notes | Excellent for fire risk areas. Free of halogens. Individually and collectively screened

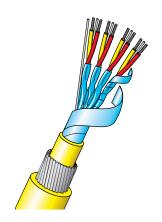


Aluminised Mylar $^{\oplus}$ tape in contact throughout by a bare 7/0.3mm diameter tinned copper drainwire. These values are nominal and if critical to your application, please request a physical check.

XLPE Insulated Multipair Thermocouple Cable

16/0.2mm Armoured Flame Retardant XLPE Insulated Multipairs -30°C to +70°C

- These cables meet the requirements of BS4066 Part 3/IEC 60332.3 Category A covering tests on cables under fire conditions and are ideal for situations where there is a risk of fire and the emission of smoke and gases could threaten life and property
- The sheathing materials used are Halogen
- The acidic gas which is evolved during combustion is less than 0.5% in accordance with BS6425 Pt 1 and IEC 60754 Pt 1
- The Oxygen Index Value is not less than 30 in accordance with BS2782:2007 Part 1 Method

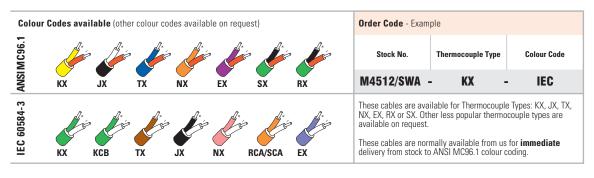


Armoured XLPE Multipair

Multipairs of stranded 16/0.2mm dia conductors XLPE insulated. Pairs numbered, twisted and individually screened with Mylar® aluminium tape with a drainwire. Pairs laid up, overall screened with Mylar® aluminium tape with a drainwire XLPE bedded. Steel wire armoured and LSF sheathed.

		Stock Number	M4502/ SWA	M4504/ SWA	M4506/ SWA	M4508/ SWA	M4512/ SWA	M4516/ SWA	M4520/ SWA	M4524/ SWA	M4536/ SWA
S	Conductor Style	onductor Style Stranded									
TOR	No. of Strands / S	Strand Diameter (mm)	16/0.2	16/0.2	16/0.2	16/0.2	16/0.2	16/0.2	16/0.2	16/0.2	16/0.2
.00	Total Area (mm²)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
CONDUCTORS	Total AWG (S = S	Stranded)	20S	20S	20S	20S	20S	20S	20S	20S	20S
2	Insulation						XLPE				
S	Number of Pairs		2	4	6	8	12	16	20	24	36
PAIRS	Laid Flat or Twis	ted					Twisted				
ď	Screen*			Yes - Individually Screened Pairs							
	Insulation		LSF								
	Insulation Continuous		-30 to +70								
	Rating (°C)	Short Term	+90								
	Colour Coding			Yes							
=	Screen*					Yes - Coll	ective, Over	all Screen			
OVERALL		Abrasion Resistance	Good								
0	Physical Properties	Moisture Resistance					Very Good				
		Typical Weight (Kg/100m)	35	55	68	84	112	145	168	207	265
	Diameter under	•	10.5	12.5	15.2	16.1	20.4	22.8	24.9	28.4	33.2
	Diameter over A	rmour (mm)	11.9	15.0	17.7	19.3	23.6	26.0	28.1	32.4	37.2
	Overall Diamete	r [†] (mm)	14.7	18.0	20.9	22.5	27.2	29.6	31.9	36.4	41.4

Notes Excellent for fire risk areas. Free of halogens. Individually and collectively screened. Armoured 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.

Kapton® Insulated Single Pair Thermocouple Cable

Kapton® Insulated Laid Flat and Twisted Pair Cables -75°C to +285°C

- Suitable for temperatures ranging from -75°C to +285°C
- 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 Flat Pair One pair of solid conductors. Negative leg Kapton insulated. Pair laid flat and Kapton sheathed.



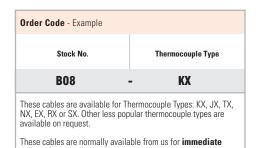
Kapton® Twisted Pair One pair of **solid** or **stranded** Kapton insulated. Pair twisted.

		Stock Number	B08
S	Conductor Style		Stranded
TOR	No. of Strands /	1/0.25	
.00	Total Area (mm²	·)	0.05
CONDUCTORS	Total AWG (S =	Stranded)	30
ပ်	Insulation		Kapton®
S	Number of Pairs	;	1
PAIRS	Laid Flat or Twis	sted	Laid Flat
Д	Screen		No
	Insulation		Kapton®
	Insulation	Continuous	-75 to +285
	Rating (°C)	Short Term	+400
_	Colour Coding		No
OVERALI		Abrasion Resistance	Very Good
VEF	Physical Properties	Moisture Resistance	Fair
0	•	Typical Weight (Kg/100m) (excluding reel)	<1.0
	Diameter under	Armour (mm)	_
	Diameter over A	rmour (mm)	_
	Overall Diamete	r [†] (mm)	<1.0
		Notes	Egg shaped construction

B09	B02						
Strai	Stranded						
1/0.5	7/0.2						
0.2	0.22						
24	24S						
Kapt	ton®						
1							
Twis	sted						
N	0						
_	_						
-75 to	+285						
+4	00						
N	0						
Very	Good						
Fa	ir						
<1.0	<1.0						
_	_						
_	_						
1.4 1.6							
Rejects electromagnetic interference.							

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

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



delivery from stock.

Notes



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