

الكابلات السعودية
Saudi Cable



www.saudicable.com

SPECIALITY CABLES CATALOGUE



This catalogue contains technical information on all SCC specialty cables with PVC, or XLPE, or HFFR insulations, armoured and un-armoured designs, single and multicore cables and with a range of sheathing compounds options. Cables are divided by insulation and armouring types.

Each section contains the appropriate technical details and constructional data. Included also, Current carrying capacities and other electrical data applicable to specialty cables, in addition to cable handling instructions. This information assists customers in selecting the most suitable cables for their specific requirements.



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INTRODUCTION

In some cases, standard cables cannot fit the requirements of special applications, and we need to meet specific requirements that can be met only with specialty cabling, e.g. LSHF cables, and control cables.

Specialty cables applications include areas where:

- hazardous materials are found
- fire hazards are found
- above average safety concerns are imperative
- critical circuits are required
- special capabilities are demanded

LSHF (LSZH) (LSOH) CABLES

What are Halogens?

Halogens are elements such as fluorine, chlorine, bromine, and iodine. Halogens are highly reactive and can be harmful to people and animals. Common cable insulation, such as PVC, contains high amounts of halogens.

The C in PVC is chloride, which is an ion of chlorine. PVC contains about 29% chlorine by weight.

Halogens, under normal circumstances, are very stable and present no danger.

Problems arise when they burn.

What is LSHF?

LSHF stands for Low Smoke, Zero Halogens. A low smoke, zero halogen cable is one in which the jacket and insulation materials are made of special LSZH materials.

When these cables come in contact with a flame very little smoke is produced making this product ideal for applications where many people are confined in a certain place (office buildings, train stations, airports, etc.).

LSHF materials mainly contain a very small trace amounts of halogens less than 1.0 % but they essentially are halogen free.





International Standards for LSHF Cables

The Fire Resistant cables manufactured by SCC complied with either one or

combination of the following specifications:

- IEC 60331, BS 6387, Fire Resistance Test
- IEC 60332, BS EN 60332 / BS EN 50266 (BS 4066), Flame Retardant test
- IEC 61034, BS 7622, Smoke Emission Test
- IEC 60754, BS 6425, Halogen Content Test
- ASTM D 2863, Oxygen Index Test

Labels of Cables

Cables intended to fulfil this type of function are often labelled as one of the following:

LSZH - Low Smoke Zero Halogen

LSOH - Low Smoke Zero Halogen

LSF - Low Smoke and Fume

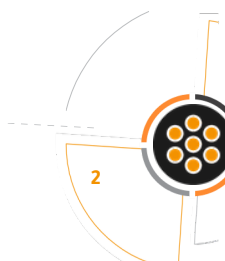
OHLS - Zero Halogen Low Smoke

Both LSZH and LSF are used to limit smoke, fumes and halogen in fire conditions.

LSHF Cables are used for:

Increasingly used in public and government buildings and where there is sensitive electronic equipment (i.e. Hospitals, Supermarkets, Airports, Control Rooms & Computer Suites) these cables are designed for increased safety in the case of a fire:

- Fire resistant safety circuits
- Public utilities and emergency systems in normal / high-rise buildings
- Control and instrumentation services in industry and residential complexes
- High-temperature installation condition





CONDUCTORS

Copper rods used in making copper conductors are manufactured in SCC's in-house copper rod mill while aluminium rods used for aluminium conductors are sourced from Midal Cables in Bahrain, a member of SCC Group.

SCC standard low voltage cable designs use plain circular or sectoral stranded, copper conductors conforming to IEC 60228 Class 1 and 2. As finished conductor diameters can sometimes vary, please contact our technical department for actual dimensions.

PVC INSULATION

Some of SCC specialty cables are supplied with PVC insulation and LSHF sheaths, where PVC is manufactured from compounds produced at the company's in-house plastics compounding plant.

These cables are supplied as standard with heat resistive PVC insulation conforming to BS 6746, rated 90°C. PVC insulation to BS 6746 rated 70°C is also available on request.

XLPE (or Halogen Free Flame Retardant HFFR-XLPE) INSULATION

Special cables can also be supplied with cross linked polyethylene (XLPE) insulation, or HFFR where higher performance specifications are required. XLPE insulated cables offer higher current ratings, superior short circuit ratings and improved moisture resistance over the equivalent PVC insulated cables. Round XLPE insulated multicore cables require a filler between assembled cores, where the gaps between cores are filled with a non-hydroscopic material compatible with the insulation.

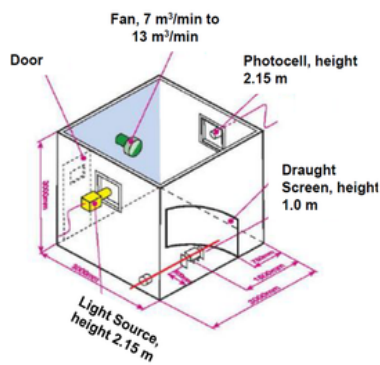
ARMOURING

All single core cables are armoured using aluminium wires applied concentrically over a taped or extruded bedding. Multicore cables are armoured using either galvanized steel wires or galvanized steel tapes applied helically over a PVC bedding.

OVERSHEATHS

SCC special cables are normally supplied with LSHF and when required with PVC type ST2 Over sheath complying with IEC 60502 and are colored black. Other colours may be provided to suit a range of installation considerations such as the effect of UV radiations and different soil conditions.

All sheaths are designed with easy strip characteristics to further reduce the time and cost of cable preparation and installation. Also, finished cables are marked on the outer sheath to help cable identification on site.



QUALITY ASSURANCE

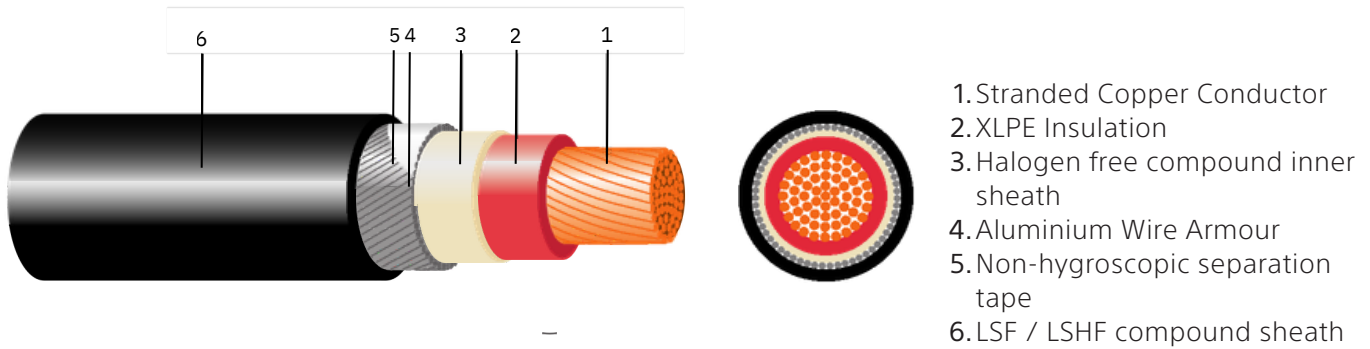
Effective Quality Assurance procedures are essential to ensure the consistency and long term reliability and performance of all products. SCC has always recognized the importance of Quality Assurance and this commitment is reflected in the company's accreditation to ISO 9001 standard.

At SCC, Quality Assurance is an integral part of the production and supply process and maintained at all stages from order entry and manufacture through to testing, packaging and shipping. All Quality Assurance procedures are regularly audited by international standards organizations and all routine voltage testing is carried out to more stringent levels than that required by standard specifications.

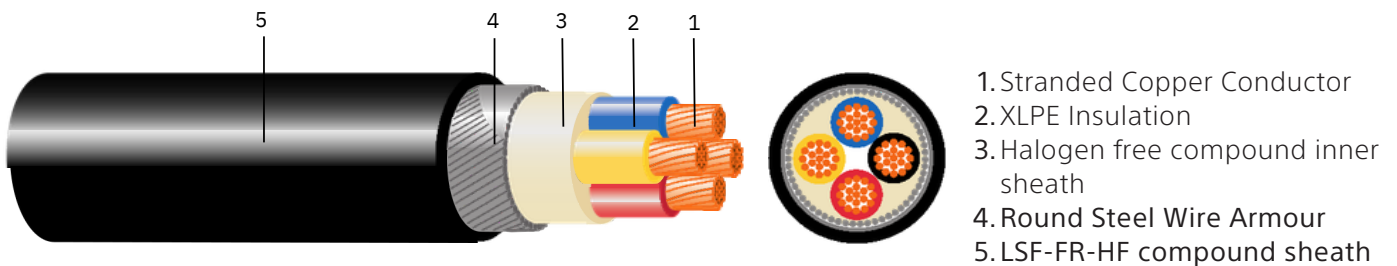




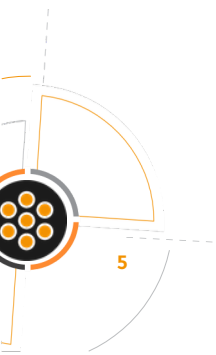
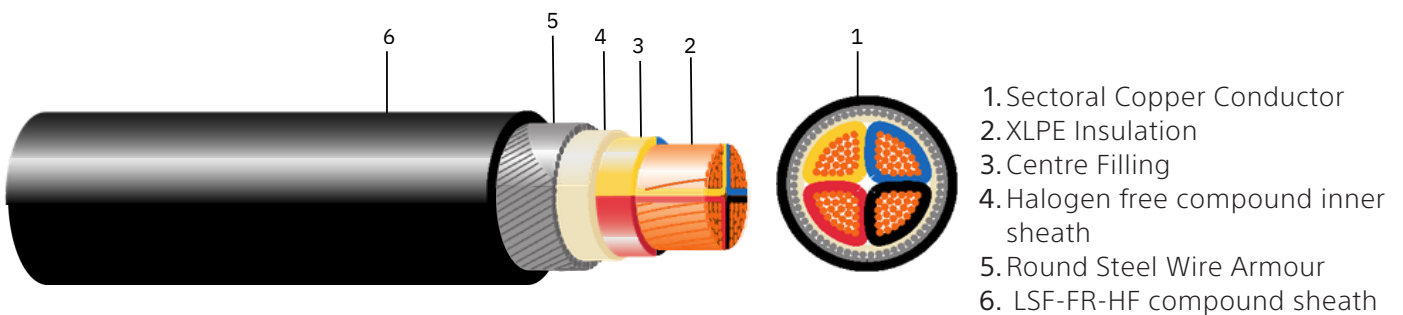
SINGLE CORE



MULTICORE CIRCULAR STRANDED CONDUCTOR



MULTICORE SECTORAL STRANDED CONDUCTOR





DESCRIPTION

Single core and multicore cables with copper conductors, XLPE insulated, extruded halogen free inner sheath, armoured and LSF / LSHF sheathed. Cables are rated 0.6/1 KV and conform to IEC 60502, BS:6724 and BS:7211.

CONSTRUCTION

Conductor

Plain circular or sector stranded copper conductors, per IEC:60228 class 1 and 2.

Insulation

XLPE (cross-linked polyethylene) or HFFR- XLPE rated 90°C.

Assembly

Two, three or four insulated cores are assembled together.

Inner sheath

In single core cables, inner sheath of halogen free compound is applied over insulation. In multicore cables, assembled cores are covered with inner sheath of halogen free compound.

Armour

For single core cables, a layer of aluminium wires applied helically over inner sheath. For multicore cables, galvanized round steel wires applied helically over inner sheath.

Sheath

LSF / LSHF compound, colour black.

Colours for core identification

Single core - red (black Color on request)

Two cores - red, and black

Three cores - red, yellow and blue

Four cores - red, yellow, blue and black

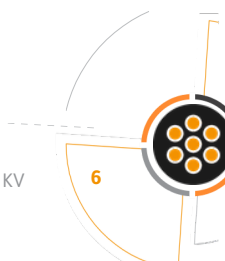
FEATURES

Cables manufactured with the above construction have a combination of high flame retardancy as well as low smoke and non-halogen acid gas generation. This makes these cables ideal to install in locations such as chemical plants, hospitals, military installations, underground railways, tunnels, etc.

APPLICATION

These cables are intended for installation on cable trays or in cable ducts.

Note: In the interests of product improvement, SCC reserve the right to alter cable specifications.





DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Cross Sectional Area Nominal (mm ²)	Minimum Number of Wires	Nominal Thickness of (mm)	Nominal Diameter of Aluminium wire (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard Package (m±5%)
50	6	1	1.25	1.5	18.2	710	1000
70	12	1.1	1.25	1.5	20.2	940	1000
95	15	1.1	1.25	1.6	22.3	1220	1000
120	18	1.2	1.25	1.6	23.6	1480	1000
150	18	1.4	1.6	1.7	25.5	1813	500
185	30	1.6	1.6	1.8	30	2280	500
240	34	1.7	1.6	1.8	31	2840	500
300	34	1.8	1.6	1.9	32	3487	500
400	53	2	2	2	38	4479	500
500	53	2.2	2	2.1	41.7	5604	500
630	53	2.4	2	2.2	46.3	7053	500





DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Cross Sectional Area Nominal (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Diameter of Aluminium wire (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard Package (m±5%)
Two Core							
2.5 rm	7	0.7	1.25	1.4	14.3	500	1000
4 rm	7	0.7	1.25	1.4	15.4	560	1000
6 rm	7	0.7	1.25	1.4	16.6	670	1000
10 rm	7	0.7	1.25	1.5	18.7	850	1000
16 rm	6	0.7	1.25	1.5	20	1060	1000
25 rm	6	0.9	1.25	1.6	24.1	1620	1000
35 rm	6	0.9	1.6	1.7	23.4	1930	500
Three Core							
2.5 rm	7	0.7	1.25	1.4	14.8	540	1000
4 rm	7	0.7	1.25	1.4	16	620	1000
6 rm	7	0.7	1.25	1.4	17.3	755	1000
10 rm	7	0.7	1.25	1.5	20.2	960	1000
16 rm	6	0.7	1.25	1.6	21.2	1240	1000
25 rm	6	0.9	1.6	1.7	26.7	1720	500
35 sm	6	0.9	1.6	1.8	25.9	2130	500
50 sm	6	1	1.6	1.8	28.5	2380	500
70 sm	12	1.1	1.6	1.9	32.2	3150	500
95 sm	15	1.1	2	2.1	37	4320	500
120 sm	18	1.2	2	2.2	40.4	5200	500
150 sm	18	1.4	2.5	2.3	45.5	6620	500
185 sm	30	1.6	2.5	2.4	49.8	7980	500
240 sm	34	1.7	2.5	2.6	55.1	9960	250
300 sm	34	1.8	2.5	2.7	60.2	12060	250

RM: Round Multi-wire Conductor SM: Sectoral Multi-Wire Conductor.

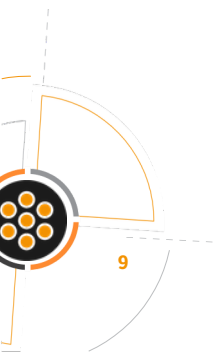




DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Cross Sectional Area Nominal (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Diameter of Aluminium wire (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard Package (m±5%)
Four Core							
2.5 rm	7	0.7	1.25	1.4	15.7	600	1000
4 rm	7	0.7	1.25	1.4	17.1	700	1000
6 rm	7	0.7	1.25	1.5	18.7	860	1000
10 rm	7	0.7	1.25	1.5	21.1	1100	1000
16 rm	6	0.7	1.25	1.6	22.9	1600	1000
25 sm	6	0.9	1.6	1.7	28.9	2090	500
35 sm	6	0.9	1.6	1.8	28.8	2590	500
50 sm	6	1	1.6	1.9	32	2960	500
70 sm	12	1.1	2	2.1	37.7	4240	500
95 sm	15	1.1	2	2.2	41.7	5410	500
120 sm	18	1.2	2.5	2.3	47.1	6980	500
150 sm	18	1.4	2.5	2.4	51.4	8320	250
185 sm	30	1.6	2.5	2.6	56.6	10080	250
240 sm	34	1.7	2.5	2.7	63	12690	250
300 sm	34	1.8	2.5	2.9	67	15023	250

RM: Round Multi-wire Conductor SM: Sectoral Multi-Wire Conductor.

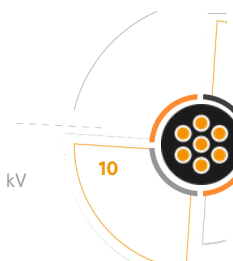




DIMENSIONS AND WEIGHTS

Conductor				Insulation		Armouring	Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)		Minimum Number of Wires		Nominal Thickness (mm)		Nominal Thickness of Steel Tape (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard Package (m±5%)
Ph	Ne	Ph	Ne	Ph	Ne					
Four Core With reduced neutral										
25 rm	16 rm	6	6	0.9	0.7	1.60	1.7	30.4	2200	500
35 sm	16 rm	6	6	0.9	0.7	1.60	1.8	29.9	2380	500
50 sm	25 rm	6	6	1.0	0.9	1.60	1.9	31.2	2780	500
70 sm	35 rm	12	6	1.1	0.9	2.00	2	36.6	3960	500
95 sm	50 rm	15	6	1.1	1.0	2.00	2.1	41	4870	500
120 sm	70 rm	18	12	1.2	1.1	2.00	2.2	45.3	5120	500
150 sm	70 rm	18	12	1.4	1.1	2.50	2.4	50	7527	250
185 sm	95 rm	30	15	1.6	1.1	2.50	2.5	55.3	9100	250
240 sm	120 rm	34	18	1.7	1.2	2.50	2.6	61	11510	250
300 sm	150 rm	34	18	1.8	1.4	2.50	2.8	66.7	13790	250

RM: Round Multi-wire Conductor SM: Sectoral Multi-Wire Conductor.





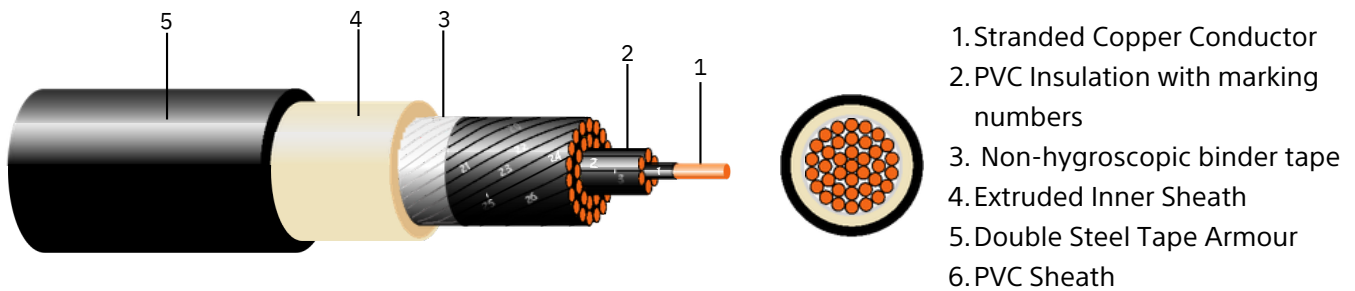
CURRENT RATINGS AND ASSOCIATED VOLTAGE DROP

Conductor	Current Rating in Air		Approx Voltage Drop Per Amp Per Meter	
Size (mm ²)	Two Cables Spaced*(amp)	Three Cables Trefoil (amp)	Two Cables Spaced*(mv)	Three Cables Trefoil (mv)
Single Core				
50	271	222	1.0	0.87
70	342	285	0.74	0.62
95	418	346	0.57	0.47
120	485	402	0.48	0.39
150	542	463	0.42	0.33
185	618	529	0.37	0.28
240	722	625	0.33	0.24
300	817	720	0.31	0.21
400	893	815	0.29	0.195
500	988	918	0.28	0.18
630	1090	1027	0.27	0.17
Multicore				
25	152	131	1.9	1.65
35	188	162	1.35	1.15
50	228	197	1.0	0.87
70	291	251	0.69	0.6
95	354	304	0.52	0.54
120	410	353	0.42	0.37
150	472	406	0.35	0.3
185	539	463	0.29	0.26
240	636	546	0.24	0.21
300	732	628	0.21	0.185

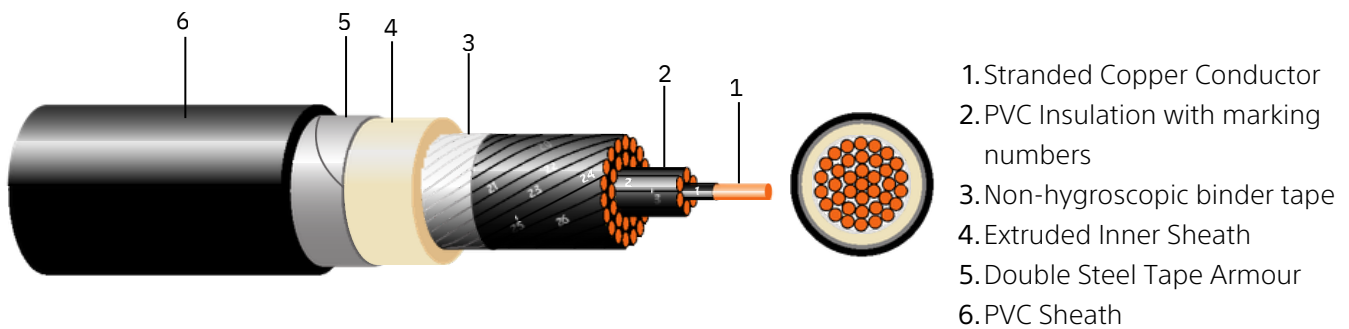
Cables spaced at twice the overall diameter between centers



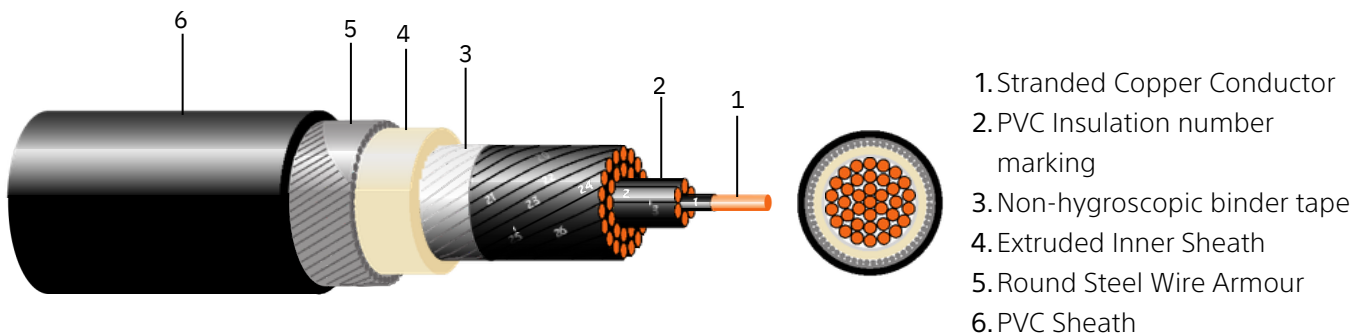
UNARMoured CONTROL CABLES



STEEL TAPE ARMoured CONTROL CABLES



STEEL WIRE ARMoured CONTROL CABLES





DESCRIPTION

Multi-core cables with copper conductors, PVC insulated, armoured or unarmoured and PVC sheathed. Cables are rated 0.6/1 KV and conform to IEC:60502.

CONSTRUCTION

Conductor

Plain circular or sector stranded copper conductors, per IEC:60228 class 1 and 2.

Insulation

XLPE (cross-linked polyethylene) or HFFR- XLPE rated 90°C.

Assembly & Filling

For armoured cables

Insulated cores are laid up together and filled with non-hygroscopic material to form compact and circular cable. Armour bedding shall be an extruded layer of PVC which may be an integral part of the filling.

For unarmoured cables

Insulated conductors are laid up together and provided with lapped or extruded inner covering.

Armour

Galvanized steel tapes or round steel wires.

Sheath

PVC type ST2 to IEC 60502 colour black. Flame retardant PVC is also available upon request.

Core identification

Black with white printed numbers 1,2,3...etc.

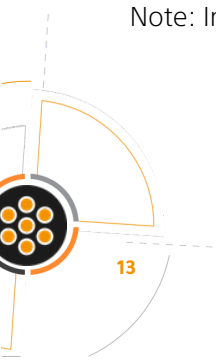
Standard number of cores

7, 12, 19, 24, 30, 37. Different number of cores are available on request.

APPLICATION

These cables are suitable for use in a broad range of commercial, in industrial and utility applications where maximum performance will be demanded and may be installed indoors, outdoors, underground, ducts (conduits), on trays or ladders.

Note: In the interests of product improvement, SCC reserve the right to alter cable specifications.





DIMENSIONS AND WEIGHTS

Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
Single Core						
1.5 sd	1	0.8	1.8	12.8	257	1000
1.5 rm	7	0.8	1.8	13.2	263	1000
2.5 sd	1	0.8	1.8	13.5	348	1000
2.5 rm	7	0.8	1.8	14.5	349	1000
4 sd	1	1	1.8	16	490	1000
4 rm	7	1	1.8	17.1	500	100
Seven Core						
1.5 sd	1	0.8	1.8	16.3	375	1000
1.5 rm	7	0.8	1.8	16.8	409	1000
2.5 sd	1	0.8	1.8	18.1	525	1000
2.5 rm	7	0.8	1.8	18.7	552	1000
4 sd	1	1	1.8	21.3	755	1000
4 rm	7	1	1.8	22.3	804	1000

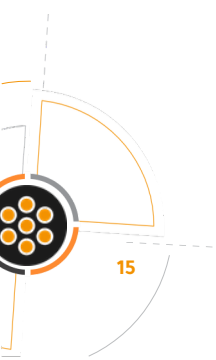
SD: Solid Conductor RM: Round Multi-wire Conductor



DIMENSIONS AND WEIGHTS

Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
19 Core						
1.5 sd	1	0.8	1.8	19	554	1000
1.5 rm	7	0.8	1.8	19.5	589	1000
2.5 sd	1	0.8	1.8	20.7	774	1000
2.5 rm	7	0.8	1.8	21.7	809	1000
4 sd	1	1	1.8	25	1164	1000
4 rm	7	1	1.8	26	1196	1000
24 Core						
1.5 sd	1	0.8	1.8	22.1	699	1000
1.5 rm	7	0.8	1.8	22.6	730	1000
2.5 sd	1	0.8	1.8	24.3	975	1000
2.5 rm	7	0.8	1.8	25.3	1006	500
4 sd	1	1	1.9	29.2	1462	500
4 rm	7	1	1.9	30.4	1493	500

SD: Solid Conductor RM: Round Multi-wire Conductor

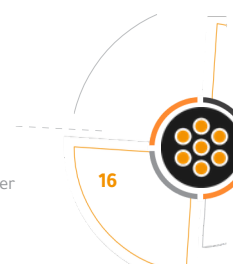




DIMENSIONS AND WEIGHTS

Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
30 Core						
1.5 sd	1	0.8	1.8	23.4	865	1000
1.5 rm	7	0.8	1.8	23.9	875	1000
2.5 sd	1	0.8	1.8	26	1175	500
2.5 rm	7	0.8	1.8	26.7	1216	500
4 sd	1	1	2	31.6	1760	500
4 rm	7	1	2	32.2	1815	500
37 Core						
1.5 sd	1	0.8	1.8	25.2	978	500
1.5 rm	7	0.8	1.8	25.8	1048	500
2.5 sd	1	0.8	1.9	28.4	1400	500
2.5 rm	7	0.8	1.9	28.8	1465	500
4 sd	1	1	2.1	33	2115	500
4 rm	7	1	2.1	34.9	2197	500

SD: Solid Conductor RM: Round Multi-wire Conductor





DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
7 Core							
1.5 rm	7	0.8	0.2	1.8	16.5	354	1000
2.5 rm	7	0.8	0.2	1.8	17.8	524	1000
4 rm	7	1	0.2	1.8	20.4	709	1000
12 Core							
1.5 rm	7	0.8	0.2	1.8	20.2	525	1000
2.5 rm	7	0.8	0.2	1.8	22	779	1000
4 rm	7	1	0.2	1.8	25.6	1078	500
19 Core							
1.5 rm	7	0.8	0.2	1.8	22.8	725	1000
2.5 rm	7	0.8	0.2	1.8	25	1074	500
4 rm	7	1	0.2	1.8	29.3	1517	500

RM: Round Multi-wire Conductor

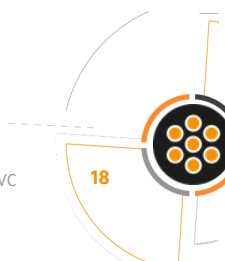




DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
24 Core							
1.5 rm	7	0.8	0.2	1.8	25.9	886	500
2.5 rm	7	0.8	0.2	1.8	28.6	1317	500
4 rm	7	1.0	0.2	2.0	30.1	1871	500
30 Core							
1.5 rm	7	0.8	0.2	1.8	27.3	1046	500
2.5 rm	7	0.8	0.2	1.8	30.1	1545	500
4 rm	7	1.0	0.2	2.1	35.6	2217	500
37 Core							
1.5 rm	7	0.8	0.2	1.8	29.3	1241	500
2.5 rm	7	0.8	0.2	1.8	32.2	1821	500
4 rm	7	1.0	0.5	2.2	38.2	2631	500

RM: Round Multi-wire Conductor

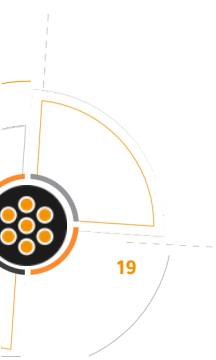




DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness of Steel Wire (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
7 Core							
1.5 rm	7	0.8	1.25	1.8	16	654	1000
2.5 rm	7	0.8	1.25	1.8	17.2	776	1000
4 rm	7	1	1.25	1.8	18.6	955	1000
12 Core							
1.5 rm	7	0.8	1.25	1.8	19.5	908	1000
2.5 rm	7	0.8	1.25	1.8	21.2	1100	1000
4 rm	7	1.0	1.6	1.8	23.1	1531	500
19 Core							
1.5 rm	7	0.8	1.6	1.8	22	1294	1000
2.5 rm	7	0.8	1.6	1.8	24	1588	500
4 rm	7	1	1.6	1.9	26.5	2060	500

RM: Round Multi-wire Conductor

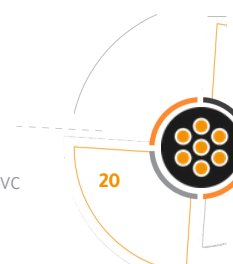




DIMENSIONS AND WEIGHTS

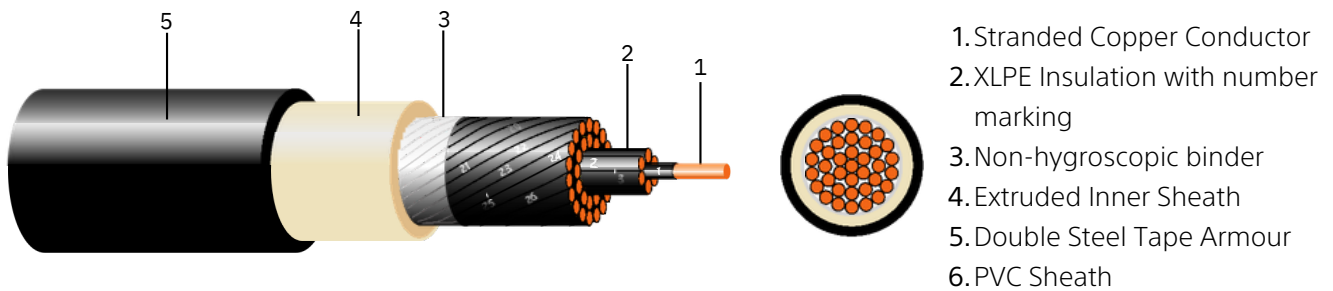
Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness of Steel Wire (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
24 Core							
1.5 rm	7	0.8	1.6	1.8	25	1551	500
2.5 rm	7	0.8	1.6	1.9	27.6	1931	500
4 rm	7	1	2	2.1	30.6	2508	500
30 Core							
1.5 rm	7	0.8	1.6	1.8	26.4	1757	500
2.5 rm	7	0.8	1.6	1.9	29.1	2205	500
4 rm	7	1	2	2.1	32.3	2896	500
37 Core							
1.5 rm	7	0.8	1.6	1.9	28.2	1997	500
2.5 rm	7	0.8	1.6	2	31.3	2540	500
4 rm	7	1	2	2.2	34.7	3383	500

RM: Round Multi-wire Conductor

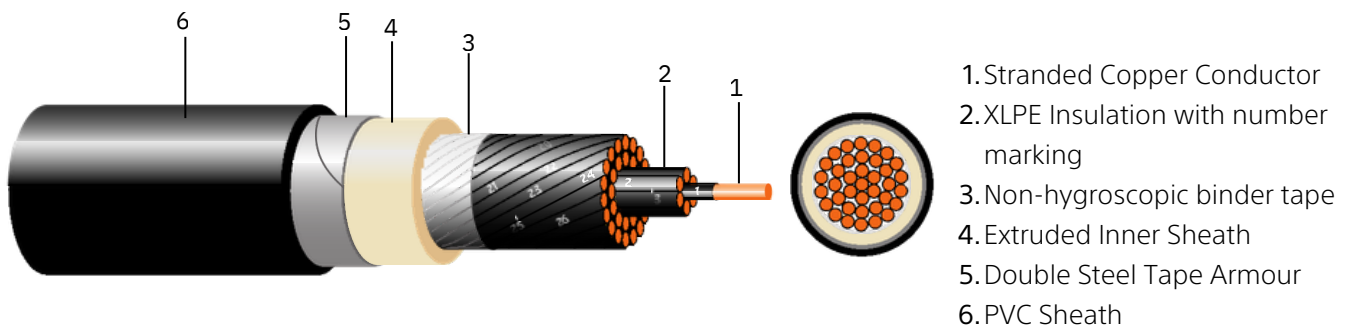




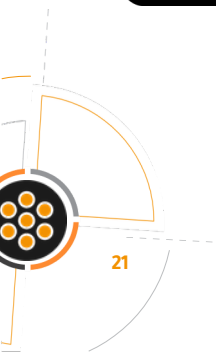
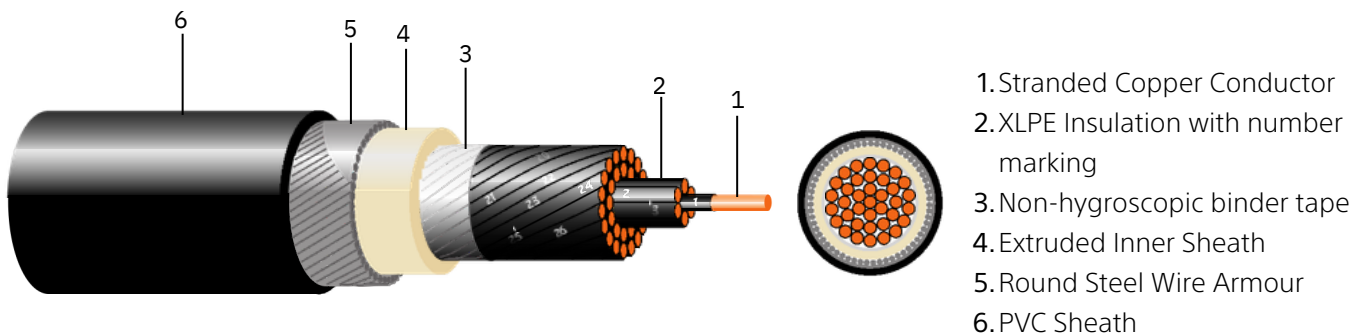
UNARMoured CONTROL CABLES



STEEL TAPE ARMoured CONTROL CABLES



STEEL WIRE ARMoured CONTROL CABLES





DESCRIPTION

Multi-core cables with copper conductors, PVC insulated, armoured or unarmoured and PVC sheathed. Cables are rated 0.6/1 KV and conform to IEC:60502.

CONSTRUCTION

Conductor

Plain circular or sector stranded copper conductors, per IEC:60228 class 1 and 2.

Insulation

XLPE (cross-linked polyethylene) or HFFR- XLPE rated 90°C.

Assembly & Filling

For armoured cables

Insulated cores are laid up together and filled with non-hygroscopic material to form compact and circular cable. Armour bedding shall be an extruded layer of PVC which may be an integral part of the filling.

For unarmoured cables

Insulated conductors are laid up together and provided with lapped or extruded inner covering.

Armour

Galvanized steel tapes or round steel wires.

Sheath

PVC type ST2 to IEC 60502 colour black. Flame retardant PVC is also available upon request.

Core identification

Black with white printed numbers 1,2,3...etc.

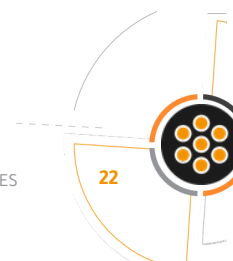
Standard number of cores

7, 12, 19, 24, 30, 37. Different number of cores are available on request.

APPLICATION

These cables are suitable for use in a broad range of commercial, industrial and utility applications where maximum performance will be demanded and may be installed indoors, outdoors, underground, ducts (conduits), on trays or ladders.

Note: In the interests of product improvement, SCC reserve the right to alter cable specifications.





DIMENSIONS AND WEIGHTS

Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
7 Core						
1.5 sd	1	0.7	1.8	12.3	226	1000
1.5 rm	7	0.7	1.8	12.7	231	1000
2.5 sd	1	0.7	1.8	13.4	300	1000
2.5 rm	7	0.7	1.8	13.9	306	1000
4 sd	1	0.7	1.8	15	413	1000
4 rm	7	0.7	1.8	15.3	418	1000
12 Core						
1.5 sd	1	0.7	1.8	15.8	351	1000
1.5 rm	7	0.7	1.8	16.2	356	1000
2.5 sd	1	0.7	1.8	17.1	476	1000
2.5 rm	7	0.7	1.8	17.8	481	1000
4 sd	1	0.7	1.8	19.4	664	1000
4 rm	7	0.7	1.8	19.8	669	1000

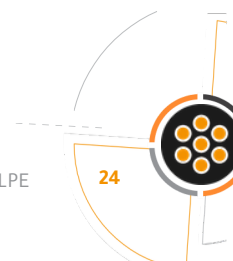
SD: Solid Conductor RM: Round Multi-wire Conductor



DIMENSIONS AND WEIGHTS

Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
19 Core						
1.5 sd	1	0.7	1.8	18.4	360	1000
1.5 rm	7	0.7	1.8	18.7	509	1000
2.5 sd	1	0.7	1.8	20.3	695	1000
2.5 rm	7	0.7	1.8	20.7	700	1000
4 sd	1	0.7	1.8	22.5	980	1000
4 rm	7	0.7	1.8	23	990	1000
24 Core						
1.5 sd	1	0.7	1.8	21.1	621	1000
1.5 rm	7	0.7	1.8	21.7	629	1000
2.5 sd	1	0.7	1.8	23	850	1000
2.5 rm	7	0.7	1.8	24.1	869	1000
4 sd	1	0.7	1.8	26	1222	500
4 rm	7	0.7	1.8	26.8	1235	500

SD: Solid Conductor RM: Round Multi-wire Conductor





DIMENSIONS AND WEIGHTS

Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
30 Core						
1.5 sd	1	0.7	1.8	22.3	730	1000
1.5 rm	7	0.7	1.8	22.9	750	1000
2.5 sd	1	0.7	1.8	24.9	1105	500
2.5 rm	7	0.7	1.8	25.5	1047	500
4 sd	1	0.7	1.9	27.4	1488	500
4 rm	7	0.7	1.9	28.4	1499	500
37 Core						
1.5 sd	1	0.7	1.8	23.8	876	1000
1.5 rm	7	0.7	1.8	24.6	896	1000
2.5 sd	1	0.7	1.8	26.6	1225	500
2.5 rm	7	0.7	1.8	27.4	1257	500
4 sd	1	0.7	1.9	30	1780	500
4 rm	7	0.7	1.9	30.7	1811	500

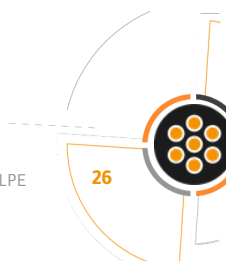
SD: Solid Conductor RM: Round Multi-wire Conductor



DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
7 Core							
1.5 rm	7	0.7	0.2	1.8	16	319	1000
2.5 rm	7	0.7	0.2	1.8	17.2	474	1000
4 rm	7	0.7	0.2	1.8	18.6	604	1000
12 Core							
1.5 rm	7	0.7	0.2	1.8	19.5	468	1000
2.5 rm	7	0.7	0.2	1.8	21.2	698	1000
4 rm	7	0.7	0.2	1.8	23.1	910	1000
19 Core							
1.5 rm	7	0.7	0.2	1.8	22	638	1000
2.5 rm	7	0.7	0.2	1.8	24	953	500
4 rm	7	0.7	0.2	1.8	26.3	1272	500

RM: Round Multi-wire Conductor

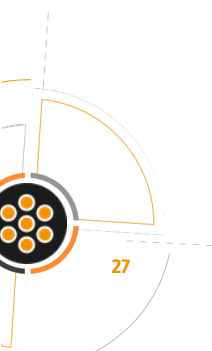




DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
24 Core							
1.5 rm	7	0.7	0.2	1.8	25	774	500
2.5 rm	7	0.7	0.2	1.8	27.4	1164	500
4 rm	7	0.7	0.2	1.9	30.1	1565	500
30 Core							
1.5 rm	7	0.7	0.2	1.8	26.2	910	500
2.5 rm	7	0.7	0.2	1.8	28.8	1360	500
4 rm	7	0.7	0.2	1.9	31.7	1849	500
37 Core							
1.5 rm	7	0.7	0.2	1.8	28.1	1080	500
2.5 rm	7	0.7	0.2	1.9	30.8	1595	500
4 rm	7	0.7	0.2	2	34	2190	500

RM: Round Multi-wire Conductor

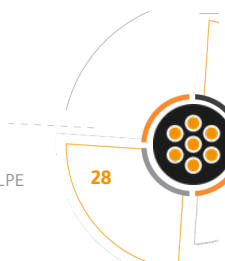




DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness of Steel Wire (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
7 Core							
1.5 rm	7	0.7	1.25	1.8	16	508	1000
2.5 rm	7	0.7	1.25	1.8	17.2	611	1000
4 rm	7	0.7	1.25	1.8	18.6	890	1000
12 Core							
1.5 rm	7	0.7	1.25	1.8	19.5	840	1000
2.5 rm	7	0.7	1.25	1.8	21.2	1037	1000
4 rm	7	0.7	1.6	1.8	23.1	1420	500
19 Core							
1.5 rm	7	0.7	1.25	1.8	22	1165	1000
2.5 rm	7	0.7	1.6	1.8	24	1488	500
4 rm	7	0.7	1.6	1.8	26.5	1883	500

RM: Round Multi-wire Conductor

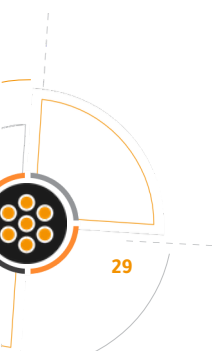


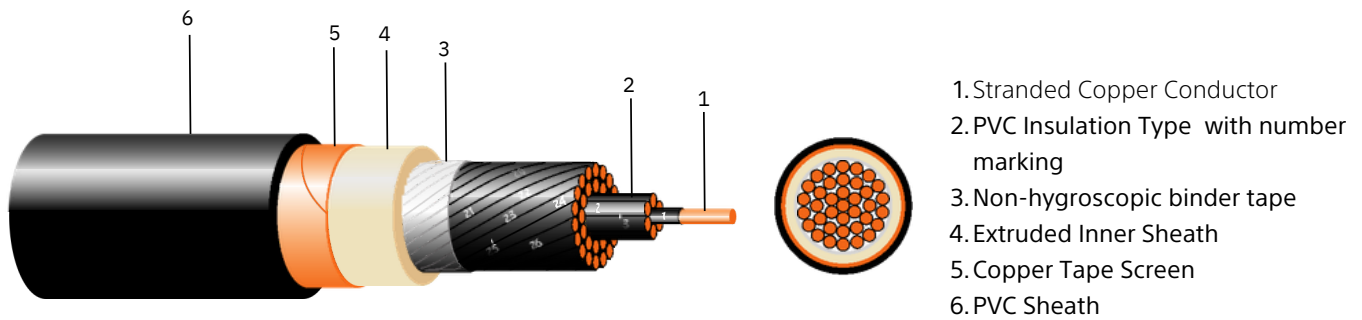


DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness of Steel Wire (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
24 Core							
1.5 rm	7	0.7	1.6	1.8	25	1355	500
2.5 rm	7	0.7	1.6	1.8	27.6	1742	500
4 rm	7	0.7	1.6	1.9	30.6	2284	500
30 Core							
1.5 rm	7	0.7	1.6	1.8	26.4	1642	500
2.5 rm	7	0.7	1.6	1.8	29.1	1720	500
4 rm	7	0.7	1.6	2	32.3	2616	500
37 Core							
1.5 rm	7	0.7	1.6	1.8	28.2	1855	500
2.5 rm	7	0.7	1.6	1.9	31.3	2346	500
4 rm	7	0.7	2	2.1	34.7	3038	500

RM: Round Multi-wire Conductor





DESCRIPTION

Multi-core cables with copper conductors, PVC insulated, copper tape screened and PVC sheathed. Cables are rated 0.6/1 KV and conform to IEC 60502.

CONSTRUCTION

Conductor

Plain circular stranded copper, per IEC 60228, class 1 and 2 - sizes: 1.5 mm², 2.5 mm² and 4 mm².

Insulation

Heat resistive PVC to BS 50363-3 rated 90 deg C for continuous operation (PVC type 1 to BS 50363-3 rated 70°C also available on request).

Assembly & Filling

Insulated conductors are laid up together and filled with non-hygroscopic material to form compact and circular cable. Bedding shall be an extruded layer of PVC which may be an integral part of the filling.

Screen

Electrolytic copper tape. Copper wire screen available on request.

Sheath

PVC type ST2 to IEC 60502-1 colour black. Flame retardant PVC is also available upon request.

Core identification

Black with white printed numbers 1,2,3...etc.

Standard number of cores

7, 12, 19, 24, 30, 37. Different number of cores are available on request.

APPLICATION

These cables are suitable for use in a broad range of commercial, industrial and utility applications where protection from electromagnetic interference is warranted, and may be installed indoors, outdoors, underground, in ducts (conduits), on trays or ladders.

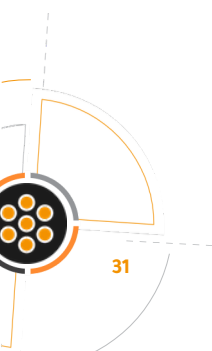
Note: In the interests of product improvement, SCC reserve the right to alter cable specifications.



DIMENSIONS AND WEIGHTS

Conductor		Insulation	Screen	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness of Copper Tape (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
7 Core							
1.5 rm	7	0.8	0.1	1.8	15.3	362	1000
2.5 rm	7	0.8	0.1	1.8	16.7	460	1000
4 rm	7	1	0.1	1.8	18	614	1000
12 Core							
1.5 rm	7	0.8	0.1	1.8	18.8	537	1000
2.5 rm	7	0.8	0.1	1.8	20.6	680	1000
4 rm	7	1	0.1	1.8	22.5	952	500
19 Core							
1.5 rm	7	0.8	0.1	1.8	21.2	738	1000
2.5 rm	7	0.8	0.1	1.8	23.4	978	500
4 rm	7	1	0.1	1.8	25.7	1369	500

RM: Round Multi-wire Conductor

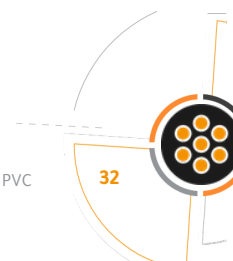


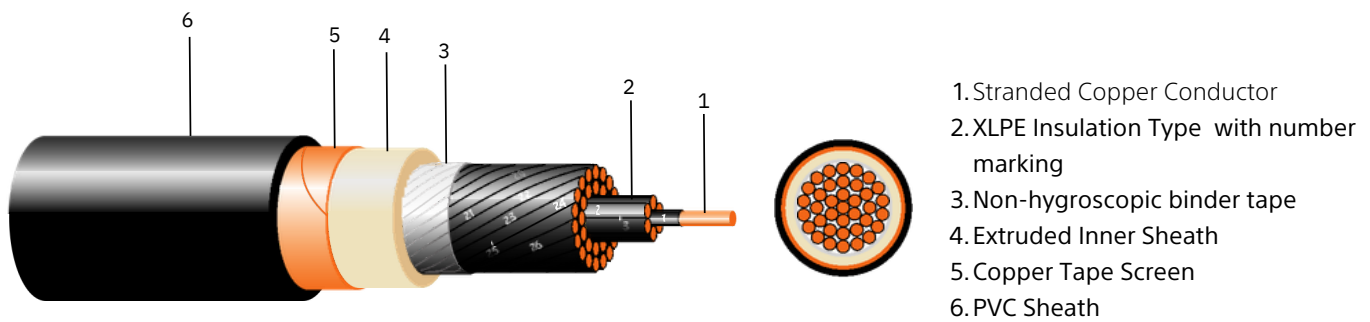


DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
24 Core							
1.5 rm	7	0.8	0.1	1.8	24.2	904	500
2.5 rm	7	0.8	0.1	1.8	26.8	1205	500
4 rm	7	1	0.1	2	29.6	1696	500
30 Core							
1.5 rm	7	0.8	0.1	1.8	25.4	1060	500
2.5 rm	7	0.8	0.1	1.9	28.2	1427	500
4 rm	7	1	0.1	2.1	31.1	2031	500
37 Core							
1.5 rm	7	0.8	0.1	1.8	27.1	1248	500
2.5 rm	7	0.8	0.1	1.9	30.2	1693	500
4 rm	7	1	0.1	2.1	33.4	2430	500

RM: Round Multi-wire Conductor





DESCRIPTION

Multi-core cables with copper conductors, XLPE insulated, copper tape screened and PVC sheathed. Cables are rated 0.6/1 KV and conform to IEC 60502.

CONSTRUCTION

Conductor

Plain circular stranded copper, per IEC 60228, class 1 and 2 - sizes: 1.5 mm², 2.5 mm² and 4 mm².

Insulation

XLPE (cross-linked polyethylene) rated 90°C

Assembly & Filling

Insulated conductors are laid up together and filled with non-hygroscopic material to form compact and circular cable. Bedding shall be an extruded layer of PVC which may be an integral part of the filling.

Screen

Electrolytic copper tape. Copper wire screen available on request

Sheath

PVC type ST2 to IEC 60502 colour black. Flame retardant PVC is also available upon request.

Core identification

Black with white printed numbers 1,2,3...etc.

Standard number of cores

7, 12, 19, 24, 30, 37. Different number of cores are available on request

APPLICATION

These cables are suitable for use in a broad range of commercial, industrial and utility applications where protection from electromagnetic interference is warranted. May be installed indoors, outdoors, underground, ducts (conduits), on trays or ladders.

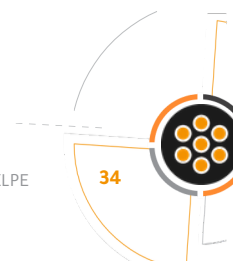
Note: In the interests of product improvement, SCC reserve the right to alter cable specifications.



DIMENSIONS AND WEIGHTS

Conductor		Insulation	Screen	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness of Copper Tape (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
7 Core							
1.5 rm	7	0.7	0.1	1.8	15.3	335	1000
2.5 rm	7	0.7	0.1	1.8	16.5	423	1000
4 rm	7	0.7	0.1	1.8	18	548	1000
12 Core							
1.5 rm	7	0.7	0.1	1.8	19.3	491	1000
2.5 rm	7	0.7	0.1	1.8	20.5	633	1000
4 rm	7	0.7	0.1	1.8	22.5	840	1000
19 Core							
1.5 rm	7	0.7	0.1	1.8	21.2	665	1000
2.5 rm	7	0.7	0.1	1.8	23.4	880	500
4 rm	7	0.7	0.1	1.8	25.7	1190	500

RM: Round Multi-wire Conductor

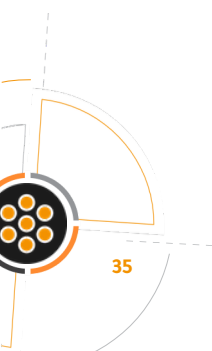




DIMENSIONS AND WEIGHTS

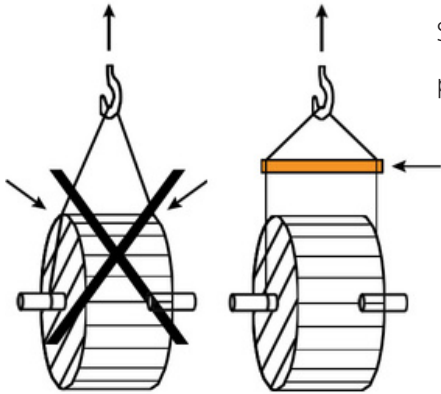
Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sectional area (mm ²)	Minimum Number of Wires	Nominal Thickness (mm)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Net Weight Approx (kg/km)	Standard package (m±5%)
24 Core							
1.5 rm	7	0.7	0.1	1.8	24.2	812	500
2.5 rm	7	0.7	0.1	1.8	26	1079	500
4 rm	7	0.7	0.1	1.8	29.6	1470	500
30 Core							
1.5 rm	7	0.7	0.1	1.8	25.4	945	500
2.5 rm	7	0.7	0.1	1.8	28.2	1269	500
4 rm	7	0.7	0.1	1.9	31.0	1749	500
37 Core							
1.5 rm	7	0.7	0.1	1.8	27.1	1106	500
2.5 rm	7	0.7	0.1	1.9	30.2	1498	500
4 rm	7	0.7	0.1	2	34.7	2082	500

RM: Round Multi-wire Conductor

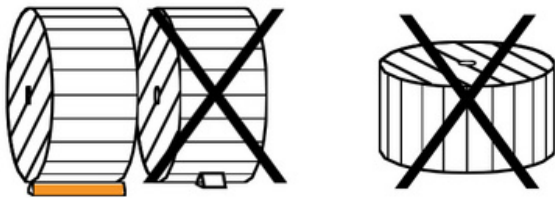




SPECIALITY CABLES
CABLE HANDLING AND LAYING PARAMETERS



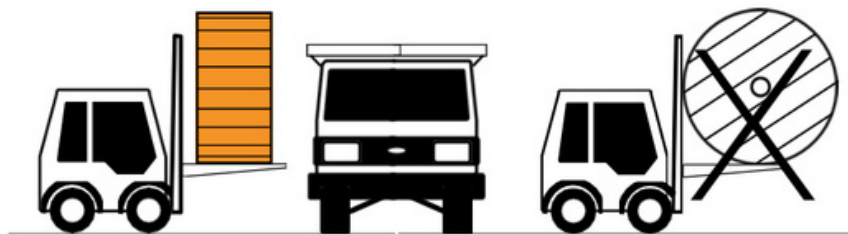
Lifting cable drums using crane.



Do not lay drums flat on their sides, use proper stops to prevent drums rolling.

SCC medium voltage cables should be installed by trained personnel in accordance with good engineering practices.

recognized codes of practice, statutory local requirements, IEE wiring regulations and where relevant, in accordance with any specific instructions issued by the company. Cables are often supplied in heavy cable reels and handling these reels can constitute a safety hazard. In particular, dangers may arise during the removal of steel binding straps and during the removal of retaining battens and timbers which may expose projecting nails. For detail information refer to our handling and installation catalogue.



Lift drums on fork trucks correctly.



Secure drums adequately before transportation.



Roll in the direction shown by the arrow.



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