

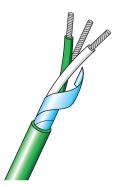
XLPE, XLPE/MICA, Silicone Rubber and Kapton® Insulated Thermocouple Cables - Single and Multipairs



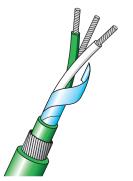
XLPE Insulated Single Pair Thermocouple Cable

Low Smoke Zero Halogen LS0H (LSZH) - XLPE Insulated Twisted with Screen -30°C to +70°C

- XLPE (Cross Linked Polyethylene) insulated cores with a Low Smoke Zero Halogen (LSOH / LSZH) outer sheath
- 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



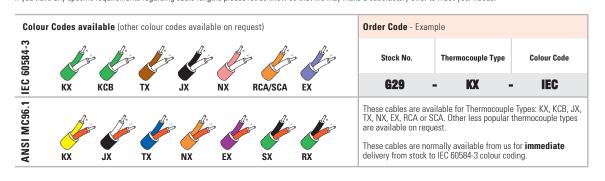
XLPE Insulated, Twisted with Screen, LSOH (LSZH) outer sheath One pair of stranded conductors. Cores XLPE insulated. Pair twisted, screened with Mylar® aluminium tape and drain wire. LSOH (LSZH) sheathed overall.



XLPE insulated, Twisted with Screen and Armour, LSOH (LSZH) outer sheath
One pair of stranded conductors. Cores XLPE insulated. Pair twisted, screened with Mylar® aluminum tape and drain wire. LSOH (LSZH) bedded. Steel wire armoured and LSOH (LSZH) sheathed.

Stock Number		G29	G31	G94	G95		
		Stock Mulliper					
SS	Conductor Style		Stra	nded	Stranded		
5	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	
CONDUCTORS	Total AWG (S = St	tranded)	20S	18S	20S	18S	
2	Insulation		XL	PE	XL	PE	
S	Number of Pairs			1	1		
PAIRS	Laid Flat or Twist	ed	Twi	sted	Twi	sted	
۵	Screen*	creen* Yes				es	
	Insulation		LS0H	(LSZH)	LS0H (LSZH)		
	Insulation	Continuous	-30 t	0 +70	-30 to	+70	
	Rating (°C)	Short Term	+	90	+5	90	
_	Colour Coding		Yes		Yes		
OVERALL		Abrasion Resistance	Go	ood	Go	od	
VE	Physical Properties	Moisture Resistance	Very Good		Very Good		
0		Typical Weight (Kg/100m) (excluding reel)	4	5	19	22	
	Diameter under A	rmour (mm)	_	_		6.0	
	Diameter over Arı	mour (mm)	_	_	7.5	8.0	
	Overall Diameter	t (mm)	6.0	6.5	10.5	11.0	
	Notes		Free of halogens. Ro electromagnetic and interference.	ound section. Rejects I electrostatic	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.



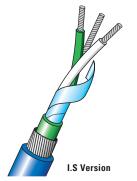
XLPE Insulated Single Pair Thermocouple Cable

Low Smoke Zero Halogen LS0H (LSZH) - XLPE Insulated Twisted with Screen I.S Version -30°C to +70°C

- XLPE (Cross Linked Polyethylene) insulated cores with a Low Smoke Zero Halogen (LSOH / LSZH) outer sheath
- 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



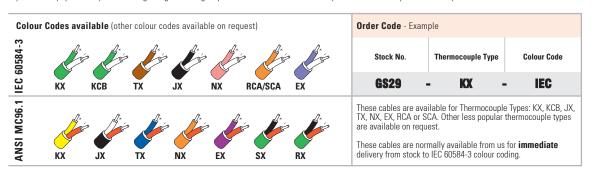
XLPE Insulated, Twisted with Screen, LSOH (LSZH) outer sheath One pair of stranded conductors. Cores XLPE insulated. Pair twisted, screened with Mylar® aluminium tape and drain wire. LSOH (LSZH) sheathed overall.



XLPE insulated, Twisted with Screen and Armour, LSOH (LSZH) outer sheath
One pair of stranded conductors. Cores XLPE insulated. Pair twisted, screened with Mylar® aluminium tape and drain wire. LSOH (LSZH) bedded. Steel wire armoured and LSOH (LSZH) sheathed.

		Stock Number	GS29	GS31	GS94	GS95		
S	Conductor Style		Strai	nded	Stranded			
CONDUCTORS	No. of Strands / Strand 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		
OND	Total AWG (S = St	tranded)	20S	18S	20S	18S		
2	Insulation		XL	PE	XL	PE		
S	Number of Pairs		1		1			
PAIRS	Laid Flat or Twist	ed	Twis	sted	Twis	sted		
Ъ	Screen*	Screen* Yes				Yes		
	Insulation		LS0H (LSZH)	LS0H (LSZH)			
	Insulation	Continuous	-30 to	+70	-30 to	o +70		
	Rating (°C)	Short Term	+6	90	+6	90		
_	Colour Coding		Yes		Yes			
OVERALL		Abrasion Resistance	Go	od	Go	Good		
VEF	Physical Properties	Moisture Resistance	Very Good		Very Good			
0	•	Typical Weight (Kg/100m) (excluding reel)	4	4	19	22		
	Diameter under A	rmour (mm)	-	_	5.5	6.0		
	Diameter over Arı	mour (mm)	_	_	7.5	8.0		
	Overall Diameter	all Diameter [†] (mm)		6.5	10.5	11.0		
		Notes	Free of halogens. Ro electromagnetic and interference.		Free of halogens. Round electromagnetic and ele Armoured for mechanica	ctrostatic interference.		

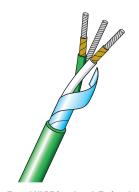
Aluminised Mylar® tape in contact throughout by a bare 7/0.3mm diameter tinned copper drainwire.
 These values are nominal and if critical to your application, please request a physical check.



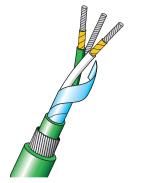
MICA/XLPE Insulated Single Pair Thermocouple Cable

Low Smoke Zero Halogen LS0H (LSZH) - Fire Resistant MICA Taped XLPE with Screen -30°C to +70°C

- 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 an XLPE (Cross Linked Polyethylene) insulated cores with a Low Smoke Zero Halogen (LSOH / LSZH) outer sheath.
- Sheathing materials are Halogen free



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

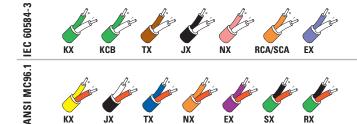


Mica Taped XLPE insulated, Twisted with Screen & Armour, LSOH (LSZH) outer sheath One pair of stranded conductors Mica taped and XLPE insulated. Pair twisted. screened with Mylar® aluminium tape and drain wire. LSOH (LSZH) bedded. Steel wire armoured and LSOH (LSZH) sheathed.

		Stock Number	G98	G97	G99	G96	
S	Conductor Sty	le	Stra	nded	Stranded		
CONDUCTORS	No. of Strands	s / Strand Diameter (mm)	16/0.2	23/0.2	16/0.2	23/0.2	
On	Total Area (mi	m ²)	0.5	0.75	0.5	0.75	
	Total AWG (S	= Stranded)	20S	18S	20S	18S	
ວ	Insulation		MICA a	nd XLPE	MICA ar	nd XLPE	
S	Number of Pairs			1	1		
PAIRS	Laid Flat or Tv	visted	Twi	sted	Twisted		
۵	Screen*		es	Yes			
	Insulation		LS0H	(LSZH)	LS0H (LSZH)	
	Insulation	Continuous	-30 to	0 +70	-30 to	+70	
	Rating (°C)	Short Term	+!	90	+9	00	
	Colour Coding		Ye	es	Yes		
ALI		Abrasion Resistance	Go	od	Good		
OVERALL	Physical Properties	Moisture Resistance	Very	Good	Very Good		
0		Typical Weight (Kg/100m)	5	6.7	23	16.6	
	Diameter und	er Armour (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			Free of halogens. Round s electromagnetic and elec		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.

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. Colour Codes available (other colour codes available on request) Order Code - Example



G98	-	ICK	-	IEC	
These cables are a TX, NX, EX, RCA care available on re	r SCA. C	for Thermoo other less po	couple Typ oular therr	es: KX, KCB, nocouple typ	JX, oes

Thermocouple Type

These cables are normally available from us for **immediate** delivery from stock to IEC 60584-3 colour coding.

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
- Ideal for applications where, for short periods of time, the temperature can fluctuate, which would cause other cables to become inflexible and brittle.



Flame Retardant Silicone Rubber insulated, Twisted Pair

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

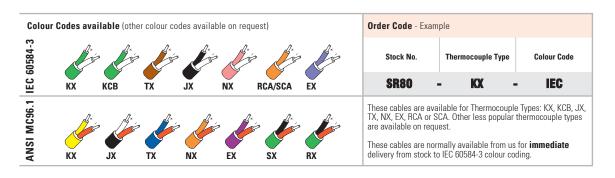


Flame Retardant Silicone Rubber insulated, Twisted Pair with Mylar® Tape

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

		Stock Number	SR30	SR31	SR73	SR77	SR80	
S	Conductor Style		St	randed		Stranded		
10R	No. of Strands / S	Strand Diameter (mm)	7/0.2	7/0.2	7/0.3	16/0.3	16/0.2	
CONDUCTORS	Total Area (mm²)		0.22	0.22	0.49	1.34	0.5	
	Total AWG (S = S	tranded)	24S	24S	218	16S	20S	
5	Insulation		PFA	FR Silicone Rubber	Flame Re	etardant Silicone	Rubber	
2	Number of Pairs			1		1		
PAIRS	Laid Flat or Twis	ted	T	wisted	Twisted			
₫	Screen			No	No			
-	Insulation		Flame Retarda	ant 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			
Z ALI		Abrasion Resistance		Good	Good			
OVERALL	Physical Properties	Moisture Resistance	Very Good		Very Good			
0		Typical Weight (Kg/100m) (excluding reel)	1	4	4	8	4.5	
	Diameter under A	Armour (mm)	_					
	Diameter over Ar	mour (mm)		_				
	Overall Diameter	† (mm)	3.0	4.5	7.0	8.5	6	
		Notes	Flame retardant. electromagnetic	Round section. Rejects interference.	Flame retardant. Rou interference.	und section. Rejects e	electromagneti	

[†] 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

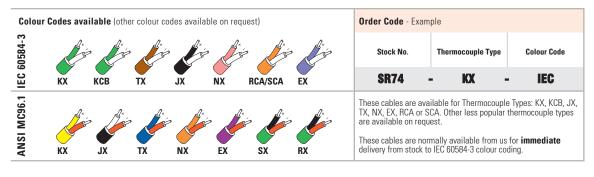
- Excellent properties for the reduced propagation of flame by incorporation of flame retardant Silicone Rubber compounds
- Ideal for applications where, for short periods of time, the temperature can fluctuate, which would cause other cables to become inflexible and brittle.



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		
S	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		
00	Total Area (mm²)		0.22	0.49	0.5	1.34	1.5		
	Total AWG (S = S	tranded)	24S	21S	20S	16S	15S		
ಪ	Insulation			Flame R	etardant Silicone	Rubber			
တ	Number of Pairs				1				
PAIRS	Laid Flat or Twist	ed			Twisted				
₫	Screen*			Yes					
	Insulation			Flame R	etardant Silicone	Rubber			
	Insulation	Continuous	-40 to +200						
	Rating (°C)	Short Term	-50 to +250						
	Colour Coding		Yes						
ALI		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	•			_				
	Diameter over Ar	mour (mm)			_				
	Overall Diameter	† (mm)	4.5	6.5	6.5	8	8		
		Notes	Flame retardant. Rou	und section. Rejects e	lectromagnetic interfe	erence.			

^{*} Where cables incorporate a metal braid, the braid can be used as a screen.

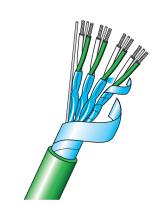


These values are nominal and if critical to your application, please request a physical check.

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.

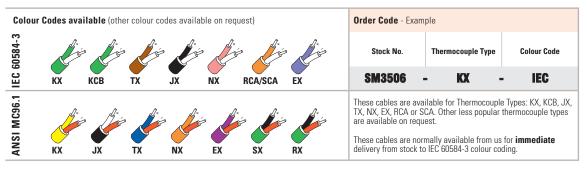


Non Armoured Flame Retardant Silicone Rubber Multipair

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 $^{\tiny{\textcircled{\tiny{0}}}}$ aluminium tape with a drainwire. Flame Retardant Silicone Rubber sheathed.

		Stock Number	SM3502	SM3504	SM3506			
တ	Conductor Style	1	Stranded					
CONDUCTORS	No. of Strands /	Strand Diameter (mm)	16/0.2	16/0.2	16/0.2			
2	Total Area (mm	²)	0.5	0.5	0.5			
	Total AWG (S =	Stranded)	20S	20S	20S			
3	Insulation		FI	ame Retardant Silicone Rubbe	ber			
,	Number of Pairs	S	2	4	6			
CHIRO	Laid Flat or Twisted Twisted							
-	Screen*		Yes - Individually Screened Pairs					
-	Insulation		FI	ame Retardant Silicone Rubbe	er			
	Insulation	Continuous		-40 to +200				
	Rating (°C)	Short Term	-50 to +250					
	Colour Coding		Yes					
į	Screen*		Yes - Collective, Overall Screen					
		Abrasion Resistance		Good				
	Physical Properties	Moisture Resistance		Very Good				
	·	Typical Weight (Kg/100m) (excluding reel)	9	13	20			
	Diameter under	Armour (mm)		_				
	Diameter over A	Armour (mm)		_				
	Overall Diamete	er [†] (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.

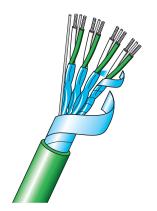


XLPE Insulated Multipair Thermocouple Cable

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

The sheathing materials used are as follows:

- Halogen free
- 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 141

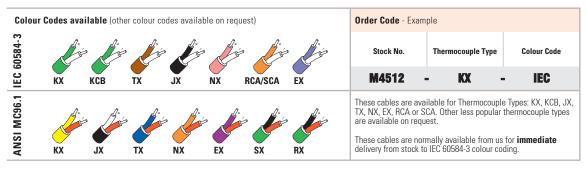


Non Armoured XLPE Multipair, LSOH (LSZH) outer sheath

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. LS0H

		Stock Number	M4502	M4504	M4506	M4508	M4512	M4516	M4520	M4524	M4536			
	Conductor Style						Stranded							
CONDUCTORS	·	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			
CT	Total Area (mm ²)	· , ,	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5			
$\frac{1}{2}$	Total AWG (S = S	Stranded)	20S	20S	20S	20S	20S	20S	20S	20S	20S			
_	Insulation						XLPE							
S	Number of Pairs		2	4	6	8	12	16	20	24	36			
PAIRS	Laid Flat or Twis	ted	Twisted Yes - Individually Screened Pairs											
₫`	Screen*													
	Insulation	LS0H (LSZH)												
	Insulation	Continuous	-30 to +70											
	Rating (°C)	Short Term	+90											
	Colour Coding		Yes											
=	Screen*		Yes - Collective, Overall Screen											
OVERALL		Abrasion Resistance					Good							
<u> </u>	Physical Properties	Moisture Resistance					Very Good							
	Troportion	Typical Weight (Kg/100m) (excluding reel)	11	17	23	31	45	60	74	89	120			
	Diameter under A						_							
	Diameter over Ar	mour (mm)					_							
	Overall Diameter	r [†] (mm)	10.5	12.5	15.2	16.1	20.4	22.8	24.9	28.4	33.2			
		Notes	Free of halog	ens. Individual	ly and collectiv	ely screened.								

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.

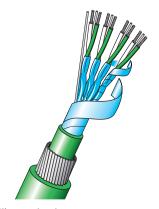


XLPE Insulated Multipair Thermocouple Cable

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

The sheathing materials used are as follows:

- Halogen free
- 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 141

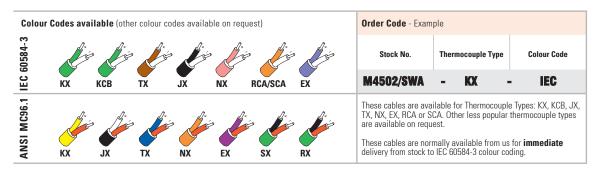


Armoured XLPE Multipair, LSOH (LSZH) outer sheath

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 LSDH (LSZH) sheathed.

		Stock Number	M4502/ SWA	M4504/ SWA	M4506/ SWA	M4508/ SWA	M4512/ SWA	M4516/ SWA	M4520/ SWA	M4524/ SWA	M4536/ SWA				
S	Conductor Style						Stranded								
IOR	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				
.30	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								
۵	Screen*		Yes - Individually Screened Pairs												
	Insulation		LS0H (LSZH)												
	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)	35	55	68	84	112	145	168	207	265				
	Diameter under	Armour (mm)	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 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



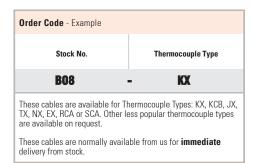
Kapton® Laid Flat Pair One pair of solid conductors. Negative leg Kapton insulated. Pair laid flat and Kapton sheathed.

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

B09	B02				
Solid	Stranded				
1/0.5	7/0.2				
0.2	0.22				
24	24S				
Kap	ton®				
1	I				
Twi	sted				
No					
_	_				
-75 to	+285				
+4	00				
N	0				
Very	Good				
Fa	nir				
<1.0	<1.0				
_	_				
_	_				
1.4	1.6				
Rejects electromagnetic interference.					

		Stock Number	B08
S	Conductor Style	Solid	
TOR	No. of Strands /	1/0.25	
DC.	Total Area (mm²)	0.05
CONDUCTORS	Total AWG (S = S	Stranded)	30
၁	Insulation		Kapton®
S	Number of Pairs	1	
PAIRS	Laid Flat or Twis	sted	Laid Flat
<u>a</u>	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	_	
	Overall Diamete	r [†] (mm)	<1.0
		Notes	Egg shaped construction

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



Notes



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