



Coleman Wires & Cables

CONTROL**CABLE**

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Brief introduction

Brief introduction

It is used as the control cable in the controlling, monitoring and protecting circuit with rated AC voltage up to 450/750V.

PVC insulated and sheathed control cable is general type, we can also manufacture the products suitable for using in the different sites according to the customers needs. Silicon rubber insulated control cable has excellent properties of resistant to high temperature, aging, oil, and radiation and is flexible. It is widely used as the transmitting wire for the instruments, apparatus and control system in the chemical, petroleum, power, metallurgical industry under the higher or lower temperature and all kinds of severe conditions.

Implemented Standard

Plastics insulated and sheathed control cable, implement BS 6724

Application Characteristic

1. Rated AC Voltage: 450/750V
2. Permitted long-term operating temperature of conductor: PVC insulation and sheath: 70°C and 105°C; PE insulation and sheath: 70°C; Cross-linked PE or EPR insulation: 90°C; Low-smoke and halogen-free, flame retardant polyolefin insulation and sheath: 70°C 90°C 125°C;
3. The lowest environment temperature: PVC insulation and sheath: Fixed laying -40°C, Non-Fixed laying -15°C; Fluoroplastic, silicon rubber insulation and sheath: Fixed laying -60°C, Non-Fixed laying -20°C;
4. Installation and laying temperature: PVC sheath: Not lower than 0°C;
5. Permitted minimum bending radius: Not less than 6 times outer diameter for non-armoured, interlocked or braid armoured cable not less than 12 times outer diameter for copper-tape shield or steel wire tape winding, steel tape wrapping armoured cable.

Main Technical Parameters

Item	Unit	Technical Index															
DC resistance of conductor at 20°C ≤	Ω/km	Cross section		0.5mm ²		0.75mm ²		1.0mm ²		1.5mm ²		2.5mm ²		4.0mm ²		6.0mm	
		Plating		Un-tinned	Ti-nned	Un-tinned	Ti-nned	Un-tinned	Ti-nned	Un-tinned	Ti-nned	Un-tinned	Ti-nned	Un-tinned	Ti-nned	Un-tinned	Ti-nned
		A or B class		36.0	36.7	24.5	24.7	18.4	18.2	12.1	12.2	7.41	7.56	4.61	4.7	3.08	3.11
		R class		39.0	40.1	26.0	26.7	19.5	20.0	13.3	13.7	7.98	8.21	/	/	/	/
Insulation resistance at the highest operating temperature ≥	M Ωkm	PVC silicon rubber	A	/	0.012		0.011		0.011		0.01		0.0085		0.0070		
			B,R	0.013	0.011		0.010		0.010		0.009		0.0077		0.0065		
		PE, EPR 1.0															
Test voltage	kV/5min	3.0															
Flame-retardant property		A or B class (testing according to GB/18380.3)															

Basic Type, Product Name and Main Application

1. PVC XLPEinsulated Control Cable

Description	Application
PVC(XLPE) - insulated and sheathed control cable with Cu core	Laid at fixed occasions, such as indoors, cable duct and pipe, etc.
PVC(XLPE)-insulated and sheathed Copper-tape shield control cable with Cu core	Laid at fixed occasions, where screen is needed, such as indoors, cable duct and pipe, etc.
PVC(XLPE)- insulated and sheathed copper-tape shield control cable with Cu core	Laid at fixed occasions, where screen is needed, such as indoors, cable duct and pipe, etc.
PVC(XLPE)- insulated and sheathed Steel-tape armoured control cable with Cu core	Laid at fixed occasions, where larger mechanical forces can be withstood such as indoors, pipe and direct bury
PVC (XLPE)- insulated and sheathed flexible control cable with Cu core	Laid at movable occasions, such as indoors, where cable must be flexible.
PV(XLPE)- insulated and sheathed Cu wire braid-shield flexible control cable with Cu core	Laid at movable occasions, where flexible screen is needed, such as indoors

Code and its Meanings

Item	Code indication
Flame-retardant property	Non- flame-retardant can be omitted
	Common flame-retardant (C class)
	Low-smoke and low-halogen flame-retardant (C class)
	Low-smoke and halogen free flame-retardant (C class)
Code of series	Control cable
Insulation material	PVC, Flame-Retardant PVC, Low-Smoke And Low-Halogen Flame-Retardant PVC
	PE, Flame-Retardant PE (YJ-XLPE)
	PP
	Fluoro-plastic
	Silicon rubber
	Low-smoke and halogen-free flame retardant
Sheath material	Climate-resistant PE or flame-retardant PE
	PVC, flame-retardant PVC or low halogen, low-smoke flame-retardant PVC

Code and its Meanings

Shield Materials	P	Cu wire braid
	PS	Tinned copper braid
	P2	Copper-Mylar laminate tape or Cu tape
	P3	Aluminium-Mylar laminate tape
Sheath Characteristics	12	Interlocked Steel Taped Armoured, PVC Sheath
	13	Interlocked Steel Tape Armoured, PE Sheath
	22	Wrapped 2-Layer Steel Tapes Armoured, PVC Sheath
	23	Wrapped 2-Layer Steel Tapes Armoured, PE Sheath
	32	Winding Steel Wire Armoured, PVC Sheath
	33	Winding Steel Wire Armoured, PE Sheath
	92	Steel Braid Armoured, PVC Sheath
	93	Steel Braid Armoured, PE Sheath
	52	Interlocked Al tape of Al alloy tape armoured, PVC sheath
	53	Interlocked Al tape of Al alloy tape armoured, PE sheath
		If the sheath is made from other material, the armor is indicated in the same way as above. Sheath is signified by "4". For example, the braided steel wire armor fluoroplastic sheath, silicon rubber sheath are indicated as "94"
Heat-resistant degree	70 90 105 200	Material must adapt to temperature class The highest operating temperature is 70° C The highest operating temperature is 90° C The highest operating temperature is 105° C The highest operating temperature is 200° C
	A B	Single conductor 7 threads stranded conductor (indicated in the bracket behind the specification for A, B type)
	R	Multiple threads stranded conductor
		No. of cores x 2 x nominal cross section of conductor mm ²

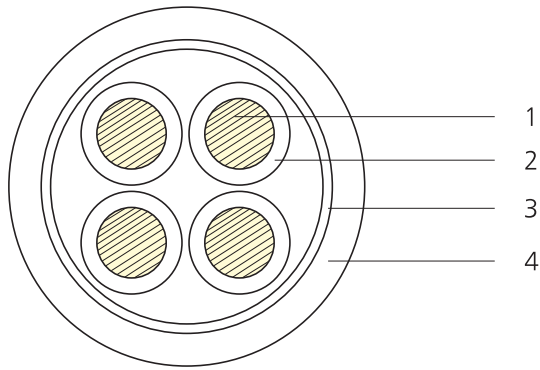
Structure size and Reference Weight

1. PVC, XLPE insulated control cable, EPR Insulated Control Cable, Silicon Rubber Insulated and Sheath Control Cable

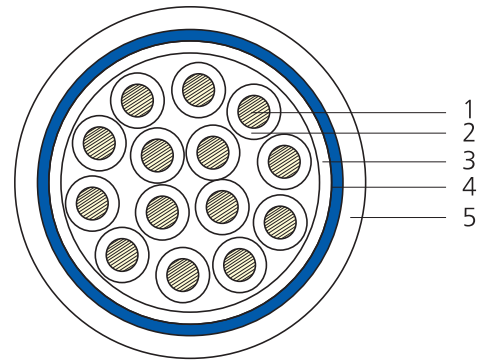
No. of cores x nominal cross section mm²	(Core structure number / diameter of wires) mm		The maximum diameter mm			Reference weight kg/km				
	A	B	No shield	Braided shield	Copper tape shield	Steel tape armour	No shield	Braided shield	Copper tape shield	Steel tape armour
2 x 0.75	1 / 0.97	7 / 0.37	7.8	9.0	10.5	11.2	75	115	140	205
2 x 1.0	1 / 1.13	7 / 0.43	8.0	9.6	11.2	11.9	80	125	150	215
2 x 1.5	1 / 1.38	7 / 0.52	9.2	10.8	12.2	12.9	110	160	185	250
2 x 2.5	1 / 1.78	7 / 0.68	10.6	11.6	13.2	13.8	155	200	235	295
2 x 4.0	1 / 2.25	7 / 0.85	11.6	13.4	14.8	15.6	190	345	405	435
2 x 6.0	1 / 2.76	7 / 1.04	12.8	14.8	16.4	17.2	240	350	410	440
3 x 0.75	1 / 0.97	7 / 0.37	8.2	9.6	11.2	11.8	90	130	145	220
3 x 1.0	1 / 1.13	7 / 0.43	8.4	9.8	11.4	12.0	100	143	160	235
3 x 1.5	1 / 1.38	7 / 0.52	9.8	11.2	12.6	13.2	125	175	210	267
3 x 2.5	1 / 1.78	7 / 0.68	11.0	12.4	13.8	14.6	185	240	290	330
3 x 4.0	1 / 2.25	7 / 0.85	12.4	14.4	15.8	16.6	235	345	405	440
3 x 6.0	1 / 2.76	7 / 1.04	14.0	15.6	17.4	18.0	330	470	550	580
4 x 0.75	1 / 0.97	7 / 0.37	8.8	10.2	12.0	12.7	105	155	185	245
4 x 1.0	1 / 1.13	7 / 0.43	9.2	10.8	12.4	13.2	120	160	198	255
4 x 1.5	1 / 1.38	7 / 0.52	10.6	11.6	13.4	14.2	155	205	235	300
4 x 2.5	1 / 1.78	7 / 0.68	12.0	14.2	15.6	16.4	225	340	376	415
4 x 4.0	1 / 2.25	7 / 0.85	14.0	15.4	16.8	17.6	315	435	495	505
4 x 6.0	1 / 2.76	7 / 1.04	15.2	16.8	17.8	18.8	415	530	600	620
5 x 0.75	1 / 0.97	7 / 0.37	9.6	10.8	12.8	13.6	120	165	195	255
5 x 1.0	1 / 1.13	7 / 0.43	9.8	11.2	13.0	13.8	140	195	235	275
5 x 1.5	1 / 1.38	7 / 0.52	11.6	12.6	14.8	15.4	190	250	300	345
5 x 2.5	1 / 1.78	7 / 0.68	13.8	15.4	16.6	17.4	290	390	450	470
5 x 4.0	1 / 2.25	7 / 0.85	15.4	16.6	17.8	18.6	385	502	560	585
5 x 6.0	1 / 2.76	7 / 1.04	16.8	18.2	19.0	20.6	505	625	710	735
7 x 0.75	1 / 0.97	7 / 0.37	10.2	11.6	13.4	13.8	145	200	245	315
7 x 1.0	1 / 1.13	7 / 0.43	10.8	12.2	13.8	14.4	170	220	260	355
7 x 1.5	1 / 1.38	7 / 0.52	12.8	14.0	15.8	15.8	225	330	375	425
7 x 2.5	1 / 1.78	7 / 0.68	14.8	16.4	17.6	18.4	355	475	520	555
7 x 4.0	1 / 2.25	7 / 0.85	16.6	17.6	19.0	19.8	78	600	680	700
7 x 6.0	1 / 2.76	7 / 1.04	18.2	19.6	20.6	21.0	655	790	895	920
8 x 0.75	1 / 0.97	7 / 0.37	11.0	12.6	13.8	14.8	165	215	255	345
8 x 1.0	1 / 1.13	7 / 0.43	11.6	13.8	14.6	15.4	195	245	285	380
8 x 1.5	1 / 1.38	7 / 0.52	14.4	15.8	16.4	16.8	275	385	445	465
8 x 2.5	1 / 1.78	7 / 0.68	16.0	17.8	18.8	19.2	405	525	600	615
8 x 4.0	1 / 2.25	7 / 0.85	18.0	20.2	20.8	21.2	545	680	760	790
8 x 6.0	1 / 2.76	7 / 1.04	20.4	22.0	22.4	23.0	745	900	1000	1030
10 x 0.75	1 / 0.97	7 / 0.37	12.8	14.8	16.0	16.8	205	300	340	350
10 x 1.0	1 / 1.13	7 / 0.43	13.9	15.4	16.8	17.4	255	370	440	450
10 x 1.5	1 / 1.38	7 / 0.52	15.9	17.4	18.6	19.0	340	455	520	555
10 x 2.5	1 / 1.78	7 / 0.68	18.4	19.8	21.2	22.0	500	635	725	755
10 x 4.0	1 / 2.25	7 / 0.85	21.4	22.4	23.3	23.8	720	865	940	975
10 x 6.0	1 / 2.76	7 / 1.04	23.6	24.2	25.3	26.0	955	1110	1205	1245

No. of cores x nominal cross section mm ²	(Core structure number / diameter of wires) mm		The maximum diameter mm			Reference weight kg/km				
	A	B	No shield	Braided shield	Copper tape shield	Steel tape armour	No shield	Braided shield	Copper tape shield	Steel tape armour
12 x 0.75	1 / 0.97	7 / 0.37	13.6	15.0	16.6	17.2	240	345	395	360
12 x 1.0	1 / 1.13	7 / 0.43	14.4	15.8	17.0	17.6	290	370	470	485
12 x 1.5	1 / 1.38	7 / 0.52	16.4	17.8	19.0	19.6	385	500	595	610
12 x 2.5	1 / 1.78	7 / 0.68	19.2	21.0	21.8	22.4	575	705	815	830
12 x 4.0	1 / 2.25	7 / 0.85	22.2	23.2	24.0	24.4	825	970	1095	1110
12 x 6.0	1 / 2.76	7 / 1.04	34.4	25.6	26.0	26.6	1100	1275	1405	1420
14 x 0.75	1 / 0.97	7 / 0.37	14.2	15.8	17.0	18.0	285	395	450	465
14 x 1.0	1 / 1.13	7 / 0.43	15.0	16.4	17.8	18.6	320	445	520	530
14 x 1.5	1 / 1.38	7 / 0.52	17.0	18.6	19.6	20.6	432	550	670	685
14 x 2.5	1 / 1.78	7 / 0.68	20.0	22.0	22.6	23.8	670	800	900	915
14 x 4.0	1 / 2.25	7 / 0.85	23.2	24.4	25.0	26.0	915	1045	1150	1160
14 x 6.0	1 / 2.76	7 / 1.04	35.6	27.0	27.0	28.2	1100	1305	1435	1450
16 x 0.75	1 / 0.97	7 / 0.37	15.0	16.4	17.6	18.6	310	425	480	495
16 x 1.0	1 / 1.13	7 / 0.43	15.6	17.2	18.6	19.4	360	470	560	575
16 x 1.5	1 / 1.38	7 / 0.52	18.0	19.6	20.5	21.0	485	595	730	745
16 x 2.5	1 / 1.78	7 / 0.68	21.8	22.6	23.8	24.8	775	880	985	1005
19 x 0.75	1 / 0.97	7 / 0.37	15.8	16.8	18.4	19.0	345	455	530	515
19 x 1.0	1 / 1.13	7 / 0.43	16.4	17.8	19.0	19.6	410	630	630	645
19 x 1.5	1 / 1.38	7 / 0.52	18.8	21.0	21.6	22.4	535	805	805	825
19 x 2.5	1 / 1.78	7 / 0.68	22.8	24.0	24.8	25.6	1055	1105	1105	1120
24 x 0.75	1 / 0.97	7 / 0.37	18.2	19.0	19.0	21.0	400	475	475	640
24 x 1.0	1 / 1.13	7 / 0.43	19.0	20.6	21.6	22.6	510	760	760	775
24 x 1.5	1 / 1.38	7 / 0.52	22.6	24.0	24.0	25.0	745	985	985	100
24 x 2.5	1 / 1.78	7 / 0.68	26.6	28.0	28.0	29.0	1110	1260	1360	1375
27 x 0.75	1 / 0.97	7 / 0.37	18.6	19.6	20.0	21.6	478	600	705	720
27 x 1.0	1 / 1.13	7 / 0.43	19.4	21.0	21.5	22.6	580	715	805	820
27 x 1.5	1 / 1.38	7 / 0.52	23.0	24.6	25.6	26.6	808	955	1045	1065
27 x 2.5	1 / 1.78	7 / 0.68	27.0	29.0	30.0	30.6	1210	1360	1465	1480
30 x 0.75	1 / 0.97	7 / 0.37	19.0	20.5	21.6	22.4	525	635	700	735
30 x 1.0	1 / 1.13	7 / 0.43	20.6	22.0	23.0	24.0	650	785	855	890
30 x 1.5	1 / 1.38	7 / 0.52	23.6	25.4	26.6	27.6	885	1095	1205	1275
30 x 2.5	1 / 1.78	7 / 0.68	28.0	30.0	31.0	31.4	1320	1415	1650	1685
37 x 0.75	1 / 0.97	7 / 0.37	20.5	22.0	23.0	24.0	600	705	805	825
37 x 1.0	1 / 1.13	7 / 0.43	22.0	23.6	24.6	25.0	770	915	995	1015
37 x 1.5	1 / 1.38	7 / 0.52	25.5	27.6	28.6	29.0	1050	1195	1315	1330
37 x 2.5	1 / 1.78	7 / 0.68	30.0	32.6	33.4	34.0	1590	1740	1900	2080
44 x 0.75	1 / 0.97	7 / 0.37	22.6	25.0	26.0	27.0	745	885	940	955
44 x 1.0	1 / 1.13	7 / 0.43	24.6	26.6	27.6	28.6	915	1035	1170	1185
44 x 1.5	1 / 1.38	7 / 0.52	29.0	30.6	31.6	33.0	1250	1395	1525	1815
44 x 2.5	1 / 1.78	7 / 0.68	34.6	37.0	38.0	39.0	1950	2100	2295	2485
48 x 0.75	1 / 0.97	7 / 0.37	23.6	25.0	26.0	27.0	830	925	1090	1105
48 x 1.0	1 / 1.13	7 / 0.43	25.0	26.6	27.6	28.6	965	1100	1220	1235
48 x 1.5	1 / 1.38	7 / 0.52	29.4	31.0	32.0	33.0	1325	1485	1620	1890
48 x 2.5	1 / 1.78	7 / 0.68	35.4	37.6	38.4	39.0	2075	2145	2345	2535
52 x 0.75	1 / 0.97	7 / 0.37	23.5	26.0	27.0	28.0	900	1010	1140	1170
52 x 1.0	1 / 1.13	7 / 0.43	25.5	27.5	28.5	29.5	1035	1185	1285	1305
52 x 1.5	1 / 1.38	7 / 0.52	30.0	32.5	33.5	34.5	1420	1580	1730	1895
52 x 2.5	1 / 1.78	7 / 0.68	36.5	39.0	40.0	40.5	2220	2395	2610	2800
61 x 0.75	1 / 0.97	7 / 0.37	25.5	27.5	28.5	29.5	965	1087	1233	1250
61 x 1.0	1 / 1.13	7 / 0.43	27.0	29.0	30.0	31.0	1185	1316	1450	1470
61 x 1.5	1 / 1.38	7 / 0.52	32.0	34.5	35.5	36.5	1680	1835	2020	2185
61 x 2.5	1 / 1.78	7 / 0.68	39.0	41.0	42.0	42.5	2600	2750	3015	3175

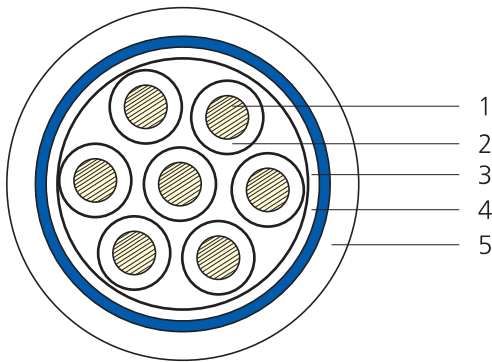
Control Cable Structure Diagram



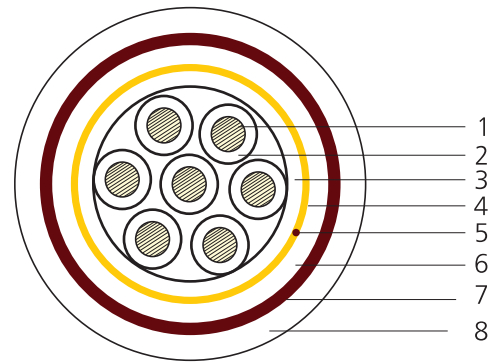
1. Copper conductor
2. F46 insulation
3. Insulation
4. F46 Sheath



1. Copper conductor
2. PVC insulation
3. Insulation
4. Tinned Copper wire braided shield
5. PVC Sheath



1. Copper conductor
2. PVC insulation
3. Insulation
4. Cu wire braided shield
5. PVC sheath



1. Copper Conductor
2. Flame-retardant PVC insulation
3. Insulation
4. Copper tape wrapped shield
5. Multiple threads tinned-copper wire ground wire
6. Flame-retardant PVC
7. Steel tape armour
8. Flame-retardant PVC sheath

FIRE-RESISTANT CONTROL CABLE

Brief Introduction

The product has high fire-resistant ability. When cables is on fire, break-circuit or short circuit failure will not occur in a certain of time. It is helpful to extinguish fire and reducing damage in case of fire disaster. It is used in fire protection system, such as, emergency lighting, elevator, fire protection circuitry and the electrical equipment and control system where fire danger exists and fire-proof safety is highly required.

Testing condition	IEC60331
Flame temperature	750
H Burning time	3 cooling 15min
Additive voltage	Rated Voltage
Additive current	3A

1. Rated AC voltage 450/750V.
2. Long-term operating temperature: flame-retardant PVC insulation and sheath 70°C and 105°C two types: XLPE insulation: 90°C Fluoroplastic insulation and sheath: 200°C two types: fluoroplastic insulation and 105°C flame-retardant PVC sheath: 105°C Silicon rubber: 200°C Low-smoke and halogen-free, flame-retardant polyolefin insulation and sheath: 70°C, low-smoke and halogen-free, cross-linked polyolefin insulation and sheath: 90°C and 125°C two types.
3. Lowest environment temperature Flame-retardant polyolefin insulation and sheath: Used for fixed laying 40°C, Used non-fixed laying 15°C Fluoroplastic or silicon rubber insulation and sheath: Used for fixed laying 60°C, Used for non-fixed laying 20°C
4. Installation and laying temperature: Ordinary cable is not lower than 0°C, fluoroplastic or silicon rubber cable is not lower than -25°C. it should be preheated if the temperature is too low.
5. Fire-resistant property: Comparison of the test conditions (See Table overleaf)
6. Permitted bending radius recommended when laying: For non-armour, interlocked or braided armour cable: not smaller than 8 times of the outer diameter of the cable for copper tape armour and steel wire tape wrapped armour cable: not smaller than 12 times of the outer diameter of the cable.

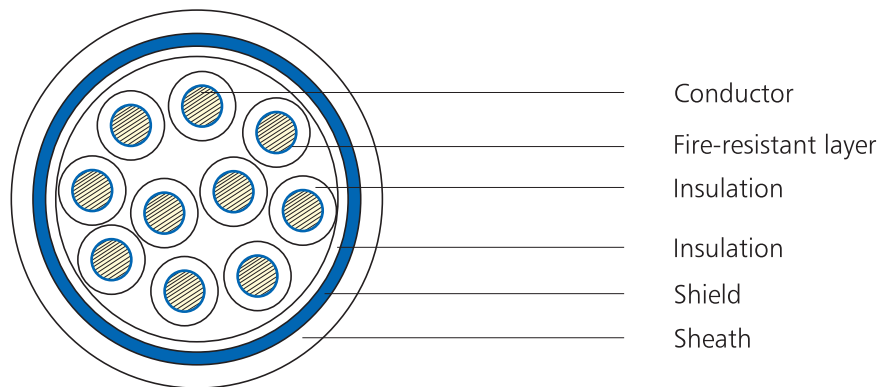
Main technical parameters

Property Item	Unit	Technical Parameter					
Conductor DC resistance At 20°C ≤	Ω k/m	Nominal cross section mm ²	0.5	0.75	1.0	1.5	2.5
		A class conductor	36.0	24.5	18.1	12.1	7.41
		R class conductor	39.0	26.0	19.5	13.3	7.98
Tested Voltage	kV	3.0 5 min					
Insulation resistance	MΩ km	1000					
Fire-resistance characteristics							
Flame-retardant characteristics		A, B, C, D, class					

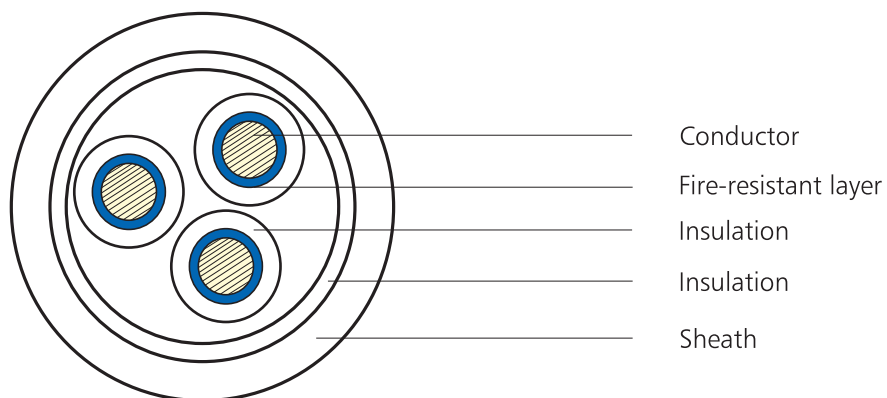
Basic type and name

Name
Flame-retardant PVC insulated and sheathed fire-resistance control cable with Cu core
Flame-retardant PVC insulated and sheathed fire-resistance flexible control cable with Cu core
Flame-retardant PVC insulated and sheathed fire-resistance copper wire braided-shield control cable with Cu core
Flame-retardant PVC insulated and sheathed fire-resistance copper wire braided-shield flexible control cable with Cu core
Flame-retardant PVC insulated and sheathed fire-resistance, copper tape shield flexible control cable with Cu core
Flame-retardant PVC insulated and sheathed fire-resistance, copper tape shield flexible control cable with Cu core
XLPE insulated and flame-retardant low smoke and halogen free PO sheathed fire-resistance control cable with Cu core
XLPE insulated and flame-retardant low smoke and halogen free PO sheathed fire-resistance flexible control cable with Cu core
XLPE insulated and flame-retardant low smoke and halogen free PO sheathed fire-resistance Cu braided shield flexible control cable with Cu core
XLPE insulated and flame-retardant low smoke and halogen free PO sheathed fire-resistance Cu tape-shield control cable with Cu core
XLPE insulated and flame-retardant low smoke and halogen free PO sheathed fire-resistance Cu tape shield flexible control cable with Cu core.
Flame-retardant PVC insulated and sheathed fire-resistance power cable with Cu core
XLPE insulated and flame-retardant PVC sheathed fire-resistance power cable with Cu core

Fire Resistant Structure Diagram of Control Cable



Fire-resistant shielded control cable



Fire resistant control cable

Structure Size and Reference Weight

No. of cores x nominal cross section mm ²	(Core structure number / diameter of wires) mm		The maximum diameter mm			Reference weight kg/km		
	Single Conductor A	Bunched Conductor Flexible B	No Shield	Copper Tape Shield	Steel Wire/Tape Shield	No Shield	Copper Tape Shield	Steel Wire/Tape Shield
2 x 0.5	1 / 0.80	16 / 0.20	12.2	14.5	16.0	245	274	564
2 x 0.75	1 / 0.97	24 / 0.20	13.2	15.4	17.0	259	290	590
2 x 1.0	1 / 1/13	32 / 0.20	14.5	16.2	18.2	275	308	628
2 x 1.5	1 / 1.38	30 / 0.25	15.3	17.5	19.0	316	375	678
2 x 2.5	1 / 1.78	50 / 0.25	16.4	18.6	20.2	381	447	776
3 x 0.5	1 / 0.80	16 / 0.20	12.7	15.0	16.4	291	332	632
3 x 0.75	1 / 0.97	24 / 0.20	13.7	16.0	17.4	310	354	663
3 x 1.0	1 / 1.13	32 / 0.20	15.0	17.0	18.7	335	380	715
3 x 1.5	1 / 1.38	30 / 0.25	16.0	18.3	19.7	383	434	787
3 x 2.5	1 / 1.78	50 / 0.25	17.6	20.0	21.8	515	572	924
4 x 0.5	1 / 0.80	16 / 0.20	14.1	16.0	17.8	347	380	736
4 x 0.75	1 / 0.97	24 / 0.20	15.2	17.0	19.0	372	418	778
4 x 1.0	1 / 1/13	32 / 0.20	16.2	18.0	20.0	438	488	843
4 x 1.5	1 / 1.38	30 / 0.25	18.2	20.0	22.4	504	560	921
4 x 2.5	1 / 1.78	50 / 0.25	19.6	22.0	24.0	619	680	1070
5 x 0.5	1 / 0.80	16 / 0.20	15.2	17.0	19.0	445	492	850
5 x 0.75	1 / 0.97	24 / 0.20	16.8	18.8	20.8	476	527	891
5 x 1.0	1 / 1/13	30 / 0.20	18.0	19.8	22.2	506	562	958
5 x 1.5	1 / 1.38	30 / 0.25	19.7	21.6	24.0	585	647	1040
5 x 2.5	1 / 1.78	50 / 0.25	21.2	23.0	25.4	727	795	1210
7 x 0.5	1 / 0.80	16 / 0.20	16.8	18.0	20.0	537	587	958
7 x 0.75	1 / 0.97	24 / 0.20	17.6	19.5	20.8	578	634	1030
7 x 1.0	1 / 1/13	30 / 0.20	18.8	20.7	22.7	617	678	1090
7 x 1.5	1 / 1.38	30 / 0.25	20.8	23.0	24.6	722	790	1210
7 x 2.5	1 / 1.78	50 / 0.25	22.9	25.3	26.8	913	988	1420
8 x 0.5	1 / 0.80	16 / 0.20	17.3	19.2	21.0	595	650	1065
8 x 0.75	1 / 0.97	24 / 0.20	18.8	20.7	21.7	641	702	1120
8 x 1.0	1 / 1/13	32 / 0.20	20.2	22.3	22.5	685	752	1215
8 x 1.5	1 / 1.38	30 / 0.25	22.3	24.9	23.5	805	880	1335
8 x 2.5	1 / 1.78	50 / 0.25	24.6	27.0	26.0	1025	1107	1585
10 x 0.5	1 / 0.80	16 / 0.20	20.0	20.0	23.0	719	774	1250
10 x 0.75	1 / 0.97	24 / 0.20	21.7	24.4	24.5	777	850	1330
10 x 1.0	1 / 1.13	32 / 0.20	23.8	26.0	25.0	900	978	1470
10 x 1.5	1 / 1.38	30 / 0.25	26.4	28.6	26.8	1050	1140	1645
10 x 2.5	1 / 1.78	50 / 0.25	28.6	33.0	29.5	1340	1438	1990

Structure Size and Reference Weight

No. of cores x nominal cross section mm ²	(Core structure number / diameter of wires) mm		The maximum diameter mm			Reference weight kg/km		
	Single Conductor A	Bunched Conductor Flexible B	No Shield	Copper Tape Shield	Steel Wire/Tape Shield	No Shield	Copper Tape Shield	Steel Wire/Tape Shield
2 x 0.5	1 / 0.80	16 / 0.20	11.4	13.3	15.3	233	265	564
2 x 0.75	1 / 0.97	24 / 0.20	11.8	13.7	15.8	246	272	590
2 x 1.0	1 / 1/13	32 / 0.20	12.6	14.5	16.5	261	285	628
2 x 1.5	1 / 1.38	30 / 0.25	13.6	15.5	17.5	300	341	679
2 x 2.5	1 / 1.78	50 / 0.25	14.7	16.6	18.6	362	408	776
3 x 0.5	1 / 0.80	16 / 0.20	11.8	13.8	15.7	276	310	632
3 x 0.75	1 / 0.97	24 / 0.20	12.3	14.3	16.2	295	332	663
3 x 1.0	1 / 1/13	32 / 0.20	13.2	15.2	17.2	318	362	715
3 x 1.5	1 / 1.38	30 / 0.25	14.2	16.2	18.2	364	410	787
3 x 2.5	1 / 1.78	50 / 0.25	15.4	17.5	19.3	489	536	924
4 x 0.5	1 / 0.80	16 / 0.20	12.6	14.6	16.5	330	367	736
4 x 0.75	1 / 0.97	24 / 0.20	13.2	15.2	17.2	354	395	778
4 x 1.0	1 / 1/13	32 / 0.20	14.2	16.2	18.2	416	458	843
4 x 1.5	1 / 1.38	30 / 0.25	15.3	17.3	19.3	478	524	921
4 x 2.5	1 / 1.78	50 / 0.25	16.6	18.5	20.5	588	654	1070
5 x 0.5	1 / 0.80	16 / 0.20	13.5	15.4	17.5	423	464	850
5 x 0.75	1 / 0.97	24 / 0.20	14.1	16.0	18.2	452	485	891
5 x 1.0	1 / 1/13	32 / 0.20	15.2	17.0	19.2	481	528	958
5 x 1.5	1 / 1.38	30 / 0.25	17.0	19.0	21.0	556	607	1040
5 x 2.5	1 / 1.78	50 / 0.25	18.5	20.4	22.5	691	748	1210
7 x 0.5	1 / 0.80	16 / 0.20	14.5	16.3	18.8	510	555	958
7 x 0.75	1 / 0.97	24 / 0.20	15.0	17.0	19.5	549	608	1030
7 x 1.0	1 / 1/13	32 / 0.20	16.8	18.8	21.2	586	648	1090
7 x 1.5	1 / 1.38	30 / 0.25	18.3	20.0	22.5	686	757	1210
7 x 2.5	1 / 1.78	50 / 0.25	20.0	21.6	24.0	867	747	1420
8 x 0.5	1 / 0.80	16 / 0.20	15.3	17.2	19.6	565	625	1065
8 x 0.75	1 / 0.97	24 / 0.20	16.2	17.9	20.3	609	674	1120
8 x 1.0	1 / 1/13	32 / 0.20	17.9	19.3	21.8	651	720	1215
8 x 1.5	1 / 1.38	30 / 0.25	20.8	21.7	22.8	765	844	1335
8 x 2.5	1 / 1.78	50 / 0.25	22.8	23.8	25.0	974	1063	1585
10 x 0.5	1 / 0.80	16 / 0.20	17.5	19.4	21.4	683	753	1250
10 x 0.75	1 / 0.97	24 / 0.20	18.3	20.2	22.2	738	814	1330
10 x 1.0	1 / 1/13	32 / 0.20	20.0	22.6	24.6	855	942	1470
10 x 1.5	1 / 1.38	30 / 0.25	22.4	24.6	26.6	1000	1093	1645
10 x 2.5	1 / 1.78	50 / 0.25	24.6	26.8	28.8	1270	1143	1990