

الكابلات السعودية
Saudi Cable



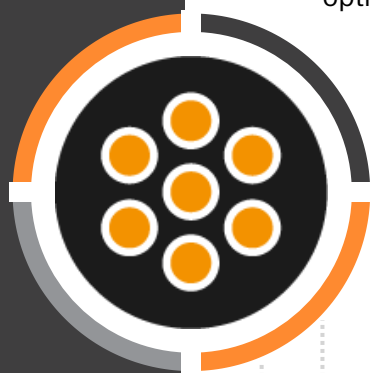
www.saudicable.com

MEDIUM VOLTAGE CABLES CATALOGUE



This catalogue contains technical information on all SCC medium voltage XLPE cables including armored and unarmored designs, single and multi-core constructions and the range of sheathing and screening options. Cables are divided by voltage ratings and each section contains the appropriate technical details, constructional data and current carrying capacities.

Also included other electrical data applicable to medium voltage cables, plus cable handling instructions, helping our customers to select the most optimum cables for their needs.



CONTENTS

1	INTRODUCTION Product specification, cable selection, cable services
	MEDIUM VOLTAGE CABLES COPPER Constructional data:
5	3.6/6 kV XLPE Insulated cables
18	6/10 kV XLPE Insulated cables
31	8.7/15 kV XLPE Insulated cables
44	12/20 kV XLPE insulated cables
42	18/30 kV XLPE insulated cables
57	MEDIUM VOLTAGE ELECTRICAL CHARACTERISTICS DATA Maximum conductor resistance, current carrying capacity, star reactance, operating capacitance and de-rating factors
85	CABLE HANDLING AND INSTALLATION PARAMETERS
86	MEDIUM VOLTAGE CABLES ALUMINUM CONDUCTOR



INTRODUCTION

This brochure contains technical information on all SCC medium voltage XLPE cables including armoured and unarmoured designs, single and multicore constructions and the range of sheathing and screening options. Cables are divided by voltage ratings and each section contains the appropriate technical details, constructional data and current carrying capacities. Other electrical data applicable to medium voltage cables, plus cable handling instructions appear at the end of this brochure.

All cable designs outlined in this brochure use constructions covered by IEC 60502 and BS 6622. Please note, however that SCC can also supply a range of alternative designs to meet more specialized customer needs including enhanced fire performance and added environmental protection. Cables can also be supplied with alternative sheathing materials and colours, or can be made to individual customer specifications or other recognized standards. In particular, cables can be manufactured to meet specific requirements for the elimination of smoke and toxic gases using low smoke and non-halogen emitting materials. In all cases, please contact our technical department to discuss your specific needs.

specifications or other recognized standards. In particular, cables can be manufactured to meet specific requirements for the elimination of smoke and toxic gases using low smoke and non-halogen emitting materials. In all cases, please contact our technical department to discuss your specific needs.

50+ years
Of Experience



Financial
Resilience



Product Range
Diversity



Industry
Expertise



Global
Presence

Company Figures



Manufacture Capacity
60,000 MT/Year



Facility Space
+200,000 m²



Skilled Workforce
+500 Employee



Footprint
+20 Countries



CABLE SELECTION

It is essential to ensure that the type of cable ordered is suitable for its intended application. Cable selection should consider various factors, including installation specifications, applicable local regulations, and the performance characteristics of the appropriate cable types. Therefore, providing a definitive guide to cable selection is not feasible.

We recommend contacting us for specialized advice on suitable designs tailored to your specific cable requirements.

XLPE INSULATION

SCC medium voltage cables are manufactured using the Triple Extrusion process on a CCV line.

Producing XLPE cables for voltages up to 33 kV requires highly specialized equipment, cutting-edge research facilities, and stringent quality control measures throughout the production process. Material cleanliness is critical to ensuring the complete homogeneity of the finished insulation, with all materials maintained under controlled conditions during production.

Additionally, advanced process controls are essential to maintain consistent production parameters at every stage. This ensures a flawless and uniform bond, free from irregularities and voids, between the insulation and the semi-conductive layers of the conductor screen and insulation screen.

CONDUCTORS

SCC standard cable designs utilize plain circular compacted copper conductors that comply with IEC 60228 Class 2 standards.

While approximate conductor diameters are provided in this brochure, finished diameters may vary. For precise dimensions of the final products, please contact our technical department.

SEMI-CONDUCTING SCREENS

In order to obtain a homogenous and radial electrical field within the insulation, semi-conductive layers of screen are extruded directly onto the conductor and insulation in a single high-precision operation. This process, known as triple extrusion, eliminates the possibility of any contamination between the layers, which could create irregularities in the electrical field. By careful material selection and attention to process parameters, it is also possible to produce the insulation screen layers with the required degree of stripping force, as standardized by national or international specifications.

ARMOURING

All single core cables are armored with aluminum wires applied helically over an extruded PVC bedding. Multicore cables are armored using either galvanized steel wires or steel tapes.





OVERSHEATHS

SCC medium voltage cables are typically supplied with a PVC oversheath compliant with IEC 60502, and are colored red. Other colors can be provided to accommodate various installation considerations, such as UV radiation effects and differing soil compositions. Anti-termite formulations are also available, along with graphite-coated oversheaths for applications requiring on-site sheath testing. Please contact our technical department for more details.

Polyethylene oversheaths can also be specified for medium voltage cables. Polyethylene offers significantly greater impermeability to moisture compared to PVC and provides superior abrasion resistance, which are critical factors when selecting cables for use in hostile environments.

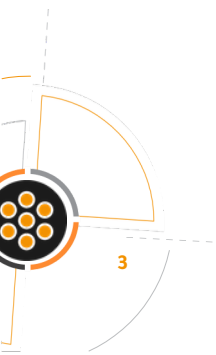
FIRE PERFORMANCE OF CABLE SHEATHS

Cables can be supplied with special flame-retardant PVC oversheaths to comply with the IEC 60332 standard. We can also provide cables with Low Smoke Halogen Free (LSHF) sheaths in accordance with BS 7211, BS 6724, or other equivalent international standards.

QUALITY ASSURANCE

Effective quality assurance procedures are essential to ensure the consistency, long-term reliability, and performance of all products. SCC has always recognized the importance of quality assurance, a commitment reflected in the company's achievement of ISO 9001 certification.

At SCC, quality assurance is an integral part of the production process, maintained from order entry and manufacturing through to testing, packaging, and shipping. All quality assurance procedures are regularly audited by international standards organizations, and routine voltage testing is conducted at levels more stringent than those required by standard specifications.





CABLE DIMENSIONS AND WEIGHTS

Approximate cable diameters are provided in this brochure to assist in selecting installation accessories. However, as finished diameters may vary, please contact our technical department for the actual dimensions of all finished products. Similarly, cable weights can vary, and the data supplied should be considered approximate.

As part of our company policy to continuously improve our products, we reserve the right to alter specifications and data shown in this brochure without prior notice.

CABLE SERVICES

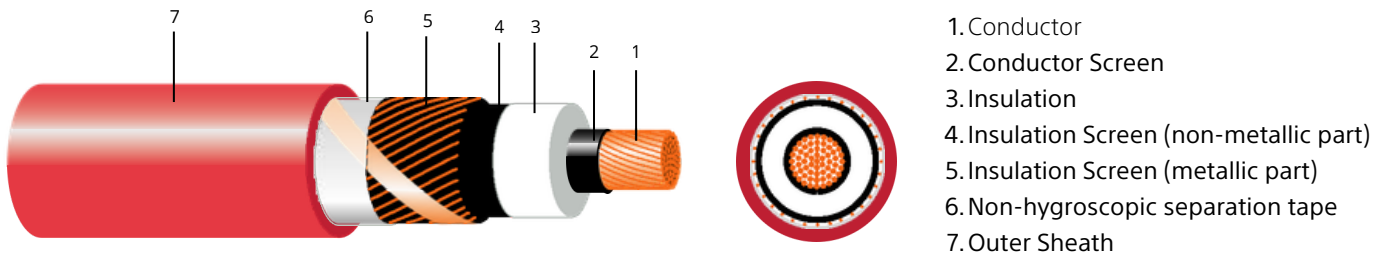
SCC TECHNICAL SUPPORT AND INSTALLATION SERVICES

Please note that SCC offers technical support for all cable installation projects and can also provide comprehensive cable installation services if required. For details, please contact our Customer Service department.





**MEDIUM VOLTAGE CABLES
COPPER CONDUCTOR**



DESCRIPTION

Circular stranded compacted copper conductor, XLPE insulated, with copper wire or copper tape screen and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted copper conductor to IEC 60228 class 2. Aluminum conductor available on request

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

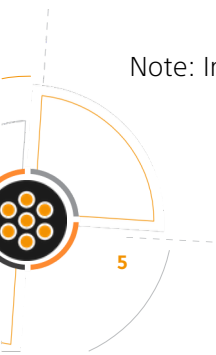
Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

For installation on trays, in ducts or by direct burial.

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





DIMENSIONS AND WEIGHTS

Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross Sect. Area of Conductor/ Screen (mm ² /mm ²)	Diameter of Conductor Approx (mm)	Nominal Thickness (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net weight Approx (kg/km)
35/16	6.9	2.5	1.6	20	1000	780
50/16	8.2	2.5	1.6	21	1000	932
70/16	9.7	2.5	1.6	23	1000	1149
95/16	11.4	2.5	1.7	25	1000	1430
120/16	12.8	2.5	1.8	26	1000	1800
150/25	14.4	2.5	1.8	28	1000	2076
185/25	15.9	2.5	1.9	30	1000	2524
240/25	18.3	2.6	1.9	33	1000	3035
300/25	20.5	2.8	2	35	500	3668
400/35	23.5	3	2.2	40	500	4580
500/35	26.3	3.2	2.3	43	500	5680
630/35	30.4	3.2	2.4	47	500	7100

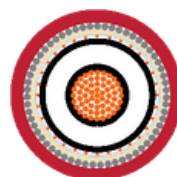
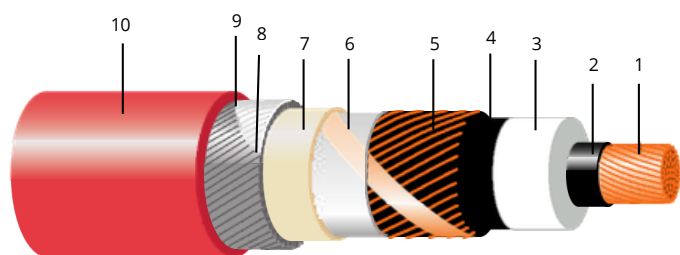


DIMENSIONS AND WEIGHTS

Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Diameter Approx (mm)	Nominal Thickness of XPLE (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
35	6.9	2.5	1.5	17.3	1000	580
50	8.2	2.5	1.6	18.8	1000	735
70	9.7	2.5	1.6	20.3	1000	940
95	11.4	2.5	1.7	22	1000	1217
120	12.8	2.5	1.7	23.5	1000	1464
150	14.4	2.5	1.8	25.7	1000	1748
185	15.9	2.5	1.8	27.3	1000	2099
240	18.3	2.6	1.9	30	1000	2685
300	20.5	2.8	2	32.7	500	3312
400	23.5	3	2.1	36.7	500	4160
500	26.3	3.2	2.2	39.5	500	5211
630	30.4	3.2	2.3	43.5	500	6592



3.6/6 kV XLPE INSULATED SINGLE-CORE ARMoured CABLE WITH COPPER CONDUCTOR (ALUMINUM WIRE ARMoured)



1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic separation tape
7. Bedding
8. Armour (AW)
9. Non-hygroscopic separation tape
10. Outer Sheath

DESCRIPTION

Circular stranded compacted Copper conductor ,XLPE insulated, with copper wire or copper tape screen, aluminium wire armoured (AWA) and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted Copper conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

Bedding

An extruded PVC layer.

Armour

Round aluminium wires.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request

APPLICATION

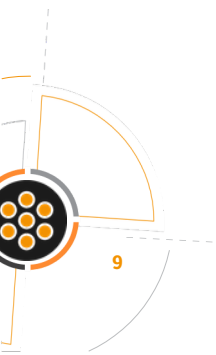
For installation on trays, in ducts or by direct burial.

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



DIMENSIONS AND WEIGHTS

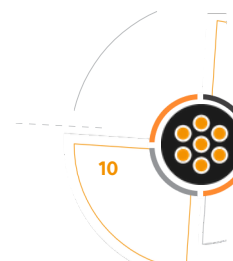
Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross sect. Area of Conductor/Screen (mm ² /mm ²)	Diameter of Conductor Approx (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
35/16	6.9	2.5	1.6	1.8	25	1000	1058
50/16	8.2	2.5	1.6	1.8	27	1000	1225
70/16	9.7	2.5	1.6	1.8	28	1000	1460
95/16	11.4	2.5	1.6	1.9	30	1000	1760
120/16	12.8	2.5	1.6	1.9	32	1000	2036
150/25	14.4	2.5	2	2	34	1000	2508
185/25	15.9	2.5	2	2.1	36	1000	2888
240/25	18.3	2.6	2	2.2	38	500	3508
300/25	20.5	2.8	2	2.2	41	500	4194
400/35	23.5	3	2.5	2.4	47	500	5393
500/35	26.3	3.2	2.5	2.5	50	500	6487
630/35	30.4	3.2	2.5	2.6	54	500	7960

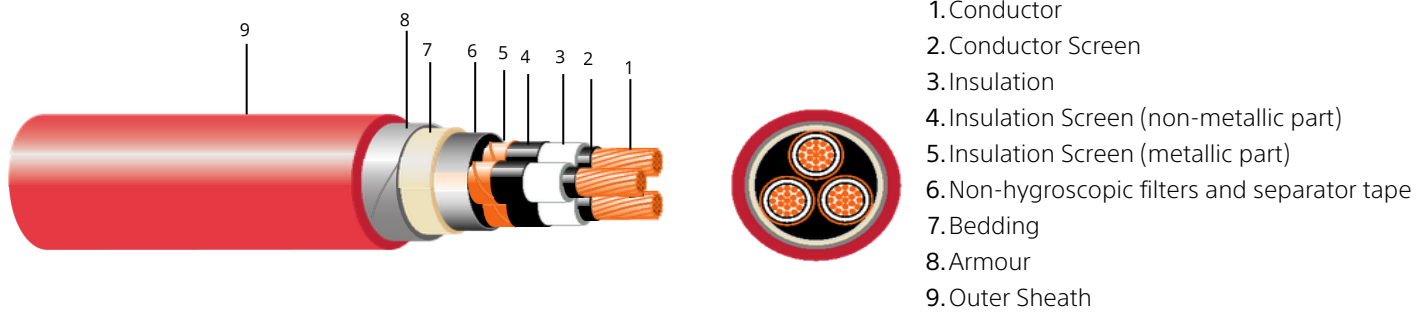




DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Diameter Approx (mm)	Nominal Thickness of XPLE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
35	6.9	2.5	1.6	1.8	23	1000	864
50	8.2	2.5	1.6	1.8	24	1000	1086
70	9.7	2.5	1.6	1.8	26	1000	1270
95	11.4	2.5	1.6	1.9	27	1000	1570
120	12.8	2.5	1.6	1.9	29	1000	1830
150	14.4	2.5	1.6	2	31	1000	2186
185	15.9	2.5	2	2.1	33	1000	2615
240	18.3	2.6	2	2.1	36	500	3235
300	20.5	2.8	2	2.2	38	500	3869
400	23.5	3	2	2.3	42	500	4830
500	26.3	3.2	2.5	2.5	46	500	6050
630	30.4	3.2	2.5	2.6	52	500	7622





DESCRIPTION

Circular stranded compacted copper Conductors, XLPE insulated, copper tape screened, three cores assembled together with non-hygroscopic polypropylene fillers, covered with extruded or taped bedding, armoured or unarmoured and PVC sheathed. Cables comply with IEC 60502-2.

CONSTRUCTION

Conductor

Plain circular compacted copper conductor to IEC 60228 class 2. Aluminium conductor available on request.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive material compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper tapes 0.10 mm thickness. Copper wires screen available on request.

Bedding for armoured cables

An extruded PVC layer.

Armour

Galvanized steel tapes or galvanized steel wires, applied over the PVC bedding.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

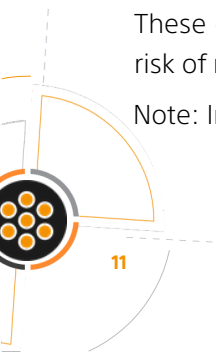
Colours for core identification

Red, Yellow and blue narrow tapes applied between non-metallic and metallic parts of insulation.

APPLICATION

These cables are generally suitable for direct burial or for installation on trays or in ducts. Where there is a risk of mechanical damage, armoured cables should be used.

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



3.6 / 6 kV THREE CORE CABLE WITH COPPER CONDUCTOR COPPER TAPE SCREEN UNARMoured AND PVC SHEATH



DIMENSIONS AND WEIGHTS

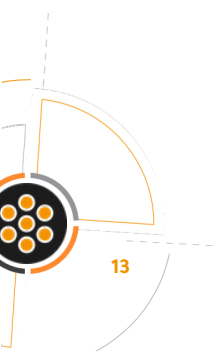
Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XPLE (mm)	Dia. Over Insulation Approx (mm)	Nominal Thickness of SC Layer (mm)	Thickness of CU Tape Approx (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
35	6.9	2.5	13.4	0.5	0.1	2.2	36	500	1850
50	8.2	2.5	14.5	0.5	0.1	2.3	39	500	2310
70	9.7	2.5	16.1	0.5	0.1	2.4	41	500	2920
95	11.4	2.5	17.8	0.5	0.1	2.5	45	500	3790
120	12.8	2.5	19.3	0.5	0.1	2.6	48	500	4580
150	14.4	2.5	20.8	0.5	0.1	2.7	52	500	5440
185	15.9	2.5	22.5	0.5	0.1	2.8	55	500	6540
240	18.3	2.6	24.9	0.5	0.1	3	61	500	8416
300	20.5	2.8	28	0.5	0.1	3.2	68	500	10510
400	23.5	3	31.1	0.5	0.1	3.5	76	500	13152
500	26.3	3.2	34.6	0.5	0.1	3.7	82	400	16333





DIMENSIONS AND WEIGHTS

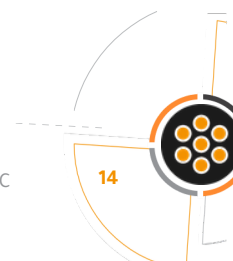
Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XPLE (mm)	Nominal Dia. Over Insulation (mm)	Thickness of SC Layer Approx (mm)	Nominal Cross Sec Area (mm ²)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of cable Approx (kg/km)
35	6.9	2.5	13.4	0.6	16	2.2	38	500	1880
50	8.2	2.5	14.5	0.6	16	2.3	41	500	2340
70	9.7	2.5	16.1	0.6	16	2.4	45	500	3000
95	11.4	2.5	17.8	0.6	16	2.5	49	500	3876
120	12.8	2.5	19.3	0.6	16	2.6	52	500	4655
150	14.4	2.5	20.8	0.6	25	2.7	56	500	5430
185	15.9	2.5	22.5	0.6	25	2.8	59	500	6734
240	18.3	2.6	24.9	0.6	25	3	65	500	8430
300	20.5	2.8	28	0.6	25	3.2	71	500	10516
400	23.5	3	31.1	0.6	35	3.5	81	400	13495
500	26.3	3.2	34.6	0.6	35	3.7	87	400	16747





DIMENSIONS AND WEIGHTS

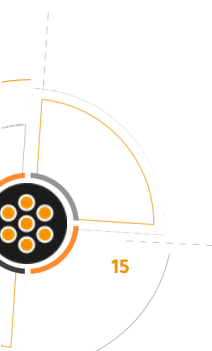
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XPLE (mm)	Nominal Dia. Over Insulation (mm)	Thickness of SC Layer Approx (mm)	Thickness of Cu tape Approx (mm)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	2.5	13.4	0.6	0.1	0.5	2.3	39	500	2780
50	8.2	2.5	14.5	0.6	0.1	0.5	2.4	42	500	3330
70	9.7	2.5	16.1	0.6	0.1	0.5	2.5	47	500	4160
95	11.4	2.5	17.8	0.6	0.1	0.5	2.6	51	500	5132
120	12.8	2.5	19.3	0.6	0.1	0.5	2.8	54	500	6030
150	14.4	2.5	20.8	0.6	0.1	0.5	2.9	57	500	6724
185	15.9	2.5	22.5	0.6	0.1	0.5	3	62	500	8124
240	18.3	2.6	24.9	0.6	0.1	0.5	3.2	67	500	10087
300	20.5	2.8	28	0.6	0.1	0.5	3.4	74	500	12272
400	23.5	3	31.1	0.6	0.1	0.8	3.7	82	350	15876
500	26.3	3.2	34.6	0.6	0.1	0.8	3.9	88	350	19321





DIMENSIONS AND WEIGHTS

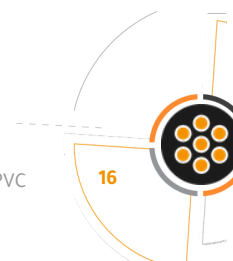
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Nominal Diameter (mm)	Thickness of XPLE (mm)	Nominal Diameter (mm)	Thickness of SC Layer Approx (mm)	Thickness of Cu tape Approx (mm)	Nominal Dia. of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	2.5	13.4	0.6	0.1	2.5	2.4	42	500	3413
50	8.2	2.5	14.5	0.6	0.1	2.5	2.5	46	500	4268
70	9.7	2.5	16.1	0.6	0.1	2.5	2.6	49	500	5190
95	11.4	2.5	17.8	0.6	0.1	2.5	2.7	54	500	6211
120	12.8	2.5	19.3	0.6	0.1	2.5	2.9	57	500	7200
150	14.4	2.5	20.8	0.6	0.1	2.5	3	60	500	8220
185	15.9	2.5	22.5	0.6	0.1	2.5	3.1	64	500	9350
240	18.3	2.6	24.9	0.6	0.1	2.5	3.3	71	500	11715
300	20.5	2.8	28	0.6	0.1	3.15	3.5	77	400	14600
400	23.5	3	31.1	0.6	0.1	3.15	3.8	86	400	18000
500	26.3	3.2	34.6	0.6	0.1	3.15	4	93	250	21730





DIMENSIONS AND WEIGHTS

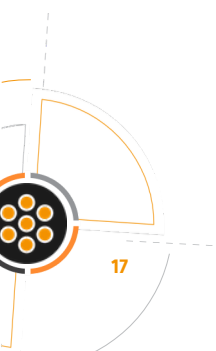
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XPLE (mm)	Nominal Diameter Over Insulation (mm)	Thickness of SC Layer Approx (mm)	Nominal Cross Sec of Screen (mm ²)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	2.5	13.4	0.8	16	0.5	2.3	43	500	2956
50	8.2	2.5	14.5	0.8	16	0.5	2.4	46	500	3528
70	9.7	2.5	16.1	0.8	16	0.5	2.5	50	500	4316
95	11.4	2.5	17.8	0.8	16	0.5	2.6	54	500	5343
120	12.8	2.5	19.3	0.8	16	0.5	2.8	57	500	6265
150	14.4	2.5	20.8	0.8	25	0.5	2.9	61	500	7397
185	15.9	2.5	22.5	0.8	25	0.5	3	65	500	8655
240	18.3	2.6	24.9	0.8	25	0.5	3.2	72	500	10790
300	20.5	2.8	28	1	25	0.5	3.4	77	500	13100
400	23.5	3	31.1	1	35	0.8	3.7	88	350	17185
500	26.3	3.2	34.6	1	35	0.8	3.9	94	350	20730

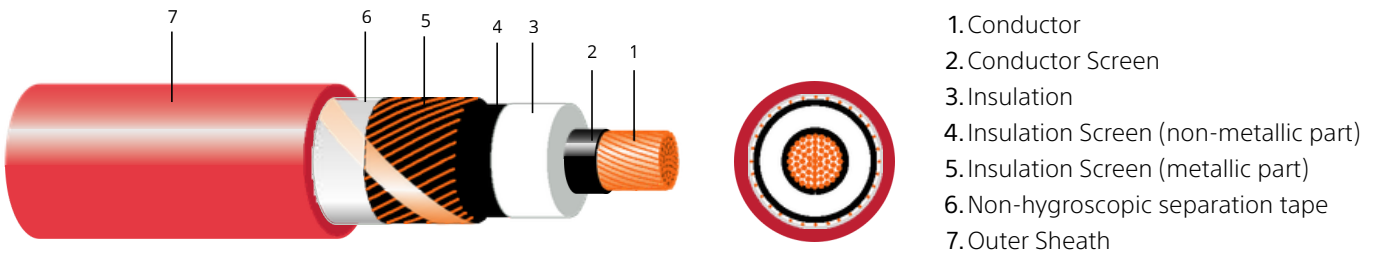




DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XPLE (mm)	Nominal Diameter (mm)	Thickness of SC Layer Approx (mm)	Nominal Cross Sec of Screen (mm ²)	Nominal Dia. of Steel Wire (mm)	Nominal Thickness of PV C (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	2.5	13.4	0.8	16	2.5	2.4	47	500	3910
50	8.2	2.5	14.5	0.8	16	2.5	2.5	50	500	4800
70	9.7	2.5	16.1	0.8	16	2.5	2.6	54	500	6463
95	11.4	2.5	17.8	0.8	16	2.5	2.7	58	500	6656
120	12.8	2.5	19.3	0.8	16	2.5	2.9	61	500	7548
150	14.4	2.5	20.8	0.8	25	2.5	3	65	500	8800
185	15.9	2.5	22.5	0.8	25	2.5	3.1	68	500	10000
240	18.3	2.6	24.9	0.8	25	2.5	3.3	76	500	12977
300	20.5	2.8	28	1	25	3.15	3.5	88	400	15873
400	23.5	3	31.1	1	35	3.15	3.8	98	400	19020
500	26.3	3.2	34.6	1	35	3.15	4	104	250	22710





DESCRIPTION

Circular stranded compacted copper conductor, XLPE insulated, with copper wire or copper tape screen and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted copper conductor to IEC 60228 class 2. Aluminium conductor available on request.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

For installation on trays, in ducts or by direct burial.

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



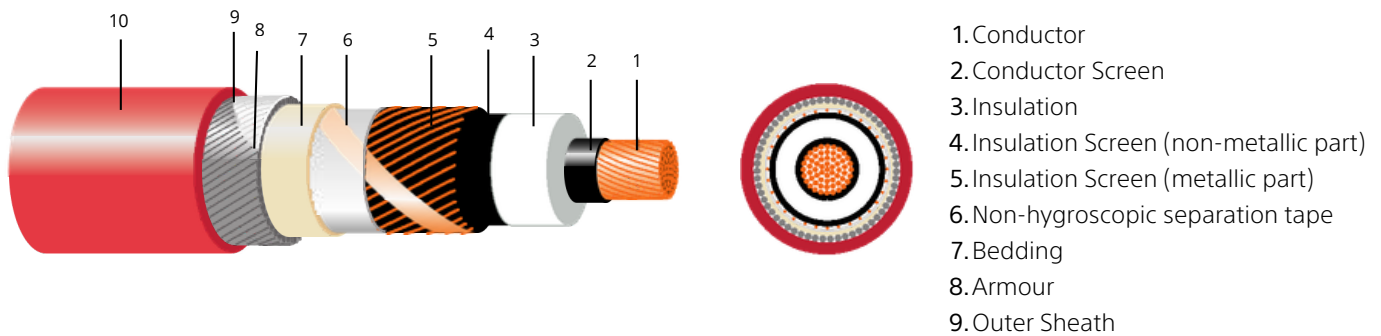
DIMENSIONS AND WEIGHTS

Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross Sect. Area of Conductor/Screen (mm ² /mm ²)	Nominal Diameter of Conductor (mm)	Nominal Thickness of XLPE mm	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard delivery length (m±5%)	Net weight Approx (kg/km)
35/16	6.9	3.4	1.6	21	1000	755
50/16	8.2	3.4	1.7	23	1000	900
70/16	9.7	3.4	1.7	24	1000	1115
95/16	11.4	3.4	1.8	26	1000	1392
120/16	12.8	3.4	1.8	28	1000	1644
150/25	14.4	3.4	1.9	29	1000	2011
185/25	15.9	3.4	1.9	31	1000	2370
240/25	18.3	3.4	2	34	1000	2948
300/25	20.5	3.4	2.1	36	500	3545
400/35	23.5	3.4	2.2	40	500	4490
500/35	26.3	3.4	2.3	42	500	5526
630/35	30.4	3.4	2.4	46	500	6875



DIMENSIONS AND WEIGHTS

Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross sect. area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Thickness of PVC (mm)	Overall diameter Approx (mm)	Standard delivery length (m±5%)	Net weight Approx (kg/km)
35	6.93	3.4	1.6	18	1000	620
50	8.1	3.4	1.6	19	1000	770
70	9.9	3.4	1.7	21	1000	987
95	11.8	3.4	1.7	23	1000	1270
120	14.1	3.4	1.8	24	1000	1518
150	14.8	3.4	1.8	26	1000	1806
185	16.3	3.4	1.9	28	1000	2177
240	18.5	3.4	2	30	1000	2767
300	20.8	3.4	2	33	500	3379
400	23.5	3.4	2.2	37	500	4234
500	26.6	3.4	2.2	40	500	5252
630	30.4	3.4	2.4	44	500	6550



DESCRIPTION

Circular stranded compacted copper conductor, XLPE insulated, with copper wire or copper tape screen, aluminium wire armoured (AWA) and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted copper conductor to IEC 60228 class 2. Aluminium conductor available on request.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

Bedding

An extruded PVC layer.

Armour

Round aluminium wires.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

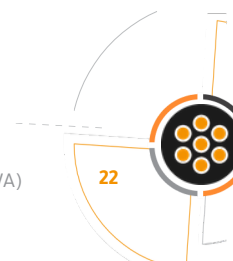
For installation on trays, in ducts or by direct burial.

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



DIMENSIONS AND WEIGHTS

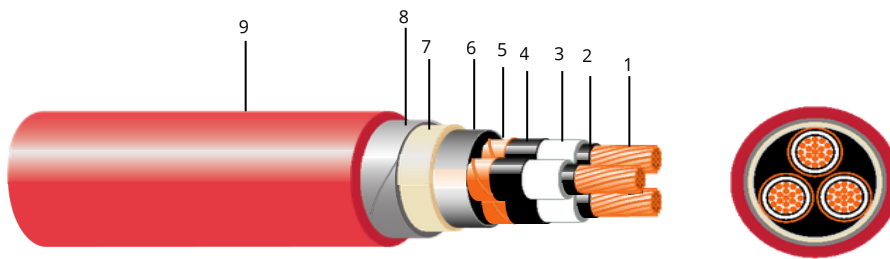
Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross sect. Area of Conductor/Screen (mm ² /mm ²)	Nominal Diameter of Conductor (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard delivery length (m±5%)	Net weight Approx (kg/km)
35/16	6.9	3.4	1.6	1.8	27	1000	1130
50/16	8.2	3.4	1.6	1.9	29	1000	1315
70/16	9.7	3.4	1.6	1.9	30	1000	1535
95/16	11.4	3.4	1.6	2	32	1000	1840
120/16	12.8	3.4	2	2	33	1000	2120
150/25	14.4	3.4	2	2.1	36	1000	2600
185/25	15.9	3.4	2	2.1	37	500	2985
240/25	18.3	3.4	2	2.2	40	500	3590
300/25	20.5	3.4	2	2.3	42	500	4305
400/35	23.5	3.4	2.5	2.4	47	500	5420
500/35	26.3	3.4	2.5	2.6	50	500	6475
630/35	30.4	3.4	2.5	2.7	56	500	8288





DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
35	6.9	3.4	1.6	1.8	23	1000	923
50	8.2	3.4	1.6	1.8	25	1000	1096
70	9.7	3.4	1.6	1.9	26	1000	1367
95	11.4	3.4	1.6	1.9	28	1000	1647
120	12.8	3.4	2	2	30	1000	1910
150	14.4	3.4	2	2.1	31	1000	2216
185	15.9	3.4	2	2.1	33	500	2684
240	18.3	3.4	2	2.2	36	500	3300
300	20.5	3.4	2	2.3	39	500	4000
400	23.5	3.4	2.5	2.4	42	500	4900
500	26.3	3.4	2.5	2.5	46	500	6160
630	30.4	3.4	2.5	2.6	50	500	7587



1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic filters and separator tape
7. Bedding
8. Armour
9. Outer Sheath

DESCRIPTION

Stranded circular compacted copper conductors, XLPE insulated, copper tape screened, three cores assembled together with non-hygroscopic polypropylene fillers, covered with extruded or taped bedding, armoured or unarmoured and PVC sheathed. Cables comply with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted copper conductor to IEC 60228 class 2. Aluminium conductor available on request.

Conductor Screen

Extruded semiconductive compound.

Insulation

XLPE (cross-linked polyethylene) extruded and cross-linked by silane curing process, rated 90°C.

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper tapes 0.10 mm thickness. Copper wires screen available on request.

Bedding for armoured cables

An extruded PVC layer.

Armour

Galvanized steel tapes or galvanized steel wires, applied over the PVC bedding.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

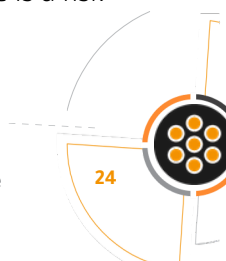
Colours for core identification

Red, yellow and blue narrow tapes applied between non-metallic and metallic parts of insulation screen.

APPLICATION

These cables are generally suitable for direct burial or for installation on trays or in ducts. Where there is a risk of mechanical damage, armoured cables should be used.

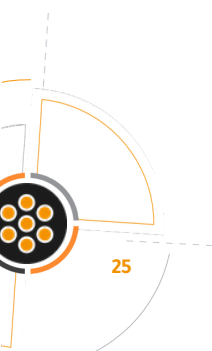
Note: In the interests of product improvement, SCC reserves the right to alter cable specifications.





DIMENSIONS AND WEIGHTS

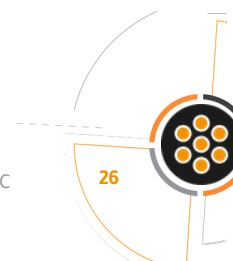
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC layer Approx (mm)	Nominal Cross Sec Area (mm ²)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	3.4	15.2	0.6	16	2.5	2.6	43	500	2180
50	8.2	3.4	16.3	0.6	16	2.5	2.7	46	500	2660
70	9.7	3.4	17.9	0.6	16	2.5	2.8	49	500	3344
95	11.4	3.4	19.6	0.6	16	2.5	2.9	53	500	4242
120	12.8	3.4	21.1	0.6	16	2.5	3	56	500	5055
150	14.4	3.4	22.6	0.6	25	2.5	3.1	60	500	6060
185	15.9	3.4	24.3	0.6	25	2.5	3.2	63	500	7190
240	18.3	3.4	26.5	0.6	25	3.15	3.4	69	500	9050
300	20.5	3.4	29.2	0.6	25	3.15	3.6	74	400	10945
400	23.5	3.4	31.9	0.6	35	3.15	3.8	83	350	13830
500	26.3	3.4	35	0.6	35	3.15	4.1	88	250	16995





DIMENSIONS AND WEIGHTS

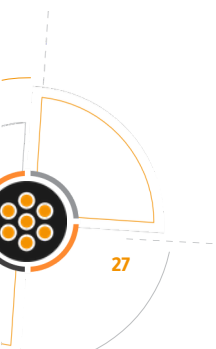
Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Dia. Over Insulation (mm)	Thickness of SC layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	3.4	15.2	0.6	0.1	2.3	40	500	2121
50	8.2	3.4	16.3	0.6	0.1	2.4	43	500	22620
70	9.7	3.4	17.9	0.6	0.1	2.5	46	500	3220
95	11.4	3.4	19.6	0.6	0.1	2.7	50	500	4114
120	12.8	3.4	21.1	0.6	0.1	2.8	53	500	4927
150	14.4	3.4	22.6	0.6	0.1	2.9	57	500	5848
185	15.9	3.4	24.3	0.6	0.1	3	60	500	6976
240	18.3	3.4	26.5	0.6	0.1	3.1	66	500	8820
300	20.5	3.4	29.2	0.6	0.1	3.3	71	500	10740
400	23.5	3.4	31.9	0.6	0.1	3.5	79	400	13500
500	26.3	3.4	35	0.6	0.1	3.7	84	350	16655





DIMENSIONS AND WEIGHTS

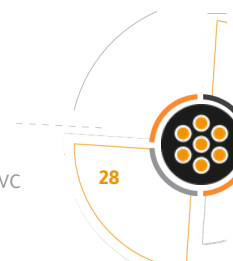
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	3.4	15.2	0.6	0.1	0.5	2.4	43	500	2954
50	8.2	3.4	16.3	0.6	0.1	0.5	2.5	46	500	3500
70	9.7	3.4	17.9	0.6	0.1	0.5	2.6	50	500	4330
95	11.4	3.4	19.6	0.6	0.1	0.5	2.8	54	500	5334
120	12.8	3.4	21.1	0.6	0.1	0.5	2.9	58	500	6239
150	14.4	3.4	22.6	0.6	0.1	0.5	3	61	500	7230
185	15.9	3.4	24.3	0.6	0.1	0.5	3	65	500	8377
240	18.3	3.4	26.5	0.6	0.1	0.5	3.3	71	500	10430
300	20.5	3.4	29.2	0.6	0.1	0.5	3.5	77	400	12627
400	23.5	3.4	31.9	0.6	0.1	0.8	3.7	83	350	16100
500	26.3	3.4	35	0.6	0.1	0.8	3.9	89	350	19433





DIMENSIONS AND WEIGHTS

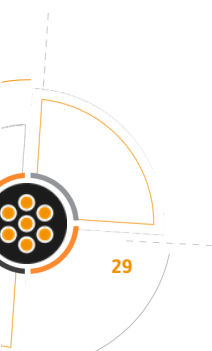
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC Layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	3.4	15.2	0.8	0.1	2.5	2.6	50	500	4394
50	8.2	3.4	16.3	0.8	0.1	2.5	2.7	52	500	4935
70	9.7	3.4	17.9	0.8	0.1	2.5	2.8	55	500	5500
95	11.4	3.4	19.6	0.8	0.1	2.5	2.9	60	500	6850
120	12.8	3.4	21.1	0.8	0.1	2.5	3	63	500	7957
150	14.4	3.4	22.6	0.8	0.1	2.5	3.1	66	500	8841
185	15.9	3.4	24.3	0.8	0.1	2.5	3.2	70	500	10550
240	18.3	3.4	26.5	1	0.1	3.15	3.4	76	500	12670
300	20.5	3.4	29.2	1	0.1	3.15	3.6	81	350	15200
400	23.5	3.4	31.9	1	0.1	3.15	3.9	87	350	18340
500	26.3	3.4	35	1	0.1	3.15	4.1	95	250	21870





DIMENSIONS AND WEIGHTS

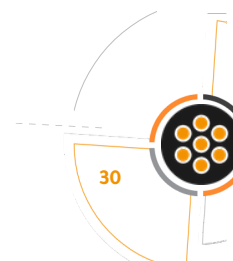
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC Layer Approx (mm)	Nominal Cross sec area (mm ²)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	3.4	15.2	0.6	16	0.5	2.4	47	500	3300
50	8.2	3.4	16.3	0.6	16	0.5	2.6	53	500	4033
70	9.7	3.4	17.9	0.6	16	0.5	2.7	57	500	4844
95	11.4	3.4	19.6	0.6	16	0.8	2.8	62	500	6426
120	12.8	3.4	21.1	0.6	16	0.8	2.9	66	500	7400
150	14.4	3.4	22.6	0.6	25	0.8	3	70	500	8586
185	15.9	3.4	24.3	0.6	25	0.8	3.1	73	500	9850
240	18.3	3.4	26.5	0.6	25	0.8	3.3	79	500	11970
300	20.5	3.4	29.2	0.6	25	0.8	3.5	84	400	14000
400	23.5	3.4	31.9	0.6	35	0.8	3.6	91	350	17050
500	26.3	3.4	35	0.6	35	0.8	3.7	96	350	20328

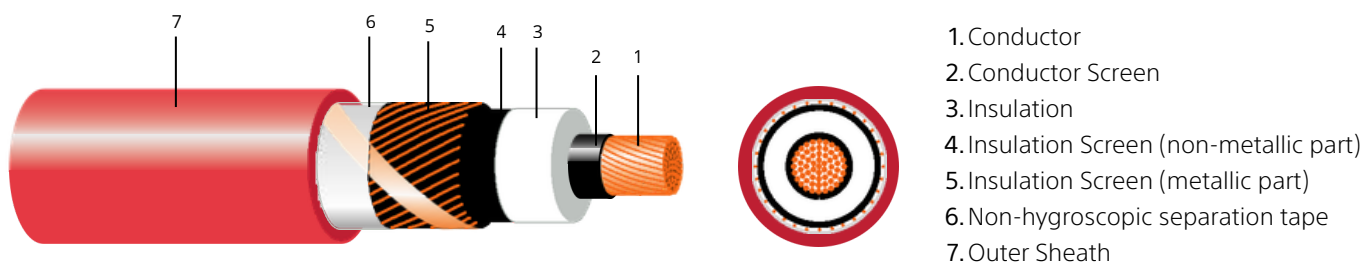




DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC Layer Approx (mm)	Nominal Cross Sec Area (mm ²)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	3.4	15.2	0.6	16	2.5	2.6	53	500	4683
50	8.2	3.4	16.3	0.6	16	2.5	2.7	56	500	5325
70	9.7	3.4	17.9	0.6	16	2.5	2.8	59	500	6123
95	11.4	3.4	19.6	0.6	16	2.5	2.9	63	500	7313
120	12.8	3.4	21.1	0.6	16	2.5	3	67	500	8338
150	14.4	3.4	22.6	0.6	25	2.5	3.1	70	500	9538
185	15.9	3.4	24.3	0.6	25	2.5	3.2	75	500	11707
240	18.3	3.4	26.5	0.6	25	3.15	3.4	81	500	13980
300	20.5	3.4	29.2	0.6	25	3.15	3.6	86	350	16227
400	23.5	3.4	31.9	0.6	35	3.15	3.9	94	350	19556
500	26.3	3.4	35	0.6	35	3.15	4.1	99	250	23036





DESCRIPTION

Circular stranded compacted copper conductor, XLPE insulated, with copper wire or copper tape screen and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted copper conductor to IEC 60228 class 2. Aluminium conductor available on request.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

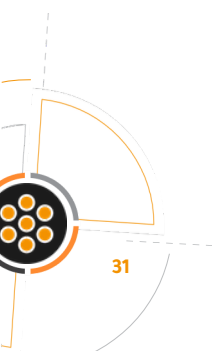
Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

For installation on trays, in ducts or by direct burial.

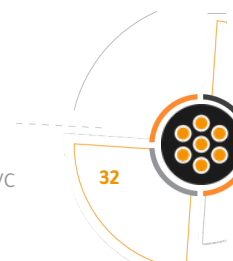
Note: In the interests of product improvement, SCC reserves the right to alter cable specifications.





DIMENSIONS AND WEIGHTS

Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross sect. Area of Conductor/Screen (mm ² /mm ²)	Nominal Diameter of Conductor (mm)	Nominal Thickness of XLPE (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Net Weight Approx (kg/km)
35/16	6.9	4.5	1.7	23	1000	847
50/16	8.2	4.5	1.7	25	1000	1000
70/16	9.7	4.5	1.8	27	1000	1220
95/16	11.4	4.5	1.8	28	1000	1500
120/16	12.8	4.5	1.9	30	1000	1765
150/25	14.4	4.5	1.9	32	1000	2137
185/25	15.9	4.5	2	34	1000	2495
240/25	18.3	4.5	2.1	36	1000	3100
300/25	20.5	4.5	2.1	39	500	3370
400/35	23.5	4.5	2.3	42	500	4660
500/35	26.3	4.5	2.4	45	500	5675
630/35	30.4	4.5	2.5	49	500	7075

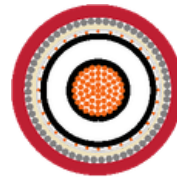
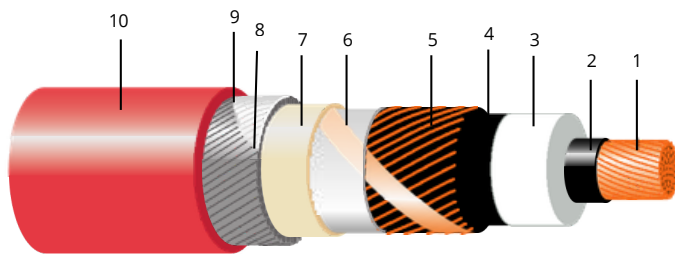




DIMENSIONS AND WEIGHTS

Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Net Weight Approx (kg/km)
35	6.9	4.5	1.7	18	1000	670
50	8.2	4.5	1.7	19	1000	818
70	9.7	4.5	1.8	21	1000	1038
95	11.4	4.5	1.8	23	1000	1325
120	12.8	4.5	1.9	24	1000	1580
150	14.4	4.5	1.9	26	1000	1874
185	15.9	4.5	2	27	1000	2233
240	18.3	4.5	2.1	30	1000	2813
300	20.5	4.5	2.1	33	500	3418
400	23.5	4.5	2.2	37	500	4242
500	26.3	4.5	2.3	40	500	5300
630	30.3	4.5	2.4	43	500	6658

8.7/15 kV XLPE INSULATED SINGLE CORE CABLE WITH COPPER CONDUCTOR (ALUMINIUM WIRE ARMoured)



1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic separation tape
7. Bedding
8. Armour
9. Non-hygroscopic separation tape
10. Outer Sheath

DESCRIPTION

Circular stranded compacted copper conductor, XLPE insulated, with copper wire or copper tape screen, aluminium wire armoured (AWA) and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted copper conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

Bedding

An extruded PVC layer.

Armour

Round aluminium wires.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

For installation on trays, in ducts or by direct burial.

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



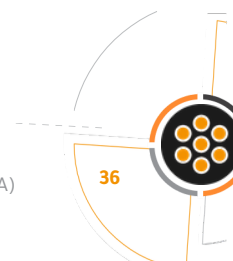
DIMENSIONS AND WEIGHTS

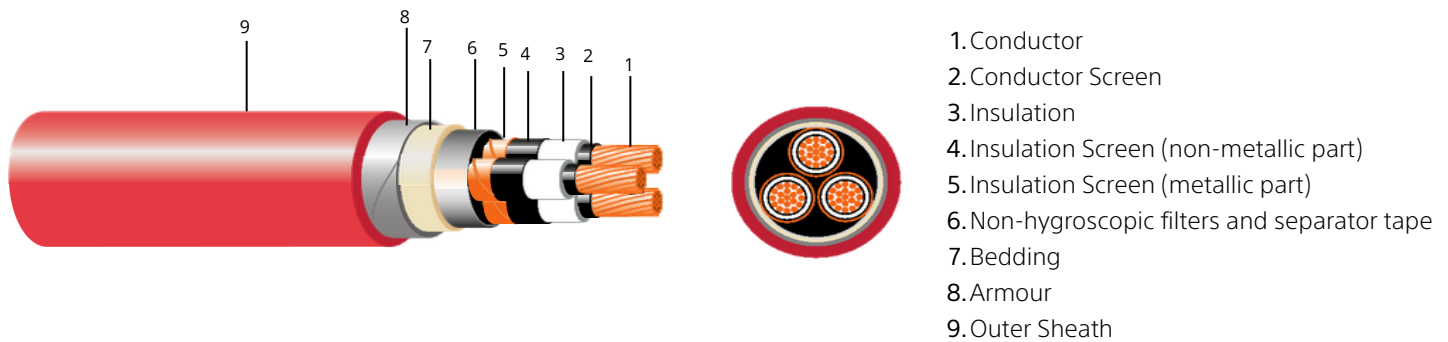
Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area of Conductor/Screen (mm ² /mm ²)	Nominal Diameter of Conductor (mm)	Nominal Thickness of XLPE mm	Nominal Diameter of Alu. Wire mm	Nominal Thickness of PVC mm	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Net Weight Approx (kg/km)
35/16	6.9	4.5	1.6	1.9	30	1000	1283
50/16	8.2	4.5	1.6	1.9	31	1000	1460
70/16	9.7	4.5	1.6	2	33	1000	1705
95/16	11.4	4.5	2	2.1	35	1000	2115
120/16	12.8	4.5	2	2.1	37	1000	2400
150/25	14.4	4.5	2	2.2	39	500	2810
185/25	15.9	4.5	2	2.2	40	500	3220
240/25	18.3	4.5	2	2.3	43	500	3895
300/25	20.5	4.5	2.5	2.4	45	500	4527
400/35	23.5	4.5	2.5	2.5	50	500	5722
500/35	26.3	4.5	2.5	2.6	53	500	6944
630/35	30.3	4.5	2.5	2.7	57	500	8338



DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Net Weight Approx (kg/km)
35	6.9	4.5	1.6	1.9	27	1000	1092
50	8.2	4.5	1.6	1.9	29	1000	1310
70	9.7	4.5	1.6	2	30	1000	1530
95	11.4	4.5	2	2	32	1000	1845
120	12.8	4.5	2	2.1	34	1000	21230
150	14.4	4.5	2	2.1	36	1000	2450
185	15.9	4.5	2	2.2	37	500	2840
240	18.3	4.5	2	2.3	41	500	3560
300	20.5	4.5	2	2.3	43	500	4190
400	23.5	4.5	2.5	2.5	57	500	5135
500	26.3	4.5	2.5	2.6	50	500	6320
630	30.3	4.5	2.5	2.7	54	500	7825





DESCRIPTION

Circular stranded compacted copper conductors, XLPE insulated, copper tape screened, assembled together with non-hygroscopic polypropylene fillers, covered with extruded or taped bedding, armoured or unarmoured and PVC sheathed. Cables comply with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted copper conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper tapes 0.10 mm thickness. Copper wires screen available on request.

Bedding for armoured cables

An extruded PVC layer.

Armour

Galvanized steel tapes or galvanized steel wires, applied over the PVC bedding.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request).

Colours for core identification

Red, yellow and blue narrow tapes applied between non-metallic and metallic parts of insulation screen.

APPLICATION

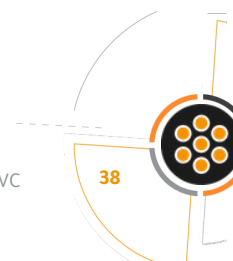
These cables are generally suitable for direct burial or for installation on trays or in ducts. Where there is a risk of mechanical damage, armoured cables should be used.

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



DIMENSIONS AND WEIGHTS

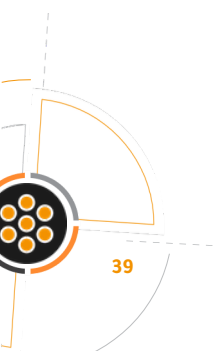
Conductor		Insulation		Screening		Outer sheath		Packaging	
Cross Sect. Area Nominal (mm ²)	Diameter Nominal (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC layer Approx (mm)	Nominal Cross Sec Area (mm ²)	Nominal Thickness of PVC Sheath (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	4.5	17.4	0.6	16	2.7	48	500	2420
50	8.2	4.5	18.5	0.6	16	2.8	51	500	6140
70	9.7	4.5	20.1	0.6	16	2.9	54	500	7100
95	11.4	4.5	21.8	0.6	16	3.1	58	500	8390
120	12.8	4.5	23.3	0.6	16	3.2	62	500	9500
150	14.4	4.5	24.8	0.6	25	3.3	65	500	11500
185	15.9	4.5	26.5	0.6	25	3.4	69	500	13080
240	18.3	4.5	28.7	0.6	25	3.5	74	400	15390
300	20.5	4.5	31.4	0.6	25	3.6	79	400	17950
400	23.5	4.5	34.1	0.6	35	3.7	88	350	21170
500	26.3	4.5	37.2	0.6	35	3.9	93	250	25250





DIMENSIONS AND WEIGHTS

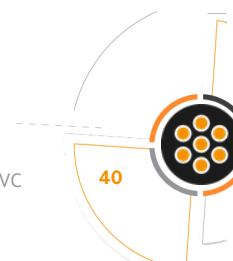
Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Dia. Over Insulation (mm)	Thickness of SC layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	4.5	17.4	0.8	0.1	2.5	45	500	2400
50	8.2	4.5	18.5	0.8	0.1	2.6	48	500	2915
70	9.7	4.5	20.1	0.8	0.1	2.7	51	500	3587
95	11.4	4.5	21.8	0.8	0.1	2.8	55	500	4515
120	12.8	4.5	23.3	0.8	0.1	2.9	58	500	5200
150	14.4	4.5	24.8	0.8	0.1	3	64	500	6480
185	15.9	4.5	26.5	1	0.1	3.1	66	500	7510
240	18.3	4.5	28.7	1	0.1	3.3	71	500	9100
300	20.5	4.5	31.4	1	0.1	3.5	76	500	11180
400	23.5	4.5	34.1	1	0.1	3.7	84	400	14190
500	26.3	4.5	37.2	1	0.1	3.9	90	350	17390





DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC Layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Thickness of Steel Tape mm	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard delivery length Approx (m±5%)	Weight of cable Approx (kg/km)
35	6.9	4.5	17.4	0.8	0.1	0.5	2.6	48	500	3350
50	8.2	4.5	18.5	0.8	0.1	0.5	2.7	51	500	4000
70	9.7	4.5	20.1	0.8	0.1	0.5	2.8	56	500	4750
95	11.4	4.5	21.8	0.8	0.1	0.5	3	60	500	5778
120	12.8	4.5	23.3	0.8	0.1	0.5	3.1	62	500	6680
150	14.4	4.5	24.8	0.8	0.1	0.5	3.2	67	500	7725
185	15.9	4.5	26.5	1	0.1	0.5	3.3	69	500	8970
240	18.3	4.5	28.7	1	0.1	0.5	3.5	76	500	11520
300	20.5	4.5	31.4	1	0.1	0.8	3.7	82	350	13200
400	23.5	4.5	34.1	1	0.1	0.8	3.9	89	350	16550
500	26.3	4.5	37.2	1	0.1	0.8	4.1	95	250	20035





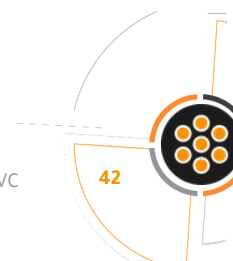
DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	4.5	17.4	0.8	0.1	2.5	2.7	52	500	5243
50	8.2	4.5	18.5	0.8	0.1	2.5	2.8	55	500	5920
70	9.7	4.5	20.1	0.8	0.1	2.5	2.9	58	500	6857
95	11.4	4.5	21.8	0.8	0.1	2.5	3.1	63	500	8015
120	12.8	4.5	23.3	0.8	0.1	2.5	3.2	66	500	9820
150	14.4	4.5	24.8	0.8	0.1	3.15	3.3	70	500	11017
185	15.9	4.5	26.5	1	0.1	3.15	3.5	74	500	12458
240	18.3	4.5	28.7	1	0.1	3.15	3.6	80	400	14789
300	20.5	4.5	31.4	1	0.1	3.15	3.8	85	350	17315
400	23.5	4.5	34.1	1	0.1	3.15	4	93	350	20716
500	26.3	4.5	37.2	1	0.1	3.15	4.2	99	250	24295



DIMENSIONS AND WEIGHTS

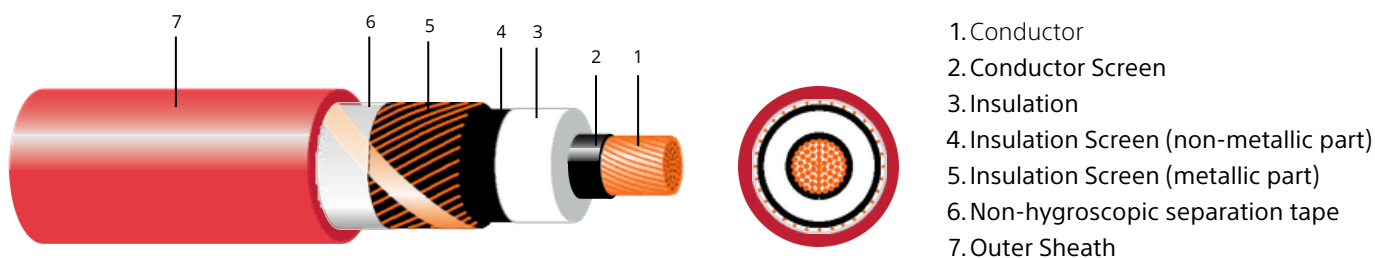
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross sect. area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC layer Approx (mm)	Nominal Cross Sec Area (mm)	Nominal Thickness of Steel tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	4.5	17.4	0.8	16	0.5	2.6	52	500	3693
50	8.2	4.5	18.5	0.8	16	0.5	2.7	55	500	4297
70	9.7	4.5	20.1	0.8	16	0.5	2.8	58	500	4968
95	11.4	4.5	21.8	0.8	16	0.5	3	63	500	6076
120	12.8	4.5	23.3	0.8	16	0.5	3.1	66	500	6896
150	14.4	4.5	24.8	0.8	25	0.5	3.2	70	500	8055
185	15.9	4.5	26.5	1	25	0.5	3.3	74	500	9325
240	18.3	4.5	28.7	1	25	0.5	3.5	80	500	12095
300	20.5	4.5	31.4	1	25	0.8	3.7	85	350	14222
400	23.5	4.5	34.1	1	35	0.8	3.9	93	350	17390
500	26.3	4.5	37.2	1	35	0.8	4.1	99	250	20747





DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC layer Approx (mm)	Nominal Cross Sec Area (mm)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	4.5	17.4	0.8	16	2.5	2.7	56	500	4930
50	8.2	4.5	18.5	0.8	16	2.5	2.8	59	500	5590
70	9.7	4.5	20.1	0.8	16	2.5	2.9	62	500	6475
95	11.4	4.5	21.8	0.8	16	2.5	3.1	66	500	7615
120	12.8	4.5	23.3	0.8	16	2.5	3.2	70	500	8750
150	14.4	4.5	24.8	0.8	25	3.15	3.3	75	500	10645
185	15.9	4.5	26.5	1	25	3.15	3.5	80	500	12300
240	18.3	4.5	28.7	1	25	3.15	3.6	84	400	14000
300	20.5	4.5	31.4	1	25	3.15	3.8	96	350	16200
400	23.5	4.5	34.1	1	35	3.15	4	103	350	20230
500	26.3	4.5	37.2	1	35	3.15	4.2	108	250	23795



1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic separation tape
7. Outer Sheath

DESCRIPTION

Circular stranded compacted copper conductors, XLPE insulated, copper wire or copper tape screen and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted copper conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

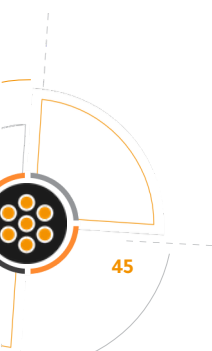
For installation on trays, in ducts or by direct burial.

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



DIMENSIONS AND WEIGHTS

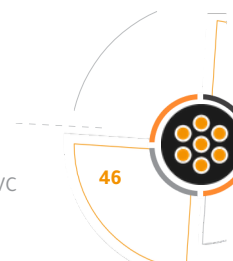
Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross sect. Area of Conductor/Screen (mm ² /mm ²)	Nominal Diameter of Conductor (mm)	Nominal Thickness of XLPE (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
50/16	8.2	5.5	1.8	28	1000	1150
70/16	9.7	5.5	1.9	29	1000	1383
95/16	11.4	5.5	1.9	31	1000	1687
120/16	12.8	5.5	2	33	1000	1956
150/25	14.4	5.5	2	34	1000	2344
185/25	15.9	5.5	2.1	36	1000	2720
240/25	18.3	5.5	2.1	39	1000	3080
300/25	20.5	5.5	2.2	41	500	4000
400/35	23.5	5.5	2.3	45	500	4957
500/35	26.3	5.5	2.4	47	500	6200
630/35	30.3	5.5	2.5	51	500	7400

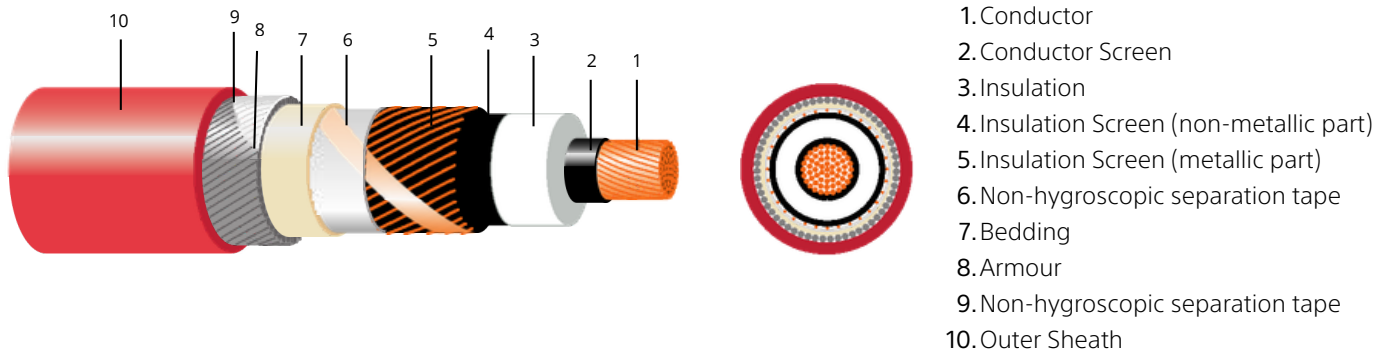




DIMENSIONS AND WEIGHTS

Catalogue Number	Conductor		Insulation	Outer sheath		Packaging	
	Nominal Cross sectional Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
ET8AA-14	50	8.2	5.5	1.8	26	1000	990
ET8AA-16	70	9.7	5.5	1.8	27	1000	1210
ET8AA-17	95	11.4	5.5	1.9	29	1000	1506
ET8AA-19	120	12.8	5.5	1.9	30	1000	1754
ET8AA-21	150	14.4	5.5	2	32	1000	2056
ET8AA-22	185	15.9	5.5	2	33	1000	2415
ET8AA-24	240	18.3	5.5	2.1	36	1000	2950
ET8AA-26	300	20.5	5.5	2.2	38	500	3600
ET8AA-27	400	23.5	5.5	2.3	41	500	4500
ET8AA-28	500	26.3	5.5	2.4	44	500	5535
ET8AA-30	630	30.3	5.5	2.5	49	500	6970





DESCRIPTION

Circular stranded compacted copper conductors, XLPE insulated, copper wire or copper tape screen aluminium wire armoured (AWA) and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted copper conductor to IEC 60228 class 2. Aluminium conductor available on request.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

Bedding

An extruded PVC layer.

Armour

Round aluminium wires.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

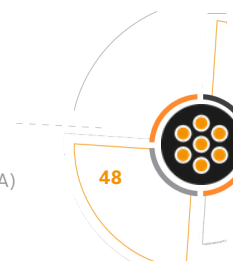
For installation on trays, in ducts or by direct burial.

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



DIMENSIONS AND WEIGHTS

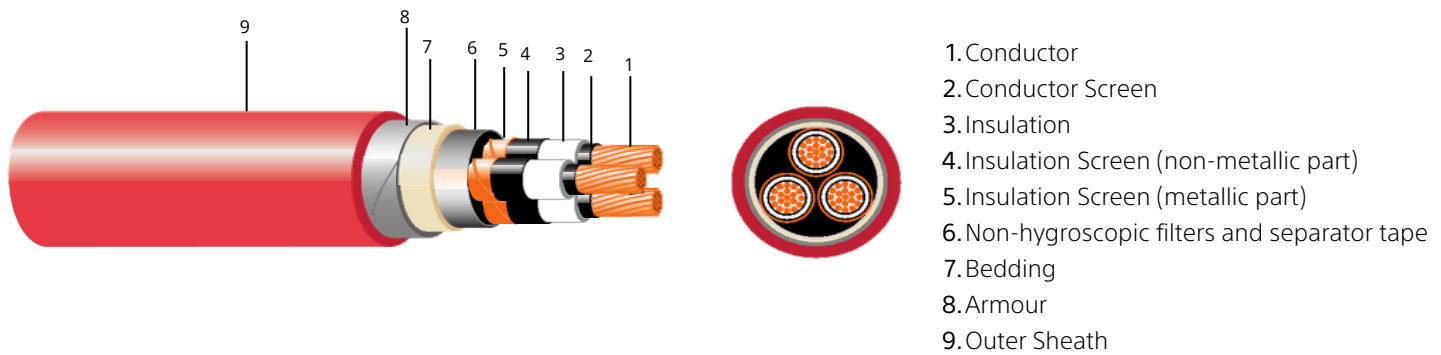
Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross sect. Area of Conductor/Screen (mm ² /mm ²)	Nominal Diameter of Conductor (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
50/16	8.2	5.5	2	2	35	1000	1740
70/16	9.7	5.5	2	2.1	36	1000	2000
95/16	11.4	5.5	2	2.1	38	1000	2343
120/16	12.8	5.5	2	2.2	40	500	2700
150/25	14.4	5.5	2	2.2	42	500	3100
185/25	15.9	5.5	2	2.3	43	500	3500
240/25	18.3	5.5	2.5	2.4	47	500	4315
300/25	20.5	5.5	2.5	2.5	49	500	5000
400/35	23.5	5.5	2.5	2.6	53	500	6100
500/35	26.3	5.5	2.5	2.7	56	500	7250
630/35	30.3	5.5	2.5	2.8	59	500	9000





DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
50	8.2	5.5	1.6	2	31	1000	1410
70	9.7	5.5	2	2.1	32	1000	1660
95	11.4	5.5	2	2.1	35	1000	2075
120	12.8	5.5	2	2.2	36	1000	2354
150	14.4	5.5	2	2.2	38	500	2695
185	15.9	5.5	2	2.3	40	500	3063
240	18.3	5.5	2	2.3	42	500	3710
300	20.5	5.5	2.5	2.5	45	500	4510
400	23.5	5.5	2.5	2.6	49	500	5490
500	26.3	5.5	2.5	2.7	52	500	6568
630	30.3	5.5	2.5	2.8	56	500	8100



DESCRIPTION

Circular stranded compacted copper conductors, XLPE insulated, copper tape screened, three cores assembled together with non-hygroscopic polypropylene fillers, covered with extruded or taped bedding, armoured or unarmoured and PVC sheathed. Cables comply with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted copper conductor to IEC 60228 class 2. Aluminium conductor available on request.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive material compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper tapes 0.10 mm thickness. Copper wires screen available on request.

Bedding for armoured cables

An extruded PVC layer.

Armour

Galvanized steel tapes or galvanized steel wires, applied over the PVC bedding.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

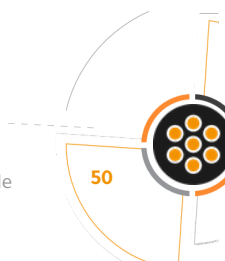
Colours for core identification

Red, Yellow and blue narrow tapes applied between non-metallic and metallic parts of insulation.

APPLICATION

These cables are generally suitable for direct burial or for installation on trays or in ducts. Where there is a risk of mechanical damage, armoured cables should be used.

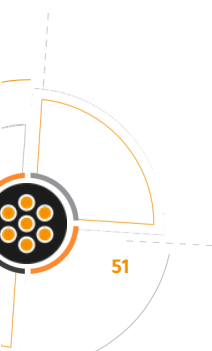
Note: In the interests of product improvement, SCC reserves the right to alter cable specifications.





DIMENSIONS AND WEIGHTS

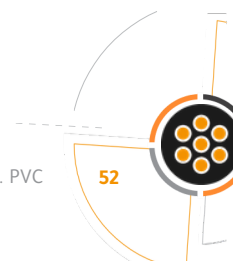
Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Diameter Approx (mm)	Nominal Thickness of XLPE (mm)	Diameter Approx (mm)	Thickness of SC layer Approx (mm)	Nominal Cross Sec Area (mm ²)	Nominal Thickness of PVC Sheath (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
50	8.2	5.5	20.5	0.6	16	2.7	58	500	3465
70	9.7	5.5	22.1	0.6	16	2.8	61	500	4200
95	11.4	5.5	23.8	0.6	16	2.9	65	500	5165
120	12.8	5.5	25.3	0.6	16	3	69	500	6024
150	14.4	5.5	26.8	0.6	25	3.1	72	500	7085
185	15.9	5.5	28.5	0.6	25	3.2	76	400	8270
240	18.3	5.5	30.7	0.6	25	3.3	81	400	10212
300	20.5	5.5	33.4	0.6	25	3.4	86	350	12200
400	23.5	5.5	36.1	0.6	35	3.6	94	250	15185
500	26.3	5.5	39.2	0.6	35	3.8	100	250	18425





DIMENSIONS AND WEIGHTS

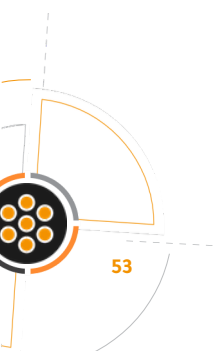
Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Diameter Approx (mm)	Nominal Thickness of XLPE (mm)	Dia. Over Insulation Approx (mm)	Thickness of SC layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Thickness of PVC Sheath (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
50	8.2	5.5	20.5	0.8	0.1	2.7	52	500	3050
70	9.7	5.5	22.1	0.8	0.1	2.8	56	500	3775
95	11.4	5.5	23.8	0.8	0.1	3	60	500	4715
120	12.8	5.5	25.3	0.8	0.1	3.1	62	500	5560
150	14.4	5.5	26.8	1	0.1	3.2	67	500	6625
185	15.9	5.5	28.5	1	0.1	3.3	70	500	7795
240	18.3	5.5	30.7	1	0.1	3.5	76	500	9720
300	20.5	5.5	33.4	1	0.1	3.6	81	400	11695
400	23.5	5.5	36.1	1	0.1	3.8	89	350	14560
500	26.3	5.5	39.2	1	0.1	4.1	94	250	17786





DIMENSIONS AND WEIGHTS

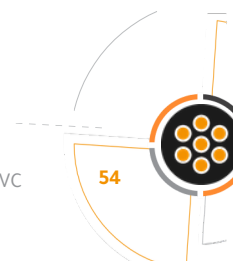
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Diameter Approx (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter Approx (mm)	Thickness of SC Layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
50	8.2	5.5	20.5	0.7	0.1	0.5	2.4	59	500	4596
70	9.7	5.5	22.1	0.7	0.1	0.5	2.6	63	500	5520
95	11.4	5.5	23.8	0.7	0.1	0.5	2.7	67	500	6565
120	12.8	5.5	25.3	0.7	0.1	0.5	2.8	71	500	7547
150	14.4	5.5	26.8	0.7	0.1	0.5	3	74	500	8588
185	15.9	5.5	28.5	0.7	0.1	0.5	3.1	80	500	9739
240	18.3	5.5	30.7	0.7	0.1	0.8	3.2	84	400	12673
300	20.5	5.5	33.4	0.7	0.1	0.8	3.3	87	350	14660
400	23.5	5.5	36.1	0.7	0.1	0.8	3.4	93	250	17400
500	26.3	5.5	39	0.7	0.1	0.8	3.6	99	250	21045





DIMENSIONS AND WEIGHTS

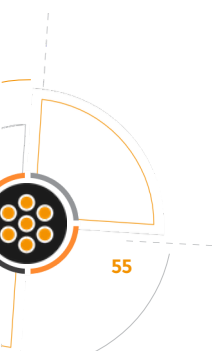
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Diameter Approx (mm)	Nominal Thickness of XLPE (mm)	Diameter Approx (mm)	Thickness of SC layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
50	8.2	5.5	20.5	0.7	0.1	2.5	2.8	56	500	6400
70	9.7	5.5	22.1	0.7	0.1	2.5	2.9	60	500	7318
95	11.4	5.5	23.8	0.7	0.1	2.5	3	64	500	9200
120	12.8	5.5	25.3	0.7	0.1	3.15	3.1	67	500	10362
150	14.4	5.5	26.8	0.7	0.1	3.15	3.2	71	500	11577
185	15.9	5.5	28.5	0.7	0.1	3.15	3.3	74	400	13028
240	18.3	5.5	30.7	0.7	0.1	3.15	3.5	80	350	15377
300	20.5	5.5	33.4	0.7	0.1	3.15	4	89	350	18195
400	23.5	5.5	36.1	0.7	0.1	3.15	4.3	98	250	21650
500	26.3	5.5	39	0.7	0.1	3.15	4.5	104	250	25263





DIMENSIONS AND WEIGHTS

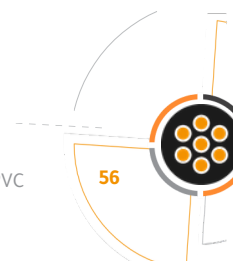
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Diameter Approx (mm)	Thickness of SC layer Approx (mm)	Nominal Cross Sec Area (mm ²)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
50	8.2	5.5	20.5	0.7	16	0.5	2.1	62	500	4610
70	9.7	5.5	22.1	0.7	16	0.5	2.2	65	500	5446
95	11.4	5.5	23.8	0.7	16	0.5	2.3	69	500	6483
120	12.8	5.5	25.3	0.7	16	0.5	2.5	73	500	7446
150	14.4	5.5	26.8	0.7	25	0.5	2.6	76	500	8432
185	15.9	5.5	28.5	0.7	25	0.5	2.7	81	500	10625
240	18.3	5.5	30.7	0.7	25	0.8	2.9	86	400	12715
300	20.5	5.5	33.4	0.7	25	0.8	3.4	93	350	15229
400	23.5	5.5	36.1	0.7	35	0.8	4	101	250	18474
500	26.3	5.5	39	0.7	35	0.8	4.2	107	250	21890

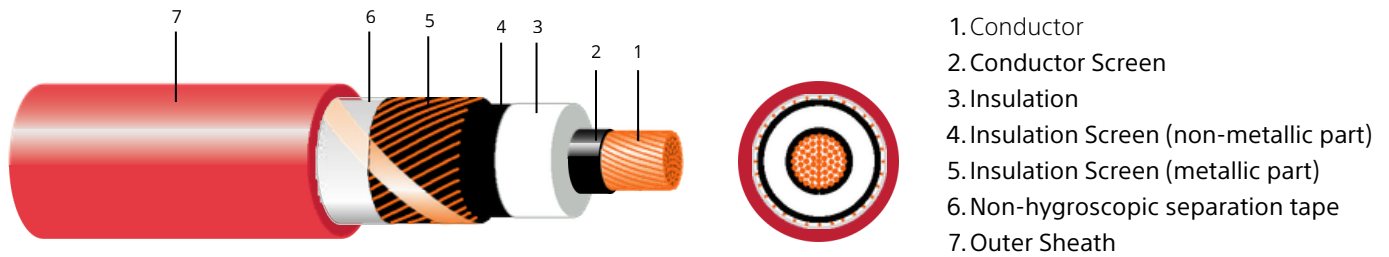




DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Diameter Approx (mm)	Thickness of SC Layer Approx (mm)	Nominal Cross Sec Area (mm ²)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
50	8.2	5.5	20.5	0.7	16	2.5	2.7	63	500	6087
70	9.7	5.5	22.1	0.7	16	2.5	2.9	66	500	6990
95	11.4	5.5	23.8	0.7	16	2.5	3	71	500	8900
120	12.8	5.5	25.3	0.7	16	3.15	3.1	75	500	9964
150	14.4	5.5	26.8	0.7	25	3.15	3.2	79	500	11250
185	15.9	5.5	28.5	0.7	25	3.15	3.3	82	400	12648
240	18.3	5.5	30.7	0.7	25	3.15	3.5	88	350	14934
300	20.5	5.5	33.4	0.7	25	3.15	3.7	99	350	17500
400	23.5	5.5	36.1	0.7	35	3.15	3.9	105	250	20822
500	26.3	5.5	39	0.7	35	3.15	4.1	111	250	24400





1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic separation tape
7. Outer Sheath

DESCRIPTION

Circular stranded compacted copper conductor, XLPE insulated, with copper wire or copper tape screen and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted copper conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

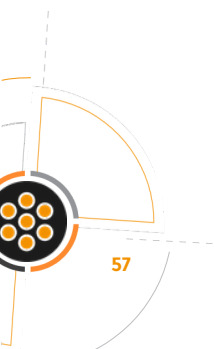
Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

For installation on trays, in ducts or by direct burial.

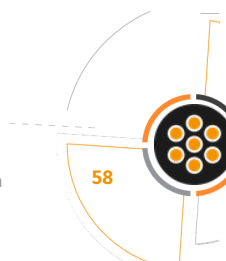
Note: In the interests of product improvement, SCC reserves the right to alter cable specifications.





DIMENSIONS AND WEIGHTS

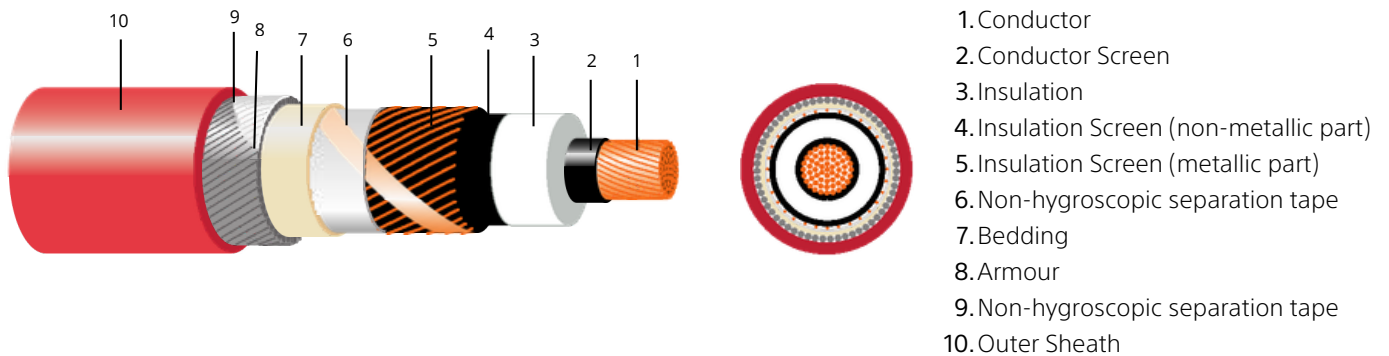
Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross sect. Area of conductor/Screen (mm ² /mm ²)	Nominal Diameter of Conductor (mm)	Nominal Thickness of XLPE (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery length Approx (m±5%)	Net Weight Approx (kg/km)
70/16	9.7	8	2	34	1000	1578
95/16	11.4	8	2.1	36	1000	1887
120/16	12.8	8	2.1	37	1000	2164
150/25	14.4	8	2.2	40	1000	2563
185/25	15.9	8	2.2	41	500	2944
240/25	18.3	8	2.3	44	500	3565
300/25	20.5	8	2.4	46	500	4200
400/35	23.5	8	2.5	50	500	5210
500/35	26.3	8	2.6	52	500	6250
630/35	30.3	8	2.7	56	500	7700





DIMENSIONS AND WEIGHTS

Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Nominal Diameter mm	Nominal Thickness of XLPE (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery length Approx (m±5%)	Net Weight Approx (kg/km)
70	9.7	8	2	32	1000	1450
95	11.4	8	2.1	34	1000	1764
120	12.8	8	2.1	35	1000	2025
150	14.4	8	2.2	37	1000	2340
185	15.9	8	2.2	39	500	2720
240	18.3	8	2.3	41	500	3310
300	20.5	8	2.4	43	500	3960
400	23.5	8	2.5	47	500	4883
500	26.3	8	2.6	49	500	5930
630	30.3	8	2.7	54	500	7400



DESCRIPTION

Circular stranded compacted copper conductors, XLPE insulated, copper wire or copper tape screen, aluminium wire armoured (AWA) and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted copper conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive material compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

Bedding

An extruded PVC layer.

Armour

Round aluminium wires.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

For installation on trays, in ducts or by direct burial.

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



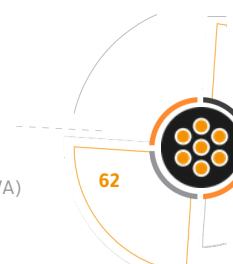
DIMENSIONS AND WEIGHTS

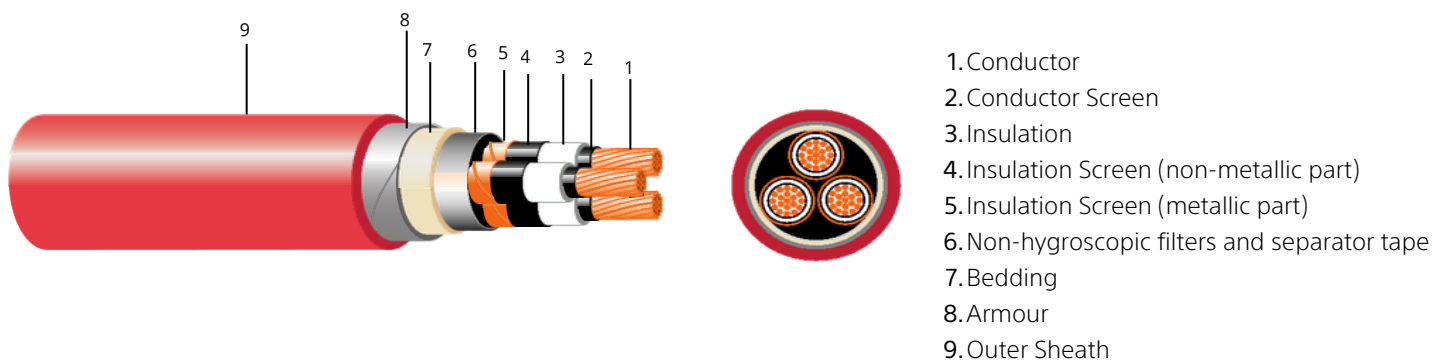
Conductor		Insulation	Armoring	Outer sheath		Packaging	
Nominal Cross sect. Area of conductor/ Screen (mm ² /mm ²)	Nominal Diameter of Conductor (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery length Approx (m±5%)	Net Weight Approx (kg/km)
70/16	9.7	8	2	2.3	43.3	500	2590
95/16	11.4	8	2	2.3	45.2	500	2650
120/16	12.8	8	2.5	2.4	48.1	500	3460
150/25	14.4	8	2.5	2.5	49.7	500	3910
185/25	15.9	8	2.5	2.5	51.2	500	4340
240/25	18.3	8	2.5	2.6	53.9	500	5090
300/25	20.5	8	2.5	2.7	56.3	500	5820
400/35	23.5	8	2.5	2.8	59.4	500	6925
500/35	26.3	8	2.5	2.9	62.9	500	8065
630/35	30.3	8	2.5	3	68.1	500	9770



DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armoring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery length Approx (m±5%)	Net Weight Approx (kg/km)
70	9.7	8	2	2.2	39	500	2085
95	11.4	8	2	2.3	41	500	2430
120	12.8	8	2	2.3	42	500	2715
150	14.4	8	2.5	2.4	44	500	3060
185	15.9	8	2.5	2.5	46	500	3590
240	18.3	8	2.5	2.6	49	500	4300
300	20.5	8	2.5	2.6	51	500	4970
400	23.5	8	2.5	2.8	55	500	5966
500	26.3	8	2.5	2.8	57	500	7065
630	30.3	8	2.5	3	62	500	8633





DESCRIPTION

Circular stranded compacted copper conductors, XLPE insulated, copper tape screened, three cores assembled together with non-hygroscopic polypropylene fillers, covered with extruded or taped bedding, armoured or unarmoured and PVC sheathed. Cables comply with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted copper conductor to IEC 60228 class 2. Aluminium conductor available on request.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive material compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper tapes 0.10 mm thickness. Copper wires screen available on request.

Bedding for armoured cables

An extruded PVC layer.

Armour

Galvanized steel tapes or galvanized steel wires, applied over the PVC bedding.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

Colours for core identification

Red, Yellow and blue narrow tapes applied between non-metallic and metallic parts of insulation.

APPLICATION

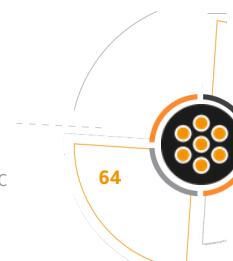
These cables are generally suitable for direct burial or for installation on trays or in ducts. Where there is a risk of mechanical damage, armoured cables should be used.

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



DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Dia .Over Insulation Approx (mm)	Nominal Thickness of SC Layer (mm)	Nominal Thickness of Cu Tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
70	9.7	8	27.1	0.8	0.1	3.2	68	500	4900
95	11.4	8	28.8	0.8	0.1	3.3	72	500	5915
120	12.8	8	30.3	0.8	0.1	3.5	75	500	6820
150	14.4	8	31.8	0.8	0.1	3.6	78	500	7850
185	15.9	8	33.5	0.8	0.1	3.7	82	500	9078
240	18.3	8	35.7	0.8	0.1	3.8	88	400	10825
300	20.5	8	38.4	0.8	0.1	4	93	400	13190
400	23.5	8	41.1	0.8	0.1	4.2	101	250	15940
500	26.3	8	44	0.8	0.1	4.4	106	250	19465





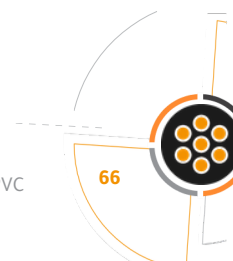
DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Diameter Approx (mm)	Nominal Thickness of SC Layer (mm)	Nominal Cross Sec Area (mm ²)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
70	9.7	8	27.1	0.8	16	3.2	74	500	5314
95	11.4	8	28.8	0.8	16	3.4	78	500	6343
120	12.8	8	30.3	0.8	16	3.5	81	400	7260
150	14.4	8	31.8	0.8	25	3.6	85	400	8384
185	15.9	8	33.5	0.8	25	3.7	88	350	9627
240	18.3	8	35.7	0.8	25	3.9	94	350	11663
300	20.5	8	38.4	0.8	25	4.1	99	250	14000
400	23.5	8	41.1	0.8	35	4.3	107	250	16855
500	26.3	8	44	0.8	35	4.5	112	250	20190



DIMENSIONS AND WEIGHTS

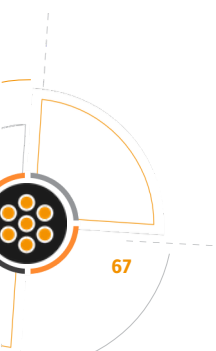
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Diameter Approx (mm)	Nominal Thickness of SC Layer (mm)	Thickness of Cu Tape Approx (mm)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
70	9.7	8	27.1	0.8	0.1	3.15	3.5	82	500	9888
95	11.4	8	28.8	0.8	0.1	3.15	3.7	86	400	11170
120	12.8	8	30.3	0.8	0.1	3.15	3.8	90	400	12340
150	14.4	8	31.8	0.8	0.1	3.15	3.9	93	350	13668
185	15.9	8	33.5	0.8	0.1	3.15	4	97	350	15130
240	18.3	8	35.7	0.8	0.1	3.15	4.2	103	250	17577
300	20.5	8	38.4	0.8	0.1	3.15	4.3	115	250	20536
400	23.5	8	41.1	0.8	0.1	3.15	4.6	123	250	24123
500	26.3	8	44	0.8	0.1	3.15	4.9	128	250	27824





DIMENSIONS AND WEIGHTS

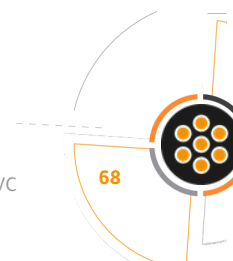
Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Dia. Over Insulation Approx (mm)	Nominal Thickness of SC layer (mm)	Thickness of Cu Tape Approx (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
70	9.7	8	27.1	0.8	0.1	3.2	73	500	7000
95	11.4	8	28.8	0.8	0.1	3.3	77	500	8534
120	12.8	8	30.3	0.8	0.1	3.5	83	500	9360
150	14.4	8	31.8	0.8	0.1	3.6	85	500	10970
185	15.9	8	33.5	0.8	0.1	3.7	92	400	12630
240	18.3	8	35.7	0.8	0.1	3.8	94	400	14733
300	20.5	8	38.4	0.8	0.1	4	102	350	17150
400	23.5	8	41.1	0.8	0.1	4.1	108	250	20250
500	26.3	8	44	0.8	0.1	4.3	115	250	23800





DIMENSIONS AND WEIGHTS

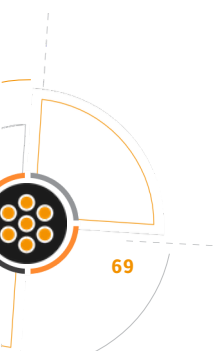
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Diameter Approx (mm)	Nominal Thickness of SC Layer (mm)	Nominal Cross Sec Area (mm ²)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
70	9.7	8	27.1	0.8	16	0.5	3.4	79	500	7585
95	11.4	8	28.8	0.8	16	0.5	3.5	84	400	9243
120	12.8	8	30.3	0.8	16	0.8	3.7	89	400	10455
150	14.4	8	31.8	0.8	25	0.8	3.8	92	350	12000
185	15.9	8	33.5	0.8	25	0.8	3.9	96	350	13525
240	18.3	8	35.7	0.8	25	0.8	4.1	101	250	15828
300	20.5	8	38.4	0.8	25	0.8	4.2	106	250	18100
400	23.5	8	41.1	0.8	35	0.8	4.3	114	250	21710
500	26.3	8	44	0.8	35	0.8	4.4	120	250	25250





DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Nominal Thickness of SC Layer (mm)	Nominal Cross Sec Area (mm ²)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
70	9.7	8	27.1	0.8	16	3.15	3.2	79	400	9360
95	11.4	8	28.8	0.8	16	3.15	3.3	82	350	10430
120	12.8	8	30.3	0.8	16	3.15	3.4	85	350	11305
150	14.4	8	31.8	0.8	25	3.15	3.6	90	350	13083
185	15.9	8	33.5	0.8	25	3.15	3.8	94	350	14535
240	18.3	8	35.7	0.8	25	3.15	3.9	100	250	17000
300	20.5	8	38.4	0.8	25	3.15	4	111	250	19400
400	23.5	8	41.1	0.8	35	3.15	4.2	119	250	23000
500	26.3	8	44	0.8	35	3.15	4.4	125	250	26677

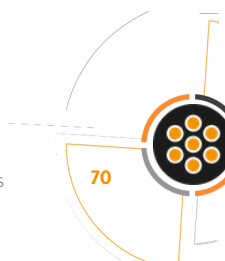




MEDIUM VOLTAGE CABLES ELECTRICAL CHARACTERISTICS

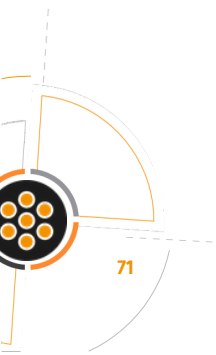


Area (mm ²)	Conductor DC Resistance at 20°C (ohm/km)	Conductor AC Resistance at 90°C (Trefoil) (Ohm/km) Rated Voltage of The Cable (kV)				
		3.6/6	6/10	8.7/15	12/20	18/30
16	1.15	1.47	1.47	-	-	-
25	0.727	0.927	0.927	0.927	-	-
35	0.524	0.668	0.668	0.668	0.668	-
50	0.387	0.494	0.494	0.494	0.494	0.494
70	0.268	0.342	0.342	0.342	0.342	0.342
95	0.193	0.247	0.247	0.247	0.247	0.247
120	0.153	0.196	0.196	0.196	0.196	0.196
150	0.124	0.16	0.16	0.16	0.159	0.159
185	0.0991	0.129	0.128	0.128	0.128	0.128
240	0.0754	0.099	0.0989	0.0987	0.0986	0.0983
300	0.0601	0.0804	0.0802	0.08	0.0798	0.0794
400	0.047	0.0647	0.0646	0.0643	0.0641	0.0636
500	0.0366	0.0527	0.0527	0.0523	0.052	0.0514
630	0.0283	0.0434	0.0438	0.0434	0.043	0.0423
800	0.0221	-	-	-	0.0367	-
1000	0.0176	-	-	-	0.0321	-
1200	0.0151	-	-	-	0.0296	-





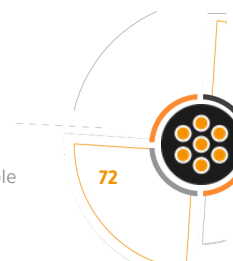
Area (mm ²)	Conductor DC Resistance at 20°C (ohm/km)	Conductor AC Resistance at 90°C (Ohms/km) Rated Voltage of The Cable (kV)				
		3.6/6	6/10	8.7/15	12/20	18/30
16	1.15	1.47	1.47	-	-	-
25	0.727	0.927	0.927	0.927	-	-
35	0.524	0.669	0.669	0.668	0.668	-
50	0.387	0.494	0.494	0.494	0.494	0.494
70	0.268	0.343	0.343	0.342	0.342	0.342
95	0.193	0.247	0.247	0.247	0.247	0.247
120	0.153	0.197	0.197	0.196	0.196	0.196
150	0.124	0.16	0.16	0.16	0.16	0.16
185	0.0991	0.129	0.129	0.129	0.129	0.128
240	0.0754	0.0999	0.0996	0.0993	0.0991	0.0986
300	0.0601	0.0814	0.0812	0.0808	0.0805	0.0799
400	0.047	0.066	0.0658	0.0653	0.0649	0.0642
500	0.0366	0.0543	0.0541	0.0536	0.0531	-





ARMoured (AWA)

Nominal Cross Sectional Area of Conductor/ Screen (mm ²)	Current Carrying Capacity In Ground		Current Carrying Capacity In Free Air Against Wall	
	flat  Approx amps	Trefoil  Approx amps	flat  Approx amps	Trefoil  Approx amps
35/16	166	161	180	176
50/16	196	190	216	211
70/16	238	231	269	263
95/16	284	276	328	320
120/16	321	313	378	370
150/25	354	349	427	420
185/25	397	393	488	482
240/25	455	454	574	569
300/25	507	509	656	653
400/35	554	571	743	750
500/35	602	619	787	790
630/35	650	668	863	830

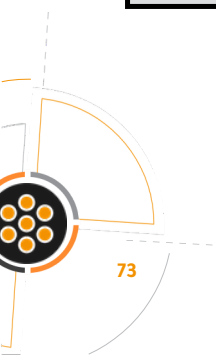




UNARMoured

Nominal Cross Sectional Area of Conductor/Screen (mm ²)	Current Carrying Capacity In Ground		Current Carrying Capacity In Free Air Against Wall	
	flat  Approx amps	Trefoil  Approx amps	flat  Approx amps	Trefoil  Approx amps
35/16	171	165	185	180
50/16	201	195	221	217
70/16	244	240	276	269
95/16	291	285	336	329
120/16	335	324	388	379
150/25	365	360	438	430
185/25	407	405	501	494
240/25	466	465	589	583
300/25	510	525	672	669
400/35	545	580	762	769
500/35	595	645	807	810
630/35	665	720	885	851

All values are calculated in accordance with IEC 60287 based on:	
Continuous Load Conductor Temperature	90°C
Ground Temperature	30°C
Depth of Burial	0.8 (m)
Thermal Resistivity of Soil	1.2 (K.m/W)
Air Ambient Temperature	40°C

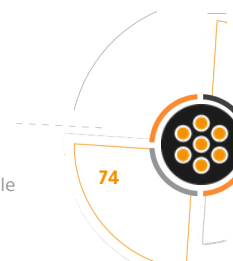




ARMoured AND UNARMoured

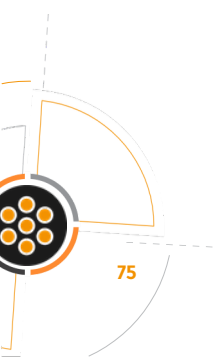
Cross Sectional Area of Conductor/ Screen Nominal (mm ²)	Current Carrying Capacity In Ground		Current Carrying Capacity In Free Air Against Wall	
	Unarmoured	Armoured	Unarmoured	Armoured
	Approx amps	Approx amps	Approx amps	Approx amps
35/16	153	153	155	140
50/16	181	181	186	165
70/16	221	220	230	200
95/16	262	263	277	239
120/16	298	298	315	270
150/25	334	332	362	300
185/25	377	374	414	340
240/25	434	431	483	392
300/25	489	482	551	445
400/35	553	545	630	500
500/35	617	605	700	560

All values are calculated in accordance with IEC 60287 based on:	
Continuous Load Conductor Temperature	90°C
Ground Temperature	30°C
Depth of Burial	0.8 (m)
Thermal Resistivity of Soil	1.2 (K.m/W)
Air Ambient Temperature	40°C



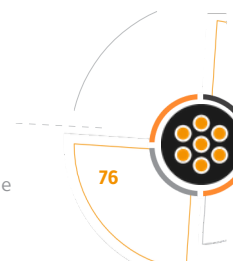


Area (mm ²)	Star Reactance (Ohm/km)				
	Rated Voltage of The Cable (kV)				
	3.6/6	6/10	8.7/15	12/20	18/30
16	0.17	0.18	-	-	-
25	0.16	0.16	0.17	-	-
35	0.15	0.15	0.16	0.18	-
50	0.14	0.15	0.16	0.16	0.17
70	0.13	0.14	0.15	0.15	0.16
95	0.13	0.13	0.14	0.15	0.16
120	0.12	0.13	0.13	0.14	0.15
150	0.12	0.12	0.13	0.14	0.15
185	0.12	0.12	0.13	0.13	0.14
240	0.11	0.12	0.12	0.13	0.14
300	0.11	0.11	0.11	0.12	0.13
400	0.11	0.11	0.11	0.12	0.13
500	0.11	0.11	0.11	0.11	0.12
630	0.10	0.10	0.11	0.11	0.11



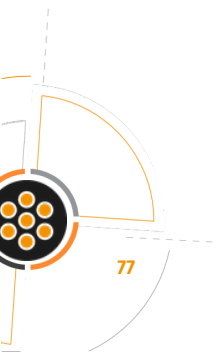


Area (mm ²)	Star Reactance (Ohm/km)				
	Rated Voltage of The Cable (kV)				
	3.6/6	6/10	8.7/15	12/20	18/30
16	0.14	0.15	-	-	-
25	0.13	0.14	0.15	-	-
35	0.13	0.13	0.14	0.15	-
50	0.12	0.13	0.14	0.14	0.16
70	0.11	0.12	0.13	0.14	0.15
95	0.11	0.12	0.12	0.13	0.14
120	0.11	0.11	0.12	0.12	0.14
150	0.1	0.11	0.12	0.12	0.13
185	0.1	0.11	0.11	0.12	0.13
240	0.1	0.1	0.11	0.11	0.12
300	0.096	0.1	0.1	0.11	0.12
400	0.095	0.1	0.1	0.11	0.12
500	0.093	0.09	0.1	0.1	-



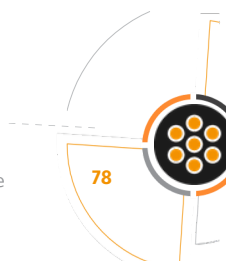


Area (mm ²)	Operating Capacitance (μF/km)				
	Rated Voltage of The Cable (kV)				
	3.6/6	6/10	8.5/15	12/20	18/30
16	0.23	0.19	-	-	-
25	0.25	0.2	0.17	-	-
35	0.28	0.22	0.18	0.16	-
50	0.31	0.25	0.2	0.18	0.14
70	0.35	0.28	0.23	0.2	0.15
95	0.39	0.31	0.25	0.22	0.17
120	0.43	0.34	0.27	0.24	0.18
150	0.47	0.37	0.3	0.26	0.2
185	0.52	0.4	0.32	0.28	0.21
240	0.56	0.45	0.36	0.3	0.23
300	0.58	0.49	0.39	0.33	0.25
400	0.6	0.54	0.43	0.37	0.27
500	500	500	500	500	500
630	0.75	0.7	0.57	0.47	0.34





Area (mm ²)	Operating Capacitance (μF/km)				
	Rated Voltage of The Cable (kV)				
	3.6/6	6/10	8.5/15	12/20	18/30
16	0.22	0.19	-	-	-
25	0.25	0.20	0.17	-	-
35	0.28	0.22	0.18	0.16	-
50	0.31	0.25	0.20	0.18	0.14
70	0.35	0.28	0.23	0.2	0.15
95	0.39	0.31	0.25	0.22	0.17
120	0.43	0.34	0.27	0.24	0.18
150	0.47	0.37	0.30	0.26	0.20
185	0.52	0.40	0.32	0.28	0.21
240	0.56	0.45	0.36	0.3	0.23
300	0.58	0.49	0.39	0.33	0.25
400	0.60	0.54	0.43	0.37	0.27
500	0.63	0.60	0.48	0.40	-





Variations in Air Ambient Temperature

Insulation	Air Ambient Temperature (°C)						
	25	30	35	40	45	50	55
XLPE	1.14	1.1	1.05	1	0.95	0.89	0.84

Variations in Ground Temperature

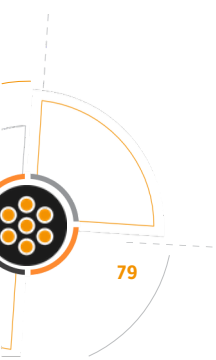
Insulation	Ground Temperature (°C)						
	20	25	30	35	40	45	50
XLPE	1.09	1.04	1	0.95	0.90	0.85	0.80

Variations in depth of burial (to center of cable or trefoil group of cables)

Depth of Laying (m)	Up to 300 (mm ²)	Above 300 (mm ²)
0.8	1	1
1	0.98	0.97
1.25	0.96	0.95
1.5	0.95	0.93
1.75	0.94	0.91
2	0.92	0.89
2.5	0.91	0.88
3.00 or more	0.9	0.87

Variations in depth of burial (to center of duct or trefoil group of ducts)

Depth of Laying (m)	Single core	Multi core
0.8	1	1
1	0.98	0.99
1.25	0.95	0.97
1.5	0.93	0.96
1.75	0.92	0.95
2	0.9	0.95
2.5	0.89	0.94
3.00 or more	0.88	0.93



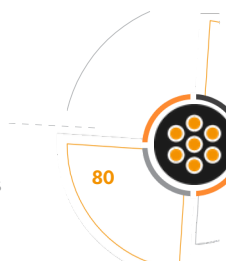


Variations in thermal resistivity of soil for cables in duct banks (average value)

Conductor (mm ²)	Soil Thermal Resistivity In (°k.m/W)						
	0.8	0.9	1.0	1.2	1.5	2.0	2.5
Single core cables up to 150	1.10	1.07	1.04	1.00	0.95	0.87	0.81
from 185-400	1.11	1.08	1.05	1.00	0.94	0.86	0.79
from 500-630	1.13	1.09	1.06	1.00	0.93	0.84	0.77
from 800-1200	1.14	1.10	1.07	1.00	0.92	0.83	0.75
Multicore cables up to 25	1.05	1.04	1.03	1.00	0.97	0.93	0.87
from 16-150	1.07	1.05	1.03	1.00	0.96	0.90	0.85
from 400-185	1.09	1.06	1.04	1.00	0.95	0.87	0.82

Variations in thermal resistivity of soil (average value)

Conductor (mm ²)	Soil Thermal Resistivity In (°k.m/W)						
	0.8	0.9	1.0	1.2	1.5	2.0	2.5
Single core cables up to 150	1.16	1.11	1.07	1	0.91	0.81	0.73
from 185-400	1.17	1.12	1.07	1	0.9	0.8	0.72
from 500-630	1.18	1.13	1.08	1	0.9	0.79	0.71
from 800-1200	1.19	1.14	1.08	1	0.89	0.78	0.70
Multicore cables up to 25-150	1.14	1.10	1.07	1	0.93	0.84	0.76
from 185-400	1.16	1.11	1.07	1	0.92	0.82	0.74





Grouping variations for three single core cables in trefoil, and flat touching and horizontal (direct buried)

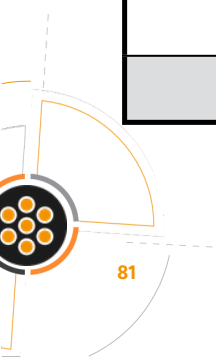
Number of circuits	Spacing (between centres of groups)				
	Trefoil	Touching	0.15m	0.30m	0.45m
2	0.78	0.8	0.81	0.85	0.88
3	0.66	0.7	0.71	0.76	0.8
4	0.61	0.65	0.65	0.72	0.76
5	0.56	0.59	0.61	0.68	0.73
6	0.53	0.56	0.58	0.66	0.72

Grouping variations for multicore cables in flat formation (direct buried)

Number of Cables In Group	Spacing (Between Cable Centres)				
	Touching	0.15m	0.30m	0.45m	0.60m
2	0.80	0.84	0.88	0.90	0.92
3	0.70	0.74	0.79	0.83	0.86
4	0.64	0.69	0.75	0.79	0.83
5	0.58	0.65	0.72	0.77	0.80
6	0.56	0.62	0.70	0.75	0.79

Grouping variations for three single core cables in trefoil, and flat touching and horizontal (in single way duct banks)

Number of Circuits	Spacing (Between Duct Centres)		
	Trefoil	0.45m	0.60m
2	0.85	0.88	0.90
3	0.76	0.80	0.83
4	0.71	0.76	0.80
5	0.67	0.73	0.77
6	0.65	0.71	0.76





Variations for multicore cables in single way duct banks in horizontal formation

Number of Ducts In Group	Spacing (Between Duct Centres)			
	Touching	0.30m	0.45m	0.60m
2	0.88	0.90	0.93	0.94
3	0.79	0.83	0.86	0.88
4	0.74	0.8	0.83	0.86
5	0.70	0.76	0.81	0.84
6	0.68	0.74	0.79	0.83

THERMAL SHORT-CIRCUIT CURRENT RATINGS

The following formula have been derived from IEC 60949:

Figure 1. Copper conductor

$$I_c = \frac{0.143 \times q}{\sqrt{t}}$$

$$I_s = \frac{0.148 \times q}{\sqrt{t}}$$

Figure 1. Aluminium conductor

$$I_c = \frac{0.0937 \times q}{\sqrt{t}}$$

$$I_s = \frac{0.148 \times q}{\sqrt{t}}$$

Where:

I_c = Permissible short-circuit current for conductor (KA)

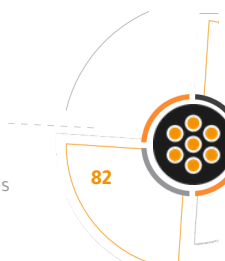
I_s = Permissible short-circuit current for screen (KA)

T = Permissible short-circuit current for screen (KA)

Q = Nomina; conductor area in mm², or nominal screen area in mm²

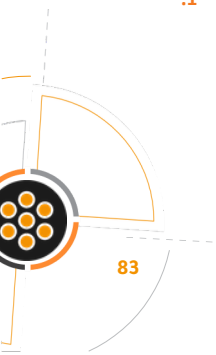
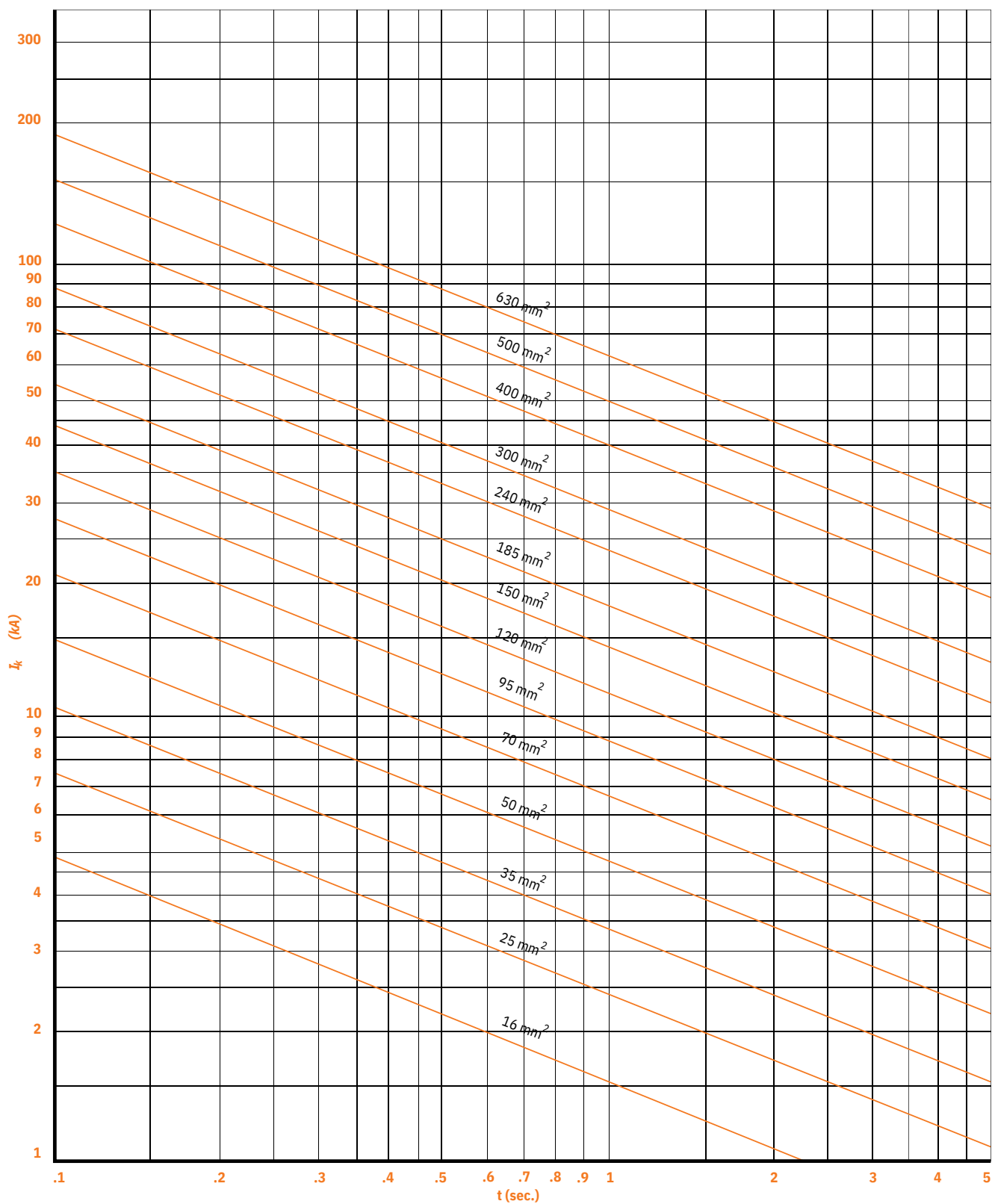
Where:

Conductor temp. before short circuit	90°C
Conductor temp. after short circuit	250°C
Screen temp. before short circuit	80°C
Screen temp. after short circuit	250°C





COPPER CONDUCTOR XLPE INSULATION





MEDIUM VOLTAGE CABLES CABLE HANDLING AND LAYING PARAMETERS



MINIMUM RECOMMENDED BENDING RADIUS

Bending of power cables at short radii may permanently damage the insulation, shielding or jacket and ultimately result in a cable failure. It is therefore, very important that no sharp bends or twists are made.

Cable type	Radius (mm)
Single core cables Armoured or Unarmoured	15 D
Multicore cables Armoured	15 D
Multicore cables Unarmoured	12 D

Where D = Overall diameter of the cable

PULLING TENSIONS AND SIDE WALL PRESSURES

The maximum allowable pulling force is dependent on the cable design, the mechanical limitations, the conductor material, and the method of laying and pulling the cables. Each factor has finite limitations and should under no circumstances be exceeded.

The maximum pulling tension should not exceed as follows:

A) Cable equipped with a pulling eye attached to the conductor.

1. The maximum tension in kgs is 5 times the conductor cross sectional area in mm^2 for copper and 3 times the cross-sectional area for aluminum.
2. For multicore cables, the maximum tension can be increased by number of cores in the cable ,provided pulling eye is attached to each conductor.

B) Cable equipped with a cable stocking over the sheath.

1. For Unarmored cables, the maximum tension in kg is 0.5 times the square of the overall cable diameter (i.e. $0.5D^2$).
2. For armored cables, the maximum tension in kg is 1.2 times the square of the overall diameter (i.e. $1.2D^2$).
3. For laid up cables, when all conductors have the same cross-sectional area, the equivalent overall diameter of the assembly is given by:

$$D_e = k \cdot D \text{ mm} \quad \text{Where:}$$

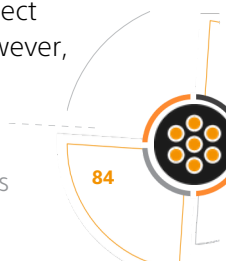
D^e	= assembly diameter in mm
k	= 2 for 2 cables
k	= 2.16 for 3 cables
k	= 2.42 for 4 cables
D	= overall cable diameter

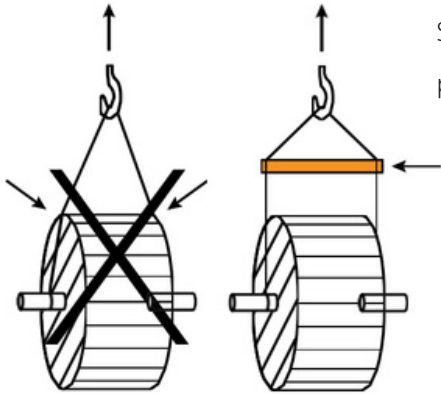
Maximum side wall pressure is given by the following formula:

$$\text{Max. side wall pressure} = \frac{\text{Max. Pulling tension}}{\text{Min. Bending radius}}$$

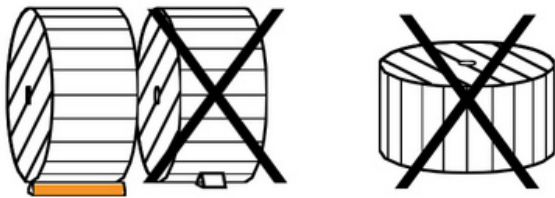
The maximum side wall pressure shall not exceed 500kg/m, i.e., the tension in the cable in kgs as it leaves the bend shall not exceed 500 times the radius of the bend in meters.

It is acceptable to pull the cable in either direction. As a matter of fact it is an intelligent design to select pulling direction resulting in minimum stress on both the cable and the pulling equipment. This, however, is controlled by the limitations of working space at the ends in consideration.





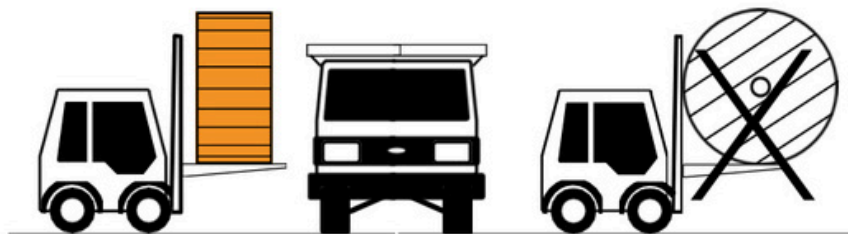
Lifting cable drums using crane.



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.

recognised 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.



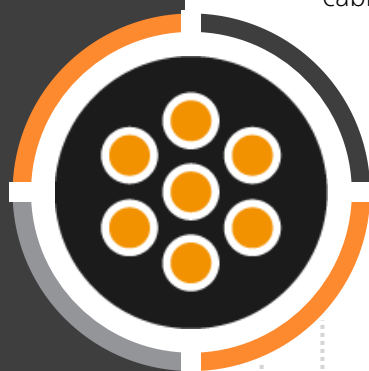
Roll in the direction shown by the arrow.



**MEDUIM VOLTAGE CABLES
ALUMINUM CONDUCTOR**

This catalogue contains technical information on all SCC medium voltage XLPE cables including armored and unarmored designs, single and multi-core constructions and the range of sheathing and screening options. Cables are divided by voltage ratings and each section contains the appropriate technical details, constructional data and current carrying capacities.

Also included other electrical data applicable to medium voltage cables, plus cable handling instructions, helping our customers to select the most optimum cables for their needs.



CONTENTS

MEDIUM VOLTAGE CABLES ALUMINUM

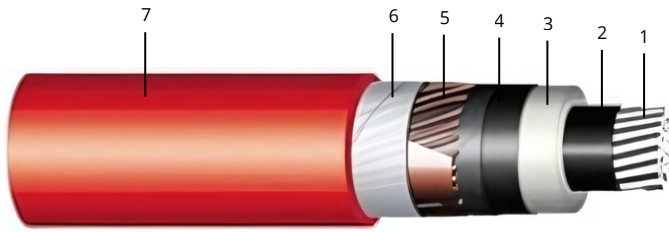
Construction data :

86	3.6/6 kV XLPE Insulated cables
99	6/10 kV XLPE Insulated cables
112	8.7/15 kV XLPE Insulated cables
125	12/20 kV XLPE insulated cables
138	18/30 kV XLPE insulated cables

MEDIUM VOLTAGE ELECTRICAL CHARACTERISTICS DATA

Maximum conductor resistance, current carrying capacity, star reactance, operating capacitance and de-rating factors

CABLE HANDLING AND INSTALLATION PARAMETERS



1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic separation tape
7. Outer Sheath

DESCRIPTION

Circular stranded compacted aluminum conductor, XLPE insulated, with copper wire or copper tape screen and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted aluminum conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

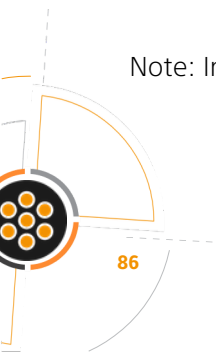
Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

For installation on trays, in ducts or by direct burial.

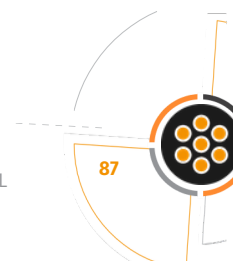
Note: In the interests of product improvement, SCC reserves the right to alter cable specifications.





DIMENSIONS AND WEIGHTS

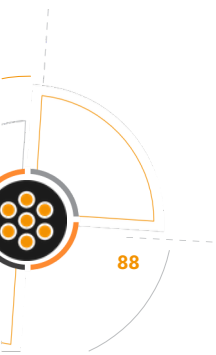
Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross Sect. Area of Conductor/ Screen (mm ² /mm ²)	Diameter of Conductor Approx (mm)	Nominal Thickness (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net weight Approx (kg/km)
35/16	6.93	2.5	1.6	19	1000	560
50/16	8.1	2.5	1.6	21	1000	628
70/16	9.9	2.5	1.6	22	1000	730
95/16	11.8	2.5	1.7	25	1000	854
120/16	14.1	2.5	1.8	27	1000	1100
150/25	14.8	2.5	1.8	28	1000	1275
185/25	16.3	2.5	1.9	30	1000	1415
240/25	18.5	2.6	1.9	32	1000	1558
300/25	20.8	2.8	2	35	500	1820
400/35	23.5	3	2.2	38	500	2175
500/35	26.6	3.2	2.3	42	500	2685
630/35	30.4	3.2	2.4	46	500	3185

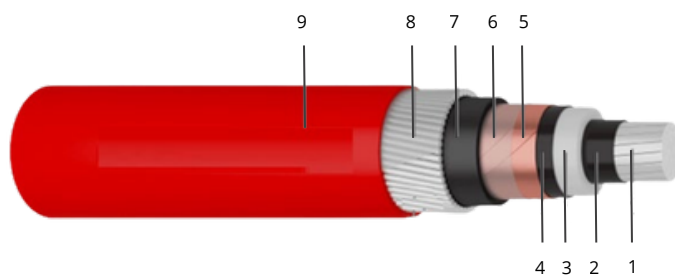




DIMENSIONS AND WEIGHTS

Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Diameter Approx (mm)	Nominal Thickness of XPLE (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
35	6.93	2.5	1.5	18	1000	380
50	8.1	2.5	1.6	20	1000	463
70	9.9	2.5	1.6	21	1000	553
95	11.8	2.5	1.7	23	1000	655
120	14.1	2.5	1.7	24	1000	756
150	14.8	2.5	1.8	25	1000	855
185	16.3	2.5	1.8	27	1000	990
240	18.5	2.6	1.9	30	1000	1222
300	20.8	2.8	2	33	500	1500
400	23.5	3	2.1	36	500	1810
500	26.6	3.2	2.2	39	500	2217
630	30.4	3.2	2.3	43	500	2676





1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic separation tape
7. Bedding
8. Armour (AW)
9. Outer Sheath

DESCRIPTION

Circular stranded compacted aluminum conductor, XLPE insulated, with copper wire or copper tape screen, aluminium wire armoured (AWA) and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted aluminum conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

Bedding

An extruded PVC layer.

Armour

Round aluminium wires.

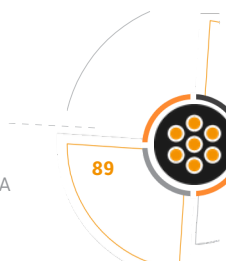
Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

For installation on trays, in ducts or by direct burial.

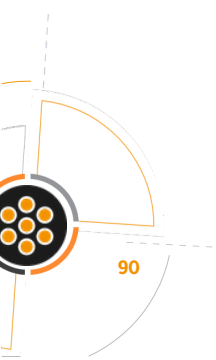
Note: In the interests of product improvement, SCC reserves the right to alter cable specifications.





DIMENSIONS AND WEIGHTS

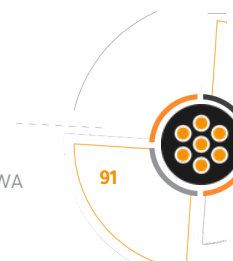
Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross sect. Area of Conductor/Screen (mm ² /mm ²)	Diameter of Conductor Approx (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
35/16	6.93	2.5	1.6	1.8	25	1000	834
50/16	8.1	2.5	1.6	1.8	26	1000	915
70/16	9.9	2.5	1.6	1.8	28	1000	1040
95/16	11.8	2.5	1.6	1.9	30	1000	1186
120/16	14.1	2.5	1.6	1.9	32	1000	1311
150/25	14.8	2.5	2	2	34	1000	1600
185/25	16.3	2.5	2	2.1	36	1000	1777
240/25	18.5	2.6	2	2.2	38	500	2030
300/25	20.8	2.8	2	2.2	41	500	2331
400/35	23.5	3	2.5	2.4	46	500	2968
500/35	26.6	3.2	2.5	2.5	50	500	3486
630/35	30.4	3.2	2.5	2.6	54	500	4053

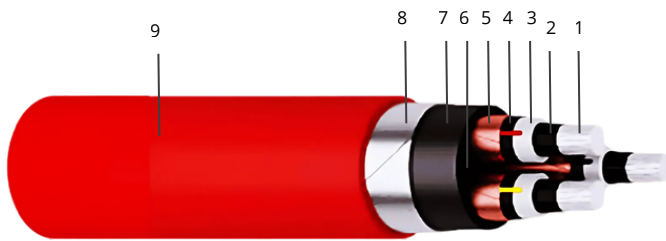




DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Diameter Approx (mm)	Nominal Thickness of XPLE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
35	6.93	2.5	1.6	1.8	23	100	621
50	8.1	2.5	1.6	1.8	25	1000	795
70	9.9	2.5	1.6	1.8	26	1000	910
95	11.8	2.5	1.6	1.9	28	1000	1015
120	14.1	2.5	1.6	1.9	29	1000	1178
150	14.8	2.5	1.6	2	31	1000	1293
185	16.3	2.5	2	2.1	34	1000	1558
240	18.5	2.6	2	2.1	36	500	1824
300	20.8	2.8	2	2.2	39	500	2144
400	23.5	3	2	2.3	43	500	2545
500	26.6	3.2	2.5	2.5	47	500	3165
630	30.4	3.2	2.5	2.6	51	500	3734





1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic separation tape
7. Bedding
8. Armour (AW)
9. Outer Sheath

DESCRIPTION

Circular stranded compacted copper Conductors, XLPE insulated, copper tape screened, three cores assembled together with non-hygroscopic polypropylene fillers, covered with extruded or taped bedding, armored or unarmored and PVC sheathed. Cables comply with IEC 502.

CONSTRUCTION

Conductor

Plain circular compacted aluminum conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper tapes 0.10 mm thickness. Copper wires screen available on request.

Bedding

An extruded PVC layer.

Armour

Galvanized steel tapes or galvanized steel wires, applied over the PVC bedding.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

Colours for core identification

Red, yellow and blue narrow tapes applied between non-metallic and metallic parts of insulation screen.

APPLICATION

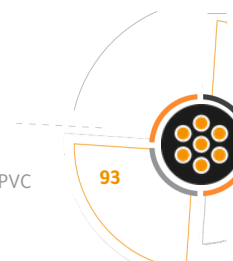
For installation on trays, in ducts or by direct burial.

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



DIMENSIONS AND WEIGHTS

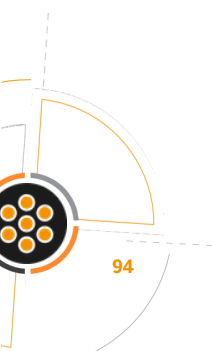
Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XPLE (mm)	Dia. Over Insulation Approx (mm)	Nominal Thickness of SC Layer (mm)	Thickness of CU Tape Approx (mm)	Nominal Thickness (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
35	6.93	2.5	13.4	0.5	0.1	2.2	35	500	1183
50	8.1	2.5	14.5	0.5	0.1	2.3	38	500	1480
70	9.9	2.5	16.1	0.5	0.1	2.4	42	500	1795
95	11.8	2.5	17.8	0.5	0.1	2.5	46	500	2200
120	14.1	2.5	19.3	0.5	0.1	2.6	50	500	2527
150	14.8	2.5	20.8	0.5	0.1	2.7	52	500	2856
185	16.3	2.5	22.5	0.5	0.1	2.8	56	500	3350
240	18.5	2.6	24.9	0.5	0.1	3	62	500	4110
300	20.8	2.8	28	0.5	0.1	3.2	68	500	4942
400	23.5	3	31.1	0.5	0.1	3.5	75	500	6137
500	26.6	3.2	34.6	0.5	0.1	3.7	83	400	7548





DIMENSIONS AND WEIGHTS

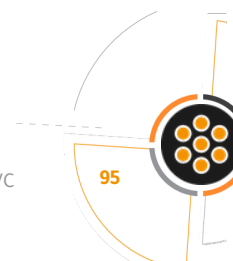
Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XPLE (mm)	Dia. Over Insulation Approx (mm)	Thickness of SC Layer Approx (mm)	Nominal Cross Sec Area (mm ²)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of cable Approx (kg/km)
35	6.93	2.5	13.4	0.6	16	2.2	37	500	1212
50	8.1	2.5	14.5	0.6	16	2.3	40	500	1416
70	9.9	2.5	16.1	0.6	16	2.4	44	500	1732
95	11.8	2.5	17.8	0.6	16	2.5	49	500	2120
120	14.1	2.5	19.3	0.6	16	2.6	54	500	2550
150	14.8	2.5	20.8	0.6	25	2.7	55	500	2690
185	16.3	2.5	22.5	0.6	25	2.8	59	500	3369
240	18.5	2.6	24.9	0.6	25	3	65	500	3952
300	20.8	2.8	28	0.6	25	3.2	71	500	4918
400	23.5	3	31.1	0.6	35	3.5	79	400	6172
500	26.6	3.2	34.6	0.6	35	3.7	87	400	7656





DIMENSIONS AND WEIGHTS

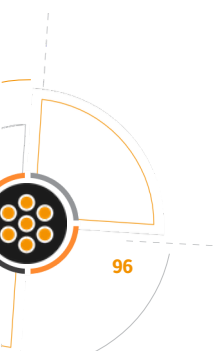
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XPLE (mm)	Nominal Dia. Over Insulation (mm)	Thickness of SC Layer Approx (mm)	Thickness of Cu tape Approx (mm)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.93	2.5	13.4	0.6	0.1	0.5	2.3	41	500	2086
50	8.1	2.5	14.5	0.6	0.1	0.5	2.4	44	500	2354
70	9.9	2.5	16.1	0.6	0.1	0.5	2.5	48	500	2790
95	11.8	2.5	17.8	0.6	0.1	0.5	2.6	52	500	3290
120	14.1	2.5	19.3	0.6	0.1	0.5	2.8	57	500	3857
150	14.8	2.5	20.8	0.6	0.1	0.5	2.9	58	500	3977
185	16.3	2.5	22.5	0.6	0.1	0.5	3	63	500	4733
240	18.5	2.6	24.9	0.6	0.1	0.5	3.2	69	500	5619
300	20.8	2.8	28	0.6	0.1	0.5	3.4	75	500	6630
400	23.5	3	31.1	0.6	0.1	0.8	3.7	83	350	8635
500	26.6	3.2	34.6	0.6	0.1	0.8	3.9	92	350	10411





DIMENSIONS AND WEIGHTS

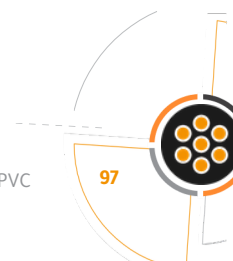
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Nominal Diameter (mm)	Thickness of XPLE (mm)	Nominal Diameter (mm)	Thickness of SC Layer Approx (mm)	Thickness of Cu tape Approx (mm)	Nominal Dia. of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.93	2.5	13.4	0.6	0.1	2.5	2.4	44	500	3153
50	8.1	2.5	14.5	0.6	0.1	2.5	2.5	47	500	3514
70	9.9	2.5	16.1	0.6	0.1	2.5	2.6	51	500	4064
95	11.8	2.5	17.8	0.6	0.1	2.5	2.7	55	500	4655
120	14.1	2.5	19.3	0.6	0.1	2.5	2.9	58	500	5145
150	14.8	2.5	20.8	0.6	0.1	2.5	3	61	500	5667
185	16.3	2.5	22.5	0.6	0.1	2.5	3.1	65	500	6358
240	18.5	2.6	24.9	0.6	0.1	2.5	3.3	71	500	7405
300	20.8	2.8	28	0.6	0.1	3.15	3.5	78	400	9422
400	23.5	3	31.1	0.6	0.1	3.15	3.8	86	400	11122
500	26.6	3.2	34.6	0.6	0.1	3.15	4	94	250	12893





DIMENSIONS AND WEIGHTS

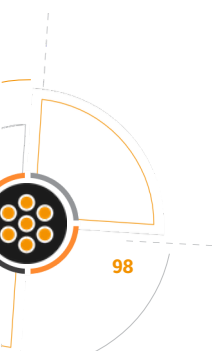
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XPLE (mm)	Nominal Diameter Over Insulation (mm)	Thickness of SC Layer Approx (mm)	Nominal Cross Sec of Screen (mm ²)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.93	2.5	13.4	0.8	16	0.5	2.3	45	500	2341
50	8.1	2.5	14.5	0.8	16	0.5	2.4	48	500	2647
70	9.9	2.5	16.1	0.8	16	0.5	2.5	52	500	3128
95	11.8	2.5	17.8	0.8	16	0.5	2.6	57	500	3696
120	14.1	2.5	19.3	0.8	16	0.5	2.8	63	500	4357
150	14.8	2.5	20.8	0.8	25	0.5	2.9	64	500	4748
185	16.3	2.5	22.5	0.8	25	0.5	3	68	500	5406
240	18.5	2.6	24.9	0.8	25	0.5	3.2	74	500	6418
300	20.8	2.8	28	1	25	0.5	3.4	81	500	7631
400	23.5	3	31.1	1	35	0.8	3.7	90	350	9930
500	26.6	3.2	34.6	1	35	0.8	3.9	98	350	11786

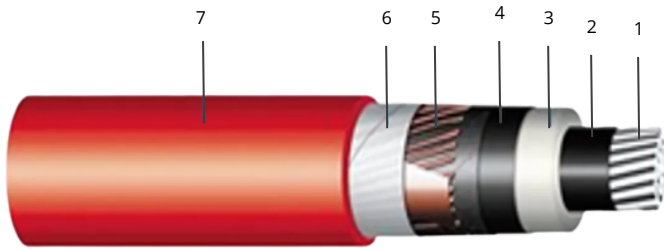




DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XPLE (mm)	Nominal Diameter (mm)	Thickness of SC Layer Approx (mm)	Nominal Cross Sec of Screen (mm ²)	Nominal Dia. of Steel Wire (mm)	Nominal Thickness of PV C (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.93	2.5	13.4	0.8	16	2.5	2.4	46	500	3312
50	8.1	2.5	14.5	0.8	16	2.5	2.5	49	500	3794
70	9.9	2.5	16.1	0.8	16	2.5	2.6	53	500	4178
95	11.8	2.5	17.8	0.8	16	2.5	2.7	57	500	4865
120	14.1	2.5	19.3	0.8	16	2.5	2.9	63	500	5497
150	14.8	2.5	20.8	0.8	25	2.5	3	64	500	6010
185	16.3	2.5	22.5	0.8	25	2.5	3.1	67	500	6500
240	18.5	2.6	24.9	0.8	25	2.5	3.3	75	500	8450
300	20.8	2.8	28	1	25	3.15	3.5	88	400	10243
400	23.5	3	31.1	1	35	3.15	3.8	95	400	11488
500	26.6	3.2	34.6	1	35	3.15	4	103	250	13498





1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic separation tape
7. Outer Sheath

DESCRIPTION

Circular stranded compacted aluminum conductor, XLPE insulated, with copper wire or copper tape screen and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted aluminum conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

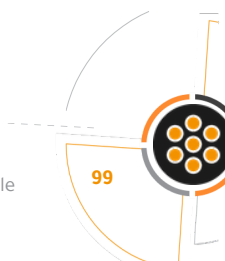
Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

For installation on trays, in ducts or by direct burial.

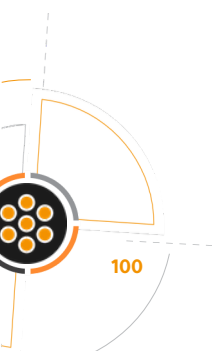
Note: In the interests of product improvement, SCC reserves the right to alter cable specifications.





DIMENSIONS AND WEIGHTS

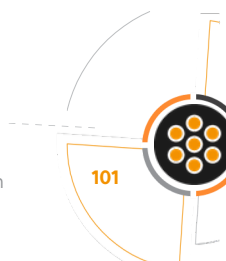
Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross Sect. Area of Conductor/Screen (mm ² /mm ²)	Nominal Diameter of Conductor (mm)	Nominal Thickness of XLPE mm	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard delivery length (m±5%)	Net weight Approx (kg/km)
35/16	6.93	3.4	1.6	21	1000	550
50/16	8.1	3.4	1.7	23	1000	615
70/16	9.9	3.4	1.7	24	1000	714
95/16	11.8	3.4	1.8	26	1000	834
120/16	14.1	3.4	1.8	29	1000	964
150/25	14.8	3.4	1.9	31	1000	1128
185/25	16.3	3.4	1.9	32	1000	1280
240/25	18.5	3.4	2	34	1000	1496
300/25	20.8	3.4	2.1	36	500	1725
400/35	23.5	3.4	2.2	40	500	2121
500/35	26.6	3.4	2.3	43	500	2558
630/35	30.4	3.4	2.4	47	500	3010

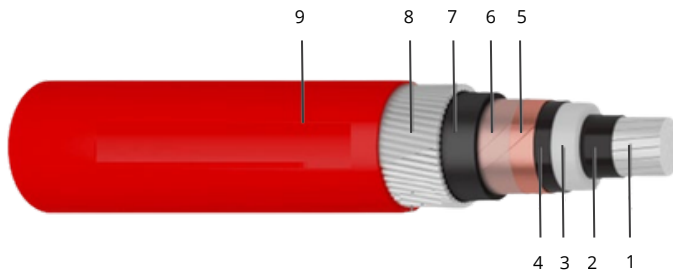




DIMENSIONS AND WEIGHTS

Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross sect. area (mm ² /mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Thickness of PVC (mm)	Overall diameter Approx (mm)	Standard delivery length (m±5%)	Net weight Approx (kg/km)
35	6.93	3.4	1.6	19	1000	422
50	8.1	3.4	1.6	21	1000	488
70	9.9	3.4	1.7	23	1000	586
95	11.8	3.4	1.7	25	1000	710
120	14.1	3.4	1.8	27	1000	840
150	14.8	3.4	1.8	28	1000	920
185	16.3	3.4	1.9	29	1000	1053
240	18.5	3.4	2	32	1000	1273
300	20.8	3.4	2	34	500	1500
400	23.5	3.4	2.2	37	500	1805
500	26.6	3.4	2.2	40	500	2207
630	30.4	3.4	2.4	44	500	2655





1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic separation tape
7. Bedding
8. Armour
9. Outer Sheath

DESCRIPTION

Circular stranded compacted aluminum conductor, XLPE insulated, with copper wire or copper tape screen, aluminium wire armoured (AWA) and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted aluminum conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

Bedding

An extruded PVC layer.

Armour

Round aluminium wires.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

For installation on trays, in ducts or by direct burial.

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





DIMENSIONS AND WEIGHTS

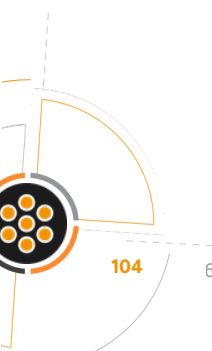
Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross sect. Area of Conductor/Screen (mm ² /mm ²)	Nominal Diameter of Conductor (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard delivery length (m±5%)	Net weight Approx (kg/km)
35/16	6.93	3.4	1.6	1.8	27	1000	926
50/16	8.1	3.4	1.6	1.9	29	1000	1031
70/16	9.9	3.4	1.6	1.9	30	1000	1140
95/16	11.8	3.4	1.6	2	32	1000	1292
120/16	14.1	3.4	2	2	33	1000	1422
150/25	14.8	3.4	2	2.1	36	1000	1723
185/25	16.3	3.4	2	2.1	37	500	1900
240/25	18.5	3.4	2	2.2	40	500	2163
300/25	20.8	3.4	2	2.3	42	500	2426
400/35	23.5	3.4	2.5	2.4	47	500	3040
500/35	26.6	3.4	2.5	2.6	50	500	3514
630/35	30.4	3.4	2.5	2.7	56	500	4375

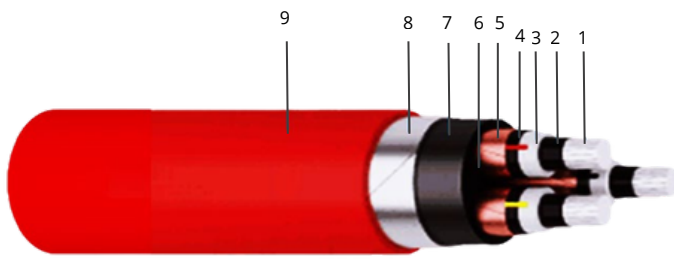




DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ² /mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
35	6.93	3.4	1.6	1.8	24	1000	745
50	8.1	3.4	1.6	1.8	25	1000	833
70	9.9	3.4	1.6	1.9	27	1000	984
95	11.8	3.4	1.6	1.9	29	1000	1142
120	14.1	3.4	2	2	31	1000	1310
150	14.8	3.4	2	2.1	32	1000	1400
185	16.3	3.4	2	2.1	35	500	1667
240	18.5	3.4	2	2.2	37	500	1933
300	20.8	3.4	2	2.3	39	500	2213
400	23.5	3.4	2.5	2.4	42	500	2578
500	26.6	3.4	2.5	2.5	46	500	3258
630	30.4	3.4	2.5	2.6	51	500	3775





1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic separation tape
7. Bedding
8. Armour
9. Outer Sheath

DESCRIPTION

Stranded circular compacted aluminum conductors, XLPE insulated, copper tape screened, three cores assembled together with non-hygroscopic polypropylene fillers, covered with extruded or taped bedding, armoured or unarmoured and PVC sheathed. Cables comply with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted aluminum conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

XLPE (cross-linked polyethylene) extruded and cross-linked by silane curing process, rated 90°C.

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper tapes 0.10 mm thickness. Copper wires screen available on request.

Bedding for armoured cables

An extruded PVC layer.

Armour

Galvanized steel tapes or galvanized steel wires, applied over the PVC bedding.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

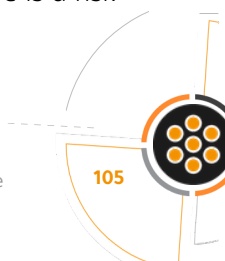
Colours for core identification

Red, yellow and blue narrow tapes applied between non-metallic and metallic parts of insulation screen.

APPLICATION

These cables are generally suitable for direct burial or for installation on trays or in ducts. Where there is a risk of mechanical damage, armoured cables should be used.

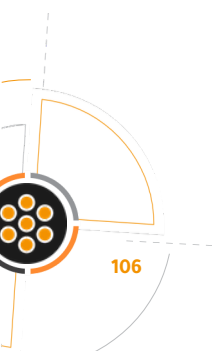
Note: In the interests of product improvement, SCC reserves the right to alter cable specifications.





DIMENSIONS AND WEIGHTS

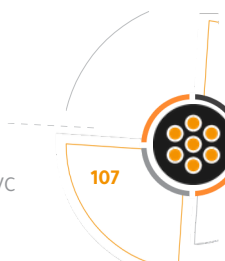
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC layer Approx (mm)	Nominal Cross Sec Area (mm ²)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.93	3.4	15.2	0.6	16	2.5	2.6	43	500	1568
50	8.1	3.4	16.3	0.6	16	2.5	2.7	45	500	1786
70	9.9	3.4	17.9	0.6	16	2.5	2.8	49	500	2140
95	11.8	3.4	19.6	0.6	16	2.5	2.9	54	500	2566
120	14.1	3.4	21.1	0.6	16	2.5	3	57	500	2935
150	14.8	3.4	22.6	0.6	25	2.5	3.1	60	500	3396
185	16.3	3.4	24.3	0.6	25	2.5	3.2	64	500	3910
240	18.5	3.4	26.5	0.6	25	3.15	3.4	69	500	4660
300	20.8	3.4	29.2	0.6	25	3.15	3.6	75	400	5460
400	23.5	3.4	31.9	0.6	35	3.15	3.8	82	350	6645
500	26.6	3.4	35	0.6	35	3.15	4.1	89	250	8040





DIMENSIONS AND WEIGHTS

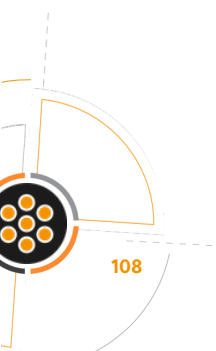
Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Dia. Over Insulation (mm)	Thickness of SC layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.93	3.4	15.2	0.6	0.1	2.3	40	500	1505
50	8.1	3.4	16.3	0.6	0.1	2.4	43	500	1740
70	9.9	3.4	17.9	0.6	0.1	2.5	46	500	2011
95	11.8	3.4	19.6	0.6	0.1	2.7	51	500	2437
120	14.1	3.4	21.1	0.6	0.1	2.8	55	500	2913
150	14.8	3.4	22.6	0.6	0.1	2.9	57	500	3183
185	16.3	3.4	24.3	0.6	0.1	3	61	500	3694
240	18.5	3.4	26.5	0.6	0.1	3.1	66	500	4440
300	20.8	3.4	29.2	0.6	0.1	3.3	72	500	5237
400	23.5	3.4	31.9	0.6	0.1	3.5	80	400	6293
500	26.6	3.4	35	0.6	0.1	3.7	85	350	7676





DIMENSIONS AND WEIGHTS

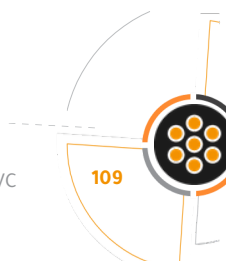
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.93	3.4	15.2	0.6	0.1	0.5	2.4	45	500	2335
50	8.1	3.4	16.3	0.6	0.1	0.5	2.5	48	500	2594
70	9.9	3.4	17.9	0.6	0.1	0.5	2.6	52	500	3043
95	11.8	3.4	19.6	0.6	0.1	0.5	2.8	56	500	3588
120	14.1	3.4	21.1	0.6	0.1	0.5	2.9	62	500	4172
150	14.8	3.4	22.6	0.6	0.1	0.5	3	64	500	4473
185	16.3	3.4	24.3	0.6	0.1	0.5	3	67	500	5013
240	18.5	3.4	26.5	0.6	0.1	0.5	3.3	72	500	5956
300	20.8	3.4	29.2	0.6	0.1	0.5	3.5	78	400	6953
400	23.5	3.4	31.9	0.6	0.1	0.8	3.7	85	350	8890
500	26.6	3.4	35	0.6	0.1	0.8	3.9	93	350	10500





DIMENSIONS AND WEIGHTS

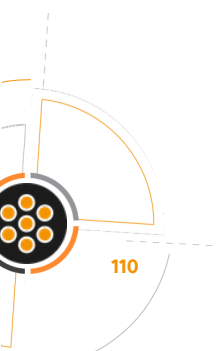
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC Layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.93	3.4	15.2	0.8	0.1	2.5	2.6	45	500	3283
50	8.1	3.4	16.3	0.8	0.1	2.5	2.7	48	500	3530
70	9.9	3.4	17.9	0.8	0.1	2.5	2.8	52	500	3954
95	11.8	3.4	19.6	0.8	0.1	2.5	2.9	56	500	4376
120	14.1	3.4	21.1	0.8	0.1	2.5	3	62	500	4940
150	14.8	3.4	22.6	0.8	0.1	2.5	3.1	64	500	5057
185	16.3	3.4	24.3	0.8	0.1	2.5	3.2	67	500	6250
240	18.5	3.4	26.5	1	0.1	3.15	3.4	73	500	6887
300	20.8	3.4	29.2	1	0.1	3.15	3.6	79	350	7730
400	23.5	3.4	31.9	1	0.1	3.15	3.9	85	350	8500
500	26.6	3.4	35	1	0.1	3.15	4.1	92	250	9410





DIMENSIONS AND WEIGHTS

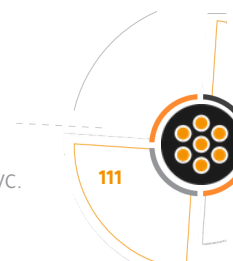
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC Layer Approx (mm)	Nominal Cross sec area (mm ²)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	3.4	15.2	0.6	16	0.5	2.4	52	500	2979
50	8.2	3.4	16.3	0.6	16	0.5	2.6	55	500	3288
70	9.7	3.4	17.9	0.6	16	0.5	2.7	59	500	3765
95	11.4	3.4	19.6	0.6	16	0.8	2.8	64	500	4913
120	12.8	3.4	21.1	0.6	16	0.8	2.9	70	500	5600
150	14.4	3.4	22.6	0.6	25	0.8	3	72	500	5996
185	15.9	3.4	24.3	0.6	25	0.8	3.1	75	500	6710
240	18.3	3.4	26.5	0.6	25	0.8	3.3	80	500	7660
300	20.5	3.4	29.2	0.6	25	0.8	3.5	85	400	8682
400	23.5	3.4	31.9	0.6	35	0.8	3.6	91	350	9886
500	26.3	3.4	35	0.6	35	0.8	3.7	97	350	11438

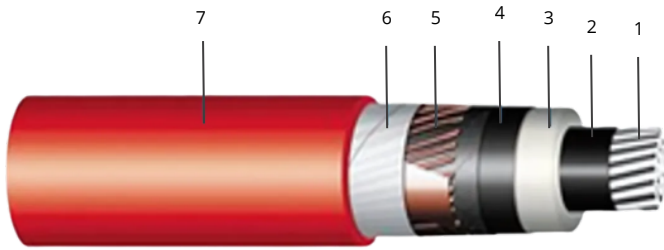




DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC Layer Approx (mm)	Nominal Cross Sec Area (mm ²)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.93	3.4	15.2	0.6	16	2.5	2.6	52	500	4068
50	8.1	3.4	16.3	0.6	16	2.5	2.7	55	500	4448
70	9.9	3.4	17.9	0.6	16	2.5	2.8	59	500	4938
95	11.8	3.4	19.6	0.6	16	2.5	2.9	64	500	5678
120	14.1	3.4	21.1	0.6	16	2.5	3	69	500	6448
150	14.8	3.4	22.6	0.6	25	2.5	3.1	72	500	6854
185	16.3	3.4	24.3	0.6	25	2.5	3.2	75	500	8389
240	18.5	3.4	26.5	0.6	25	3.15	3.4	81	500	9478
300	20.8	3.4	29.2	0.6	25	3.15	3.6	85	350	10600
400	23.5	3.4	31.9	0.6	35	3.15	3.9	92	350	12142
500	26.6	3.4	35	0.6	35	3.15	4.1	99	250	14058





1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic separation tape
7. Outer Sheath

DESCRIPTION

Circular stranded compacted aluminum conductor, XLPE insulated, with copper wire or copper tape screen and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted aluminum conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

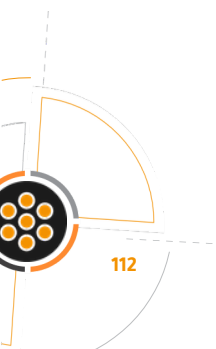
Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

For installation on trays, in ducts or by direct burial.

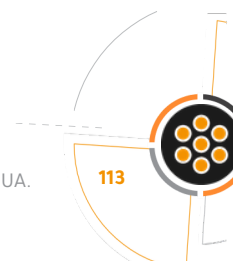
Note: In the interests of product improvement, SCC reserves the right to alter cable specifications.





DIMENSIONS AND WEIGHTS

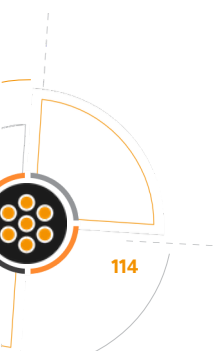
Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross sect. Area of Conductor/Screen (mm ² /mm ²)	Nominal Diameter of Conductor (mm)	Nominal Thickness of XLPE (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Net Weight Approx (kg/km)
35/16	6.93	4.5	1.7	24	1000	643
50/16	8.1	4.5	1.7	25	1000	713
70/16	9.9	4.5	1.8	27	1000	820
95/16	11.8	4.5	1.8	29	1000	949
120/16	14.1	4.5	1.9	31	1000	1090
150/25	14.8	4.5	1.9	32	1000	1256
185/25	16.3	4.5	2	34	1000	1410
240/25	18.5	4.5	2.1	36	1000	1643
300/25	20.8	4.5	2.1	39	500	1883
400/35	23.5	4.5	2.3	42	500	2289
500/35	26.6	4.5	2.4	45	500	2706
630/35	30.4	4.5	2.5	49	500	3208

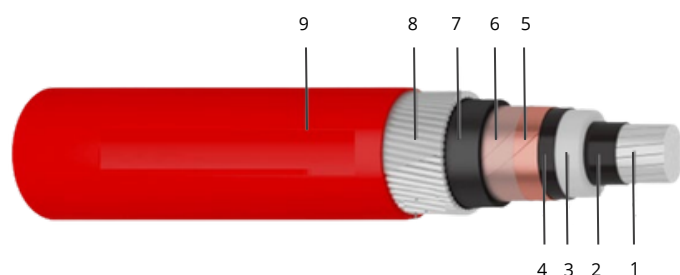




DIMENSIONS AND WEIGHTS

Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Net Weight Approx (kg/km)
35	6.93	4.5	1.7	18	1000	460
50	8.1	4.5	1.7	19	1000	532
70	9.9	4.5	1.8	21	1000	635
95	11.8	4.5	1.8	23	1000	766
120	14.1	4.5	1.9	24	1000	930
150	14.8	4.5	1.9	26	1000	1005
185	16.3	4.5	2	28	1000	1157
240	18.5	4.5	2.1	31	1000	1400
300	20.8	4.5	2.1	33	500	1635
400	23.5	4.5	2.2	37	500	1910
500	26.6	4.5	2.3	40	500	2391
630	30.4	4.5	2.4	44	500	2892





1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic separation tape
7. Bedding
8. Armour
9. Outer Sheath

DESCRIPTION

Circular stranded compacted aluminum conductor, XLPE insulated, with copper wire or copper tape screen, aluminium wire armoured (AWA) and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted aluminum conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

Bedding

An extruded PVC layer.

Armour

Round aluminium wires.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

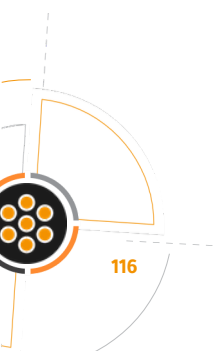
For installation on trays, in ducts or by direct burial.

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



DIMENSIONS AND WEIGHTS

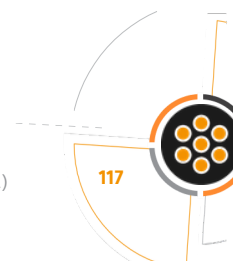
Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area of Conductor/Screen (mm ² /mm ²)	Nominal Diameter of Conductor (mm)	Nominal Thickness of XLPE mm	Nominal Diameter of Alu. Wire mm	Nominal Thickness of PVC mm	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Net Weight Approx (kg/km)
35/16	6.93	4.5	1.6	1.9	30	1000	1094
50/16	8.1	4.5	1.6	1.9	31	1000	1197
70/16	9.9	4.5	1.6	2	33	1000	1324
95/16	11.8	4.5	2	2.1	35	1000	1579
120/16	14.1	4.5	2	2.1	37	1000	1720
150/25	14.8	4.5	2	2.2	39	500	1950
185/25	16.3	4.5	2	2.2	40	500	2162
240/25	18.5	4.5	2	2.3	43	500	2448
300/25	20.8	4.5	2.5	2.4	45	500	2880
400/35	23.5	4.5	2.5	2.5	50	500	3212
500/35	26.6	4.5	2.5	2.6	53	500	3951
630/35	30.4	4.5	2.5	2.7	57	500	4500

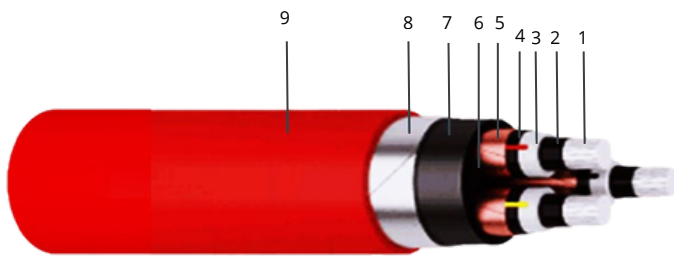




DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Net Weight Approx (kg/km)
35	6.93	4.5	1.6	1.9	28	1000	888
50	8.1	4.5	1.6	1.9	29	1000	1019
70	9.9	4.5	1.6	2	31	1000	1131
95	11.8	4.5	2	2	33	1000	1296
120	14.1	4.5	2	2.1	35	1000	1478
150	14.8	4.5	2	2.1	36	1000	1570
185	16.3	4.5	2	2.2	38	500	1756
240	18.5	4.5	2	2.3	41	500	2096
300	20.8	4.5	2	2.3	43	500	2380
400	23.5	4.5	2.5	2.5	46	500	2751
500	26.6	4.5	2.5	2.6	50	500	3355
630	30.4	4.5	2.5	2.7	54	500	4010





1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic separation tape
7. Bedding
8. Armour
9. Outer Sheath

DESCRIPTION

Circular stranded compacted aluminum conductors, XLPE insulated, copper tape screened, assembled together with non-hygroscopic polypropylene fillers, covered with extruded or taped bedding, armoured or unarmoured and PVC sheathed. Cables comply with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted aluminum conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper tapes 0.10 mm thickness. Copper wires screen available on request.

Bedding for armoured cables

An extruded PVC layer.

Armour

Galvanized steel tapes or galvanized steel wires, applied over the PVC bedding.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request).

Colours for core identification

Red, yellow and blue narrow tapes applied between non-metallic and metallic parts of insulation screen.

APPLICATION

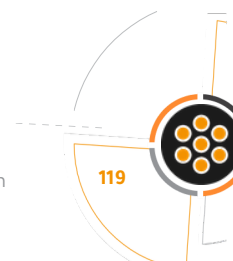
These cables are generally suitable for direct burial or for installation on trays or in ducts. Where there is a risk of mechanical damage, armoured cables should be used.

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



DIMENSIONS AND WEIGHTS

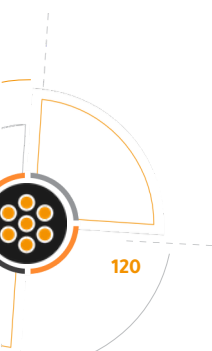
Conductor		Insulation		Screening		Outer sheath		Packaging	
Cross Sect. Area Nominal (mm ²)	Diameter Nominal (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC layer Approx (mm)	Nominal Cross Sec Area (mm ²)	Nominal Thickness of PVC Sheath (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	4.5	17.4	0.6	16	2.7	47	500	1821
50	8.2	4.5	18.5	0.6	16	2.8	50	500	2063
70	9.7	4.5	20.1	0.6	16	2.9	54	500	2439
95	11.4	4.5	21.8	0.6	16	3.1	59	500	2889
120	12.8	4.5	23.3	0.6	16	3.2	64	500	3395
150	14.4	4.5	24.8	0.6	25	3.3	65	500	3759
185	15.9	4.5	26.5	0.6	25	3.4	68	500	4331
240	18.3	4.5	28.7	0.6	25	3.5	74	400	5113
300	20.5	4.5	31.4	0.6	25	3.6	80	400	7996
400	23.5	4.5	34.1	0.6	35	3.7	86	350	7148
500	26.3	4.5	37.2	0.6	35	3.9	94	250	8708





DIMENSIONS AND WEIGHTS

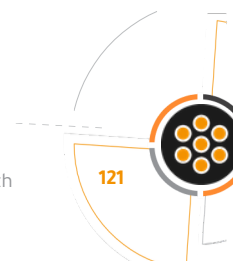
Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Dia. Over Insulation (mm)	Thickness of SC layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	4.5	17.4	0.8	0.1	2.5	45	500	1787
50	8.2	4.5	18.5	0.8	0.1	2.6	48	500	2037
70	9.7	4.5	20.1	0.8	0.1	2.7	52	500	2425
95	11.4	4.5	21.8	0.8	0.1	2.8	56	500	2842
120	12.8	4.5	23.3	0.8	0.1	2.9	59	500	3210
150	14.4	4.5	24.8	0.8	0.1	3	64	500	3820
185	15.9	4.5	26.5	1	0.1	3.1	66	500	4156
240	18.3	4.5	28.7	1	0.1	3.3	71	500	4758
300	20.5	4.5	31.4	1	0.1	3.5	77	500	5682
400	23.5	4.5	34.1	1	0.1	3.7	83	400	6973
500	26.3	4.5	37.2	1	0.1	3.9	90	350	8419





DIMENSIONS AND WEIGHTS

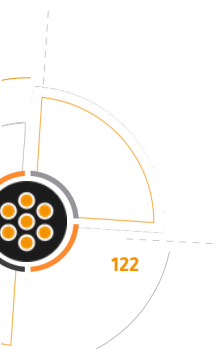
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC Layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Thickness of Steel Tape mm	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard delivery length Approx (m±5%)	Weight of cable Approx (kg/km)
35	6.9	4.5	17.4	0.8	0.1	0.5	2.6	48	500	2874
50	8.2	4.5	18.5	0.8	0.1	0.5	2.7	51	500	3175
70	9.7	4.5	20.1	0.8	0.1	0.5	2.8	55	500	3694
95	11.4	4.5	21.8	0.8	0.1	0.5	3	60	500	4212
120	12.8	4.5	23.3	0.8	0.1	0.5	3.1	62	500	4730
150	14.4	4.5	24.8	0.8	0.1	0.5	3.2	66	500	5076
185	15.9	4.5	26.5	1	0.1	0.5	3.3	69	500	5800
240	18.3	4.5	28.7	1	0.1	0.5	3.5	76	500	7370
300	20.5	4.5	31.4	1	0.1	0.8	3.7	81	350	8354
400	23.5	4.5	34.1	1	0.1	0.8	3.9	88	350	9849
500	26.3	4.5	37.2	1	0.1	0.8	4.1	96	250	11704





DIMENSIONS AND WEIGHTS

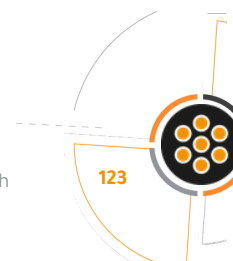
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	4.5	17.4	0.8	0.1	2.5	2.7	51	500	4030
50	8.2	4.5	18.5	0.8	0.1	2.5	2.8	54	500	4391
70	9.7	4.5	20.1	0.8	0.1	2.5	2.9	58	500	4970
95	11.4	4.5	21.8	0.8	0.1	2.5	3.1	62	500	5621
120	12.8	4.5	23.3	0.8	0.1	2.5	3.2	68	500	7100
150	14.4	4.5	24.8	0.8	0.1	3.15	3.3	70	500	7451
185	15.9	4.5	26.5	1	0.1	3.15	3.5	76	500	8250
240	18.3	4.5	28.7	1	0.1	3.15	3.6	81	400	9431
300	20.5	4.5	31.4	1	0.1	3.15	3.8	87	350	10546
400	23.5	4.5	34.1	1	0.1	3.15	4	93	350	11942
500	26.3	4.5	37.2	1	0.1	3.15	4.2	99	250	13594





DIMENSIONS AND WEIGHTS

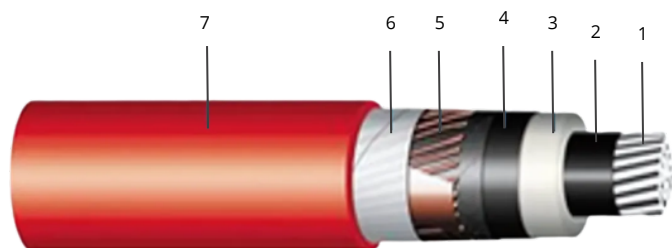
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross sect. area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC layer Approx (mm)	Nominal Cross Sec Area (mm)	Nominal Thickness of Steel tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	4.5	17.4	0.8	16	0.5	2.6	55	500	3174
50	8.2	4.5	18.5	0.8	16	0.5	2.7	58	500	3514
70	9.7	4.5	20.1	0.8	16	0.5	2.8	62	500	4059
95	11.4	4.5	21.8	0.8	16	0.5	3	67	500	4640
120	12.8	4.5	23.3	0.8	16	0.5	3.1	72	500	5115
150	14.4	4.5	24.8	0.8	25	0.5	3.2	74	500	5639
185	15.9	4.5	26.5	1	25	0.5	3.3	77	500	6400
240	18.3	4.5	28.7	1	25	0.5	3.5	85	500	8010
300	20.5	4.5	31.4	1	25	0.8	3.7	90	350	9150
400	23.5	4.5	34.1	1	35	0.8	3.9	95	350	10285
500	26.3	4.5	37.2	1	35	0.8	4.1	102	250	11730





DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter (mm)	Thickness of SC layer Approx (mm)	Nominal Cross Sec Area (mm)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
35	6.9	4.5	17.4	0.8	16	2.5	2.7	57	500	4500
50	8.2	4.5	18.5	0.8	16	2.5	2.8	59	500	4900
70	9.7	4.5	20.1	0.8	16	2.5	2.9	64	500	5505
95	11.4	4.5	21.8	0.8	16	2.5	3.1	68	500	6207
120	12.8	4.5	23.3	0.8	16	2.5	3.2	73	500	7420
150	14.4	4.5	24.8	0.8	25	3.15	3.3	76	500	8258
185	15.9	4.5	26.5	1	25	3.15	3.5	80	500	9065
240	18.3	4.5	28.7	1	25	3.15	3.6	86	400	10208
300	20.5	4.5	31.4	1	25	3.15	3.8	91	350	11374
400	23.5	4.5	34.1	1	35	3.15	4	97	350	13000
500	26.3	4.5	37.2	1	35	3.15	4.2	105	250	15092



1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic separation tape
7. Outer Sheath

DESCRIPTION

Circular stranded compacted aluminum conductors, XLPE insulated, copper wire or copper tape screen and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted aluminum conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

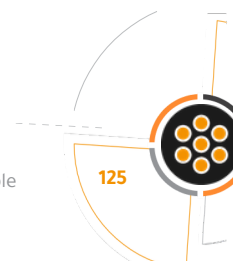
Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

For installation on trays, in ducts or by direct burial.

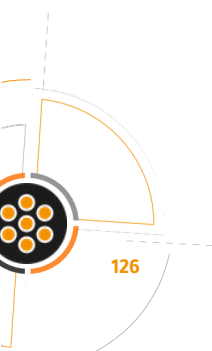
Note: In the interests of product improvement, SCC reserves the right to alter cable specifications.





DIMENSIONS AND WEIGHTS

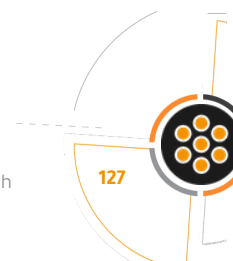
Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross sect. Area of Conductor/Screen (mm ² /mm ²)	Nominal Diameter of Conductor (mm)	Nominal Thickness of XLPE (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
50/16	8.2	5.5	1.8	27	1000	823
70/16	9.7	5.5	1.9	29	1000	939
95/16	11.4	5.5	1.9	31	1000	1077
120/16	12.8	5.5	2	33	1000	1230
150/25	14.4	5.5	2	34	1000	1396
185/25	15.9	5.5	2.1	35	1000	1460
240/25	18.3	5.5	2.1	37	1000	1674
300/25	20.5	5.5	2.2	40	500	1893
400/35	23.5	5.5	2.3	44	500	2438
500/35	26.3	5.5	2.4	47	500	2866
630/35	30.3	5.5	2.5	51	500	3382

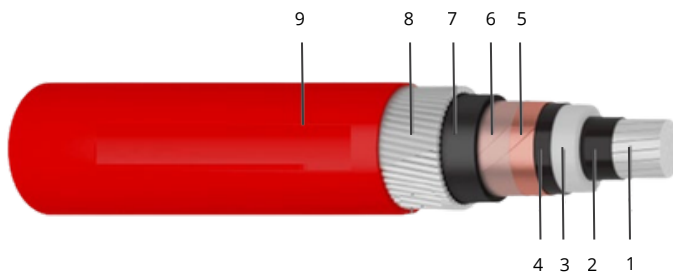




DIMENSIONS AND WEIGHTS

Catalogue Number	Conductor		Insulation	Outer sheath		Packaging	
	Nominal Cross sectional Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
ET8AA-14	50	8.2	5.5	1.8	25	1000	697
ET8AA-16	70	9.7	5.5	1.8	27	1000	811
ET8AA-17	95	11.4	5.5	1.9	29	1000	951
ET8AA-19	120	12.8	5.5	1.9	31	1000	1088
ET8AA-21	150	14.4	5.5	2	32	1000	1175
ET8AA-22	185	15.9	5.5	2	34	1000	1330
ET8AA-24	240	18.3	5.5	2.1	36	1000	1500
ET8AA-26	300	20.5	5.5	2.2	38	500	1790
ET8AA-27	400	23.5	5.5	2.3	41	500	2128
ET8AA-28	500	26.3	5.5	2.4	44	500	2570
ET8AA-30	630	30.3	5.5	2.5	48	500	3085





1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic filters and separator tape
7. Bedding
8. Armour
9. Outer Sheath

DESCRIPTION

Circular stranded compacted aluminum conductors, XLPE insulated, copper wire or copper tape screen aluminium wire armoured (AWA) and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted aluminum conductor to IEC 60228 class 2. Aluminium conductor available on request.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

Bedding

An extruded PVC layer .

Armour

Round aluminium wires.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

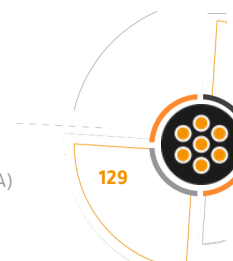
For installation on trays, in ducts or by direct burial.

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



DIMENSIONS AND WEIGHTS

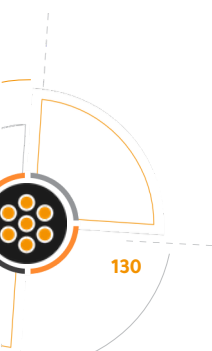
Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross sect. Area of Conductor/Screen (mm ² /mm ²)	Nominal Diameter of Conductor (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
50/16	8.2	5.5	2	2	34	1000	1419
70/16	9.7	5.5	2	2.1	36	1000	1572
95/16	11.4	5.5	2	2.1	38	1000	1749
120/16	12.8	5.5	2	2.2	40	500	1896
150/25	14.4	5.5	2	2.2	42	500	2300
185/25	15.9	5.5	2	2.3	44	500	2450
240/25	18.3	5.5	2.5	2.4	46	500	2626
300/25	20.5	5.5	2.5	2.5	48	500	2800
400/35	23.5	5.5	2.5	2.6	52	500	3534
500/35	26.3	5.5	2.5	2.7	55	500	4069
630/35	30.3	5.5	2.5	2.8	59	500	4675

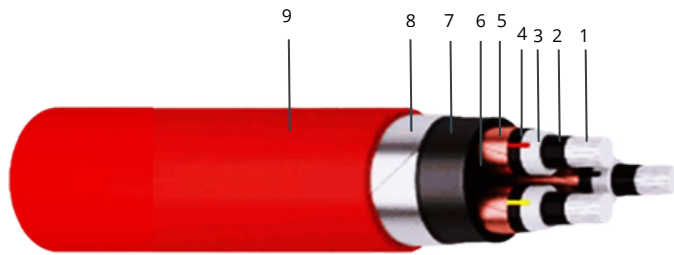




DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length (m±5%)	Net Weight Approx (kg/km)
50	8.2	5.5	1.6	2	31	1000	1104
70	9.7	5.5	2	2.1	33	1000	1246
95	11.4	5.5	2	2.1	36	1000	1500
120	12.8	5.5	2	2.2	37	1000	1676
150	14.4	5.5	2	2.2	39	500	1806
185	15.9	5.5	2	2.3	40	500	1995
240	18.3	5.5	2	2.3	43	500	2273
300	20.5	5.5	2.5	2.5	46	500	2700
400	23.5	5.5	2.5	2.6	49	500	3108
500	26.3	5.5	2.5	2.7	53	500	3611
630	30.3	5.5	2.5	2.8	56	500	4213





1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic filters and separator tape
7. Bedding
8. Armour
9. Outer Sheath

DESCRIPTION

Circular stranded compacted aluminum conductors, XLPE insulated, copper tape screened, three cores assembled together with non-hygroscopic polypropylene fillers, covered with extruded or taped bedding, armoured or unarmoured and PVC sheathed. Cables comply with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted aluminum conductor to IEC 60228 class 2. Aluminium conductor available on request.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive material compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper tapes 0.10 mm thickness. Copper wires screen available on request.

Bedding for armoured cables

An extruded PVC layer.

Armour

Galvanized steel tapes or galvanized steel wires, applied over the PVC bedding.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

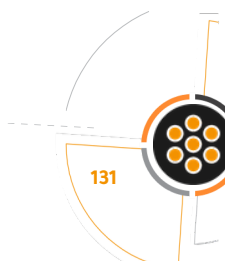
Colours for core identification

Red, Yellow and blue narrow tapes applied between non-metallic and metallic parts of insulation.

APPLICATION

For installation on trays, in ducts or by direct burial.

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





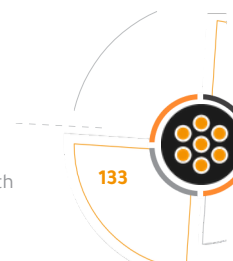
DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Diameter Approx (mm)	Nominal Thickness of XLPE (mm)	Diameter Approx (mm)	Thickness of SC layer Approx (mm)	Nominal Cross Sec Area (mm ²)	Nominal Thickness of PVC Sheath (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
50	8.2	5.5	20.5	0.6	16	2.7	58	500	2586
70	9.7	5.5	22.1	0.6	16	2.8	62	500	3000
95	11.4	5.5	23.8	0.6	16	2.9	65	500	3500
120	12.8	5.5	25.3	0.6	16	3	71	500	4058
150	14.4	5.5	26.8	0.6	25	3.1	73	500	4426
185	15.9	5.5	28.5	0.6	25	3.2	77	400	5000
240	18.3	5.5	30.7	0.6	25	3.3	82	400	5829
300	20.5	5.5	33.4	0.6	25	3.4	87	350	6711
400	23.5	5.5	36.1	0.6	35	3.6	93	250	7959
500	26.3	5.5	39.2	0.6	35	3.8	100	250	9461



DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Diameter Approx (mm)	Nominal Thickness of XLPE (mm)	Dia. Over Insulation Approx (mm)	Thickness of SC layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Thickness of PVC Sheath (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
50	8.2	5.5	20.5	0.8	0.1	2.7	52	500	2145
70	9.7	5.5	22.1	0.8	0.1	2.8	56	500	2572
95	11.4	5.5	23.8	0.8	0.1	3	61	500	3045
120	12.8	5.5	25.3	0.8	0.1	3.1	65	500	3611
150	14.4	5.5	26.8	1	0.1	3.2	67	500	3963
185	15.9	5.5	28.5	1	0.1	3.3	71	500	4524
240	18.3	5.5	30.7	1	0.1	3.5	75	500	5247
300	20.5	5.5	33.4	1	0.1	3.6	81	400	6123
400	23.5	5.5	36.1	1	0.1	3.8	87	350	7255
500	26.3	5.5	39.2	1	0.1	4.1	94	250	8726





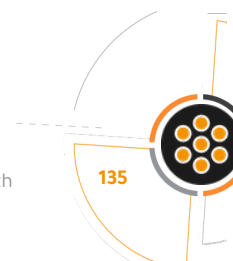
DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Diameter Approx (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter Approx (mm)	Thickness of SC Layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
50	8.2	5.5	20.5	0.7	0.1	0.5	2.4	60	500	3506
70	9.7	5.5	22.1	0.7	0.1	0.5	2.6	63	500	3903
95	11.4	5.5	23.8	0.7	0.1	0.5	2.7	69	500	4587
120	12.8	5.5	25.3	0.7	0.1	0.5	2.8	74	500	5240
150	14.4	5.5	26.8	0.7	0.1	0.5	3	76	500	5564
185	15.9	5.5	28.5	0.7	0.1	0.5	3.1	80	500	6220
240	18.3	5.5	30.7	0.7	0.1	0.8	3.2	86	400	7915
300	20.5	5.5	33.4	0.7	0.1	0.8	3.3	92	350	9000
400	23.5	5.5	36.1	0.7	0.1	0.8	3.4	98	250	10090
500	26.3	5.5	39	0.7	0.1	0.8	3.6	104	250	10940



DIMENSIONS AND WEIGHTS

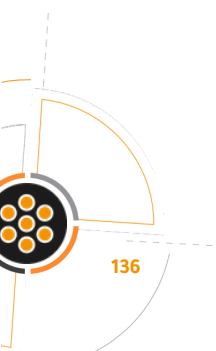
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Diameter Approx (mm)	Nominal Thickness of XLPE (mm)	Diameter Approx (mm)	Thickness of SC layer Approx (mm)	Thickness of Cu Tape Approx (mm)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
50	8.2	5.5	20.5	0.7	0.1	2.5	2.8	61	500	4945
70	9.7	5.5	22.1	0.7	0.1	2.5	2.9	66	500	5548
95	11.4	5.5	23.8	0.7	0.1	2.5	3	72	500	6945
120	12.8	5.5	25.3	0.7	0.1	3.15	3.1	77	500	7870
150	14.4	5.5	26.8	0.7	0.1	3.15	3.2	79	500	8228
185	15.9	5.5	28.5	0.7	0.1	3.15	3.3	83	400	9059
240	18.3	5.5	30.7	0.7	0.1	3.15	3.5	85	350	9848
300	20.5	5.5	33.4	0.7	0.1	3.15	4	91	350	11544
400	23.5	5.5	36.1	0.7	0.1	3.15	4.3	98	250	12860
500	26.3	5.5	39	0.7	0.1	3.15	4.5	106	250	15050





DIMENSIONS AND WEIGHTS

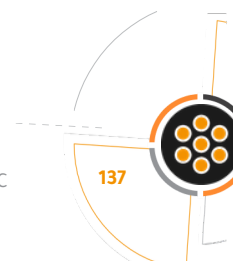
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Diameter Approx (mm)	Nominal Thickness of XLPE (mm)	Diameter Approx (mm)	Thickness of SC layer Approx (mm)	Nominal Cross Sec Area (mm ²)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
50	8.2	5.5	20.5	0.7	16	0.5	2.1	61	500	3730
70	9.7	5.5	22.1	0.7	16	0.5	2.2	66	500	4260
95	11.4	5.5	23.8	0.7	16	0.5	2.3	70	500	4836
120	12.8	5.5	25.3	0.7	16	0.5	2.5	74	500	5535
150	14.4	5.5	26.8	0.7	25	0.5	2.6	76	500	5808
185	15.9	5.5	28.5	0.7	25	0.5	2.7	82	500	7383
240	18.3	5.5	30.7	0.7	25	0.8	2.9	86	400	8345
300	20.5	5.5	33.4	0.7	25	0.8	3.4	93	350	9611
400	23.5	5.5	36.1	0.7	35	0.8	4	101	250	11137
500	26.3	5.5	39	0.7	35	0.8	4.2	107	250	12948

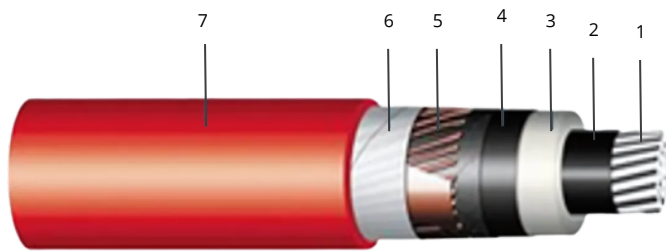




DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Diameter Approx (mm)	Nominal Thickness of XLPE (mm)	Diameter Approx (mm)	Thickness of SC Layer Approx (mm)	Nominal Cross Sec Area (mm ²)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
50	8.2	5.5	20.5	0.7	16	2.5	2.7	62	500	5210
70	9.7	5.5	22.1	0.7	16	2.5	2.9	67	500	5823
95	11.4	5.5	23.8	0.7	16	2.5	3	72	500	7298
120	12.8	5.5	25.3	0.7	16	3.15	3.1	77	500	8189
150	14.4	5.5	26.8	0.7	25	3.15	3.2	79	500	8621
185	15.9	5.5	28.5	0.7	25	3.15	3.3	83	400	9437
240	18.3	5.5	30.7	0.7	25	3.15	3.5	88	350	10591
300	20.5	5.5	33.4	0.7	25	3.15	3.7	100	350	12053
400	23.5	5.5	36.1	0.7	35	3.15	3.9	106	250	13525
500	26.3	5.5	39	0.7	35	3.15	4.1	114	250	15486





1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic separation tape
7. Outer Sheath

DESCRIPTION

Circular stranded compacted aluminum conductor, XLPE insulated, with copper wire or copper tape screen and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted aluminum conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

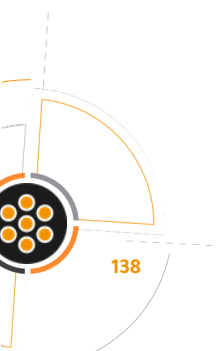
Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

For installation on trays, in ducts or by direct burial.

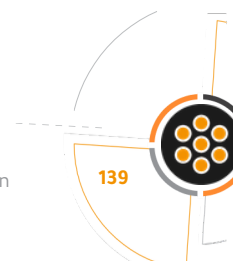
Note: In the interests of product improvement, SCC reserves the right to alter cable specifications.





DIMENSIONS AND WEIGHTS

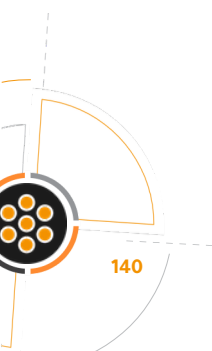
Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross sect. Area of conductor/Screen (mm ² /mm ²)	Nominal Diameter of Conductor (mm)	Nominal Thickness of XLPE (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery length Approx (m±5%)	Net Weight Approx (kg/km)
70/16	9.7	8	2	34	1000	1182
95/16	11.4	8	2.1	36	1000	1336
120/16	12.8	8	2.1	38	1000	1469
150/25	14.4	8	2.2	40	1000	1685
185/25	15.9	8	2.2	42	500	1862
240/25	18.3	8	2.3	44	500	2145
300/25	20.5	8	2.4	46	500	2406
400/35	23.5	8	2.5	49	500	2858
500/35	26.3	8	2.6	53	500	3320
630/35	30.3	8	2.7	57	500	3872

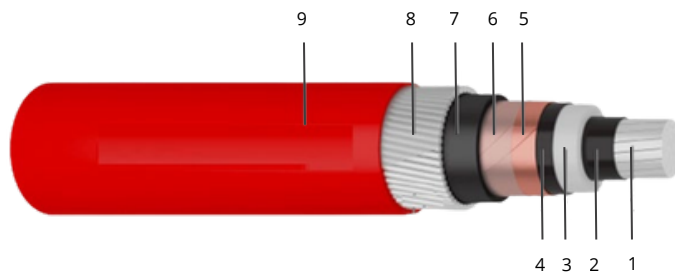




DIMENSIONS AND WEIGHTS

Conductor		Insulation	Outer sheath		Packaging	
Nominal Cross Sectional Area (mm ²)	Nominal Diameter mm	Nominal Thickness of XLPE (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery length Approx (m±5%)	Net Weight Approx (kg/km)
70	9.7	8	2	32	1000	1450
95	11.4	8	2.1	34	1000	1764
120	12.8	8	2.1	35	1000	2025
150	14.4	8	2.2	37	1000	2340
185	15.9	8	2.2	39	500	2720
240	18.3	8	2.3	41	500	3310
300	20.5	8	2.4	43	500	3960
400	23.5	8	2.5	47	500	4883
500	26.3	8	2.6	49	500	5930
630	30.3	8	2.7	54	500	7400





1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic separation tape
7. Bedding
8. Armour
9. Outer Sheath

DESCRIPTION

Circular stranded compacted aluminum conductors, XLPE insulated, copper wire or copper tape screen, aluminium wire armoured (AWA) and PVC outer sheath. Complies with IEC 60502.

CONSTRUCTION

Conductor

Plain circular compacted aluminum conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive material compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper wires screen or copper tape screen.

Bedding

An extruded PVC layer.

Armour

Round aluminium wires.

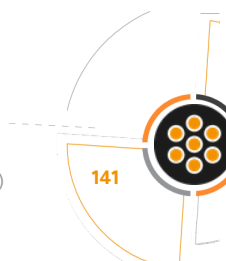
Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

APPLICATION

For installation on trays, in ducts or by direct burial.

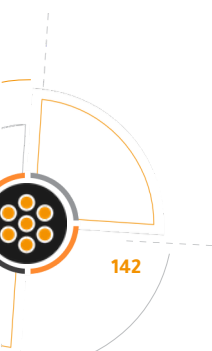
Note: In the interests of product improvement, SCC reserves the right to alter cable specifications.





DIMENSIONS AND WEIGHTS

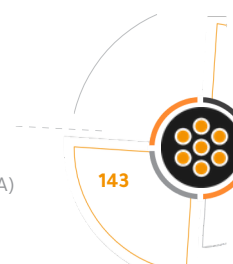
Conductor		Insulation	Armoring	Outer sheath		Packaging	
Nominal Cross sect. Area of conductor/Screen (mm ² /mm ²)	Nominal Diameter of Conductor (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery length Approx (m±5%)	Net Weight Approx (kg/km)
70/16	9.7	8	2	2.3	41	500	1907
95/16	11.4	8	2	2.3	43	500	2100
120/16	12.8	8	2.5	2.4	44	500	2235
150/25	14.4	8	2.5	2.5	47	500	2600
185/25	15.9	8	2.5	2.5	49	500	2823
240/25	18.3	8	2.5	2.6	51	500	3129
300/25	20.5	8	2.5	2.7	53	500	3460
400/35	23.5	8	2.5	2.8	57	500	4000
500/35	26.3	8	2.5	2.9	62	500	4510
630/35	30.3	8	2.5	3	64	500	5224

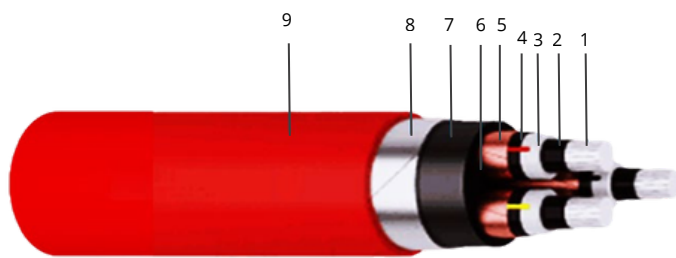




DIMENSIONS AND WEIGHTS

Conductor		Insulation	Armoring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Nominal Diameter of Alu. Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery length Approx (m±5%)	Net Weight Approx (kg/km)
70	9.7	8	2	2.2	39	500	1700
95	11.4	8	2	2.3	41	500	1900
120	12.8	8	2	2.3	42	500	2086
150	14.4	8	2.5	2.4	44	500	2346
185	15.9	8	2.5	2.5	46	500	2542
240	18.3	8	2.5	2.6	49	500	2878
300	20.5	8	2.5	2.6	51	500	3200
400	23.5	8	2.5	2.8	55	500	3623
500	26.3	8	2.5	2.8	57	500	4190
630	30.3	8	2.5	3	62	500	4815





1. Conductor
2. Conductor Screen
3. Insulation
4. Insulation Screen (non-metallic part)
5. Insulation Screen (metallic part)
6. Non-hygroscopic separation tape
7. Bedding
8. Armour
9. Outer Sheath

DESCRIPTION

Circular stranded compacted aluminum conductors, XLPE insulated, copper tape screened, three cores assembled together with non-hygroscopic polypropylene fillers, covered with extruded or taped bedding, armoured or unarmoured and PVC sheathed. Cables comply with IEC 60502-2.

CONSTRUCTION

Conductor

Plain circular compacted aluminum conductor to IEC 60228 class 2.

Conductor Screen

Extruded semiconductive compound.

Insulation

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

Insulation Screen (non-metallic part)

Semiconductive extruded layer of semiconductive material compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.

Insulation Screen (metallic part)

Copper tapes 0.10 mm thickness. Copper wires screen available on request.

Bedding for armoured cables

An extruded PVC layer.

Armour

Galvanized steel tapes or galvanized steel wires, applied over the PVC bedding.

Outer Sheath

PVC type ST2 to IEC 60502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

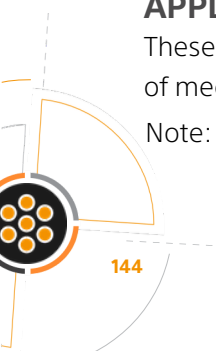
Colours for core identification

Red, yellow and blue narrow tapes applied between non-metallic and metallic parts of insulation screen.

APPLICATION

These cables are generally suitable for direct burial or for installation on trays or in ducts. Where there is a risk of mechanical damage, armoured cables should be used.

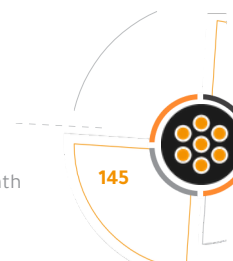
Note: In the interests of product improvement, SCC reserves the right to alter cable specifications.





DIMENSIONS AND WEIGHTS

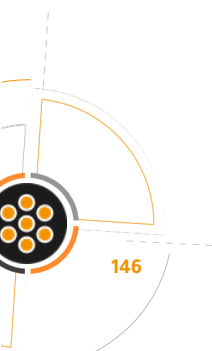
Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Dia .Over Insulation Approx (mm)	Nominal Thickness of SC Layer (mm)	Nominal Thickness of Cu Tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
70	9.7	8	27.1	0.8	0.1	3.2	68	500	3712
95	11.4	8	28.8	0.8	0.1	3.3	73	500	4337
120	12.8	8	30.3	0.8	0.1	3.5	76	500	4746
150	14.4	8	31.8	0.8	0.1	3.6	79	500	5140
185	15.9	8	33.5	0.8	0.1	3.7	82	500	5777
240	18.3	8	35.7	0.8	0.1	3.8	88	400	6695
300	20.5	8	38.4	0.8	0.1	4	93	400	7670
400	23.5	8	41.1	0.8	0.1	4.2	100	250	8773
500	26.3	8	44	0.8	0.1	4.4	107	250	10508





DIMENSIONS AND WEIGHTS

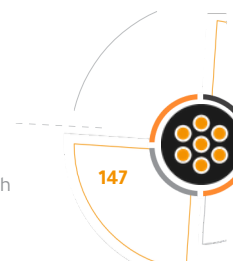
Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Diameter Approx (mm)	Nominal Thickness of SC Layer (mm)	Nominal Cross Sec Area (mm ²)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
70	9.7	8	27.1	0.8	16	3.2	73	500	4152
95	11.4	8	28.8	0.8	16	3.4	76	500	4322
120	12.8	8	30.3	0.8	16	3.5	81	400	4872
150	14.4	8	31.8	0.8	25	3.6	83	400	5327
185	15.9	8	33.5	0.8	25	3.7	86	350	5948
240	18.3	8	35.7	0.8	25	3.9	91	350	6836
300	20.5	8	38.4	0.8	25	4.1	97	250	7870
400	23.5	8	41.1	0.8	35	4.3	103	250	9103
500	26.3	8	44	0.8	35	4.5	111	250	10920





DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Diameter Approx (mm)	Nominal Thickness of SC Layer (mm)	Thickness of Cu Tape Approx (mm)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
70	9.7	8	27.1	0.8	0.1	3.15	3.5	80	500	7515
95	11.4	8	28.8	0.8	0.1	3.15	3.7	84	400	8910
120	12.8	8	30.3	0.8	0.1	3.15	3.8	87	400	9745
150	14.4	8	31.8	0.8	0.1	3.15	3.9	91	350	10382
185	15.9	8	33.5	0.8	0.1	3.15	4	95	350	11267
240	18.3	8	35.7	0.8	0.1	3.15	4.2	100	250	12478
300	20.5	8	38.4	0.8	0.1	3.15	4.3	105	250	13721
400	23.5	8	41.1	0.8	0.1	3.15	4.6	112	250	15681
500	26.3	8	44	0.8	0.1	3.15	4.9	120	250	17781





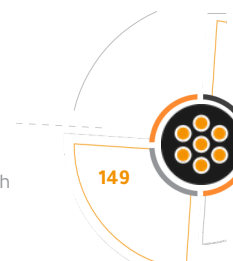
DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Dia. Over Insulation Approx (mm)	Nominal Thickness of SC layer (mm)	Thickness of Cu Tape Approx (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
70	9.7	8	27.1	0.8	0.1	3.2	73	500	5432
95	11.4	8	28.8	0.8	0.1	3.3	77	500	6686
120	12.8	8	30.3	0.8	0.1	3.5	83	500	7400
150	14.4	8	31.8	0.8	0.1	3.6	85	500	8077
185	15.9	8	33.5	0.8	0.1	3.7	92	400	9057
240	18.3	8	35.7	0.8	0.1	3.8	94	400	10065
300	20.5	8	38.4	0.8	0.1	4	102	350	11315
400	23.5	8	41.1	0.8	0.1	4.1	108	250	12730
500	26.3	8	44	0.8	0.1	4.3	115	250	14621



DIMENSIONS AND WEIGHTS

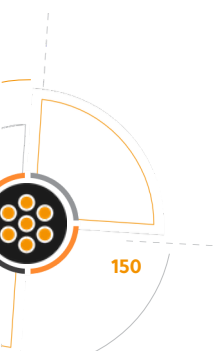
Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Diameter Approx (mm)	Nominal Thickness of SC Layer (mm)	Nominal Cross Sec Area (mm ²)	Nominal Thickness of Steel Tape (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
70	9.7	8	27.1	0.8	16	0.5	3.4	80	500	6412
95	11.4	8	28.8	0.8	16	0.5	3.5	84	400	7624
120	12.8	8	30.3	0.8	16	0.8	3.7	91	400	8639
150	14.4	8	31.8	0.8	25	0.8	3.8	93	350	9370
185	15.9	8	33.5	0.8	25	0.8	3.9	96	350	10305
240	18.3	8	35.7	0.8	25	0.8	4.1	102	250	11470
300	20.5	8	38.4	0.8	25	0.8	4.2	107	250	12647
400	23.5	8	41.1	0.8	35	0.8	4.3	114	250	14057
500	26.3	8	44	0.8	35	0.8	4.4	122	250	16174





DIMENSIONS AND WEIGHTS

Conductor		Insulation		Screening		Armouring	Outer sheath		Packaging	
Nominal Cross Sect. Area (mm ²)	Nominal Diameter (mm)	Nominal Thickness of XLPE (mm)	Diameter Approx (mm)	Nominal Thickness of SC Layer (mm)	Nominal Cross Sec Area (mm ²)	Nominal Diameter of Steel Wire (mm)	Nominal Thickness of PVC (mm)	Overall Diameter Approx (mm)	Standard Delivery Length Approx (m±5%)	Weight of Cable Approx (kg/km)
70	9.7	8	27.1	0.8	16	3.15	3.2	82	400	8868
95	11.4	8	28.8	0.8	16	3.15	3.3	86	350	9490
120	12.8	8	30.3	0.8	16	3.15	3.4	91	350	10486
150	14.4	8	31.8	0.8	25	3.15	3.6	93	350	10949
185	15.9	8	33.5	0.8	25	3.15	3.8	97	350	11844
240	18.3	8	35.7	0.8	25	3.15	3.9	100	250	13124
300	20.5	8	38.4	0.8	25	3.15	4	107	250	14755
400	23.5	8	41.1	0.8	35	3.15	4.2	114	250	16209
500	26.3	8	44	0.8	35	3.15	4.4	121	250	18312



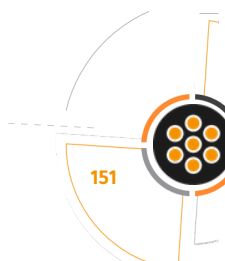


MEDIUM VOLTAGE CABLES ELECTRICAL CHARACTERISTICS

MAXIMUM ALUMINUM CONDUCTOR RESISTANCE FOR THREE CORE XLPE INSULATED CABLE



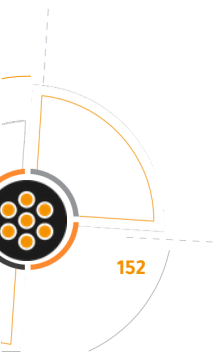
Area (mm ²)	Conductor DC Resistance at 20°C (ohm/km)	Conductor AC Resistance at 90°C (Trefoil) (Ohm/km) Rated Voltage of The Cable (kV)				
		3.6/6	6/10	8.5/15	12/20	18/30
35	0.868	1.113	1.113	1.113	1.113	-
50	0.641	0.822	0.822	0.822	0.822	0.822
70	0.443	0.568	0.568	0.568	0.568	0.568
95	0.32	0.41	0.41	0.41	0.41	0.41
120	0.253	0.324	0.324	0.324	0.324	0.324
150	0.206	0.264	0.264	0.264	0.262	0.262
185	0.164	0.21	0.209	0.209	0.209	0.209
240	0.125	0.16	0.159	0.158	0.158	0.158
300	0.1	0.128	0.127	0.126	0.124	0.123
400	0.0778	0.1	0.0978	0.0978	0.0968	0.0958
500	0.0605	0.078	0.0768	0.076	0.0753	0.0745
630	0.0469	0.0601	0.0595	0.0589	0.0583	0.0578



MAXIMUM COPPER CONDUCTOR RESISTANCE FOR THREE CORE XLPE INSULATED CABLE



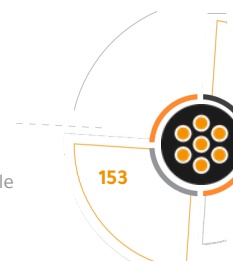
Area (mm ²)	Conductor DC Resistance at 20°C (ohm/km)	Conductor AC Resistance at 90°C (trefoil) (Ohms/km) Rated Voltage of The Cable (kV)				
		3.6/6	6/10	8.5/15	12/20	18/30
16	1.15	1.47	1.47	-	-	-
25	0.727	0.927	0.927	0.927	-	-
35	0.524	0.668	0.668	0.668	0.668	-
50	0.387	0.494	0.494	0.494	0.494	0.494
70	0.268	0.342	0.342	0.342	0.342	0.342
95	0.193	0.247	0.247	0.247	0.247	0.247
120	0.153	0.196	0.196	0.196	0.196	0.196
150	0.124	0.160	0.160	0.160	0.159	0.159
185	0.0991	0.129	0.128	0.128	0.128	0.128
240	0.0754	0.099	0.0989	0.0987	0.0986	0.0983
300	0.0601	0.0804	0.0802	0.0800	0.0798	0.0794
400	0.0470	0.0647	0.0646	0.0643	0.0641	0.0636
500	0.0366	0.0527	0.0527	0.0523	0.0520	0.0514
630	0.0283	0.0434	0.0438	0.0434	0.0430	0.0423
800	0.0221	-	-	-	0.0367	-
1000	0.0176	-	-	-	0.0321	-





ARMoured (AWA)

Nominal Cross Sectional Area of Conductor/Screen (mm ²)	Current Carrying Capacity In Ground		Current Carrying Capacity In Free Air Against Wall	
	flat  Approx amps	Trefoil  Approx amps	flat  Approx amps	Trefoil  Approx amps
35/16	130	125	139	137
50/16	152	147	168	163
70/16	186	180	210	204
95/16	222	214	255	249
120/16	252	244	295	288
150/25	279	272	334	327
185/25	314	307	384	376
240/25	361	355	454	446
300/25	406	401	520	512
400/35	451	455	600	597
500/35	499	499	650	637
630/35	548	548	743	677

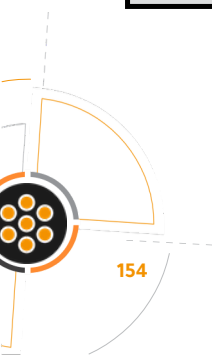




UNARMoured

Nominal Cross Sectional Area of Conductor/ Screen (mm ²)	Current Carrying Capacity In Ground		Current Carrying Capacity In Free Air Against Wall	
	flat  Approx amps	Trefoil  Approx amps	flat  Approx amps	Trefoil  Approx amps
35/16	133	128	143	140
50/16	156	151	172	167
70/16	190	185	215	209
95/16	227	219	261	255
120/16	258	250	302	295
150/25	286	279	342	335
185/25	321	314	393	386
240/25	370	364	465	457
300/25	416	411	533	525
400/35	462	466	615	612
500/35	512	512	655	653
630/35	561	561	762	694

All values are calculated in accordance with IEC 60287 based on:	
Continuous Load Conductor Temperature	90°C
Ground Temperature	30°C
Depth of Burial	0.8 (m)
Thermal Resistivity of Soil	1.2 (K.m/W)
Air Ambient Temperature	40°C

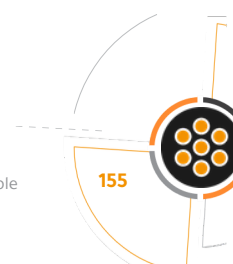




ARMoured AND UNARMoured

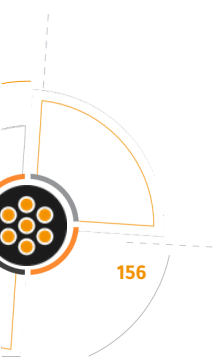
Cross Sectional Area of Conductor/ Screen Nominal (mm ²)	Current Carrying Capacity In Ground		Current Carrying Capacity In Free Air Against Wall	
	Unarmoured	Armoured	Unarmoured	Armoured
	Approx amps	Approx amps	Approx amps	Approx amps
35/16	119	119	120	120
50/16	140	140	144	145
70/16	171	171	178	178
95/16	203	204	215	217
120/16	232	232	248	249
150/25	260	259	281	281
185/25	294	293	323	322
240/25	340	338	378	378
300/25	384	380	432	430
400/35	438	432	502	496
500/35	502	510	571	560

All values are calculated in accordance with IEC 60287 based on:	
Continuous Load Conductor Temperature	90°C
Ground Temperature	30°C
Depth of Burial	0.8 (m)
Thermal Resistivity of Soil	1.2 (K.m/W)
Air Ambient Temperature	40°C



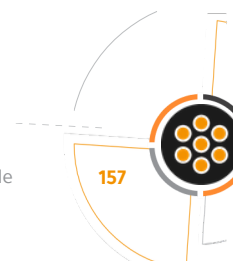


Area (mm ²)	Star Reactance (Ohm/km)				
	Rated Voltage of The Cable (kV)				
	3.6/6	6/10	8.5/15	12/20	18/30
35	0.15	0.15	0.16	0.18	-
50	0.14	0.15	0.16	0.16	0.17
70	0.13	0.14	0.15	0.15	0.16
95	0.13	0.13	0.14	0.15	0.16
120	0.12	0.13	0.13	0.14	0.15
150	0.12	0.12	0.13	0.14	0.15
185	0.12	0.12	0.13	0.13	0.14
240	0.11	0.12	0.12	0.13	0.14
300	0.11	0.11	0.11	0.12	0.13
400	0.11	0.11	0.11	0.12	0.13
500	0.11	0.11	0.11	0.11	0.12
630	0.10	0.10	0.11	0.11	0.11



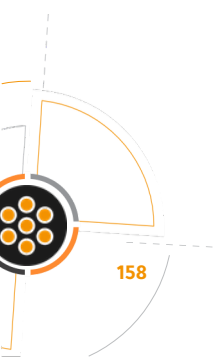


Area (mm ²)	Star Reactance (Ohm/km)				
	Rated Voltage of The Cable (kV)				
	3.6/6	6/10	8.5/15	12/20	18/30
35	0.11	0.114	0.14	0.15	-
50	0.107	0.112	0.13	0.14	0.16
70	0.103	0.11	0.12	0.13	0.14
95	0.101	0.107	0.12	0.12	0.14
120	0.098	0.104	0.11	0.12	0.13
150	0.096	0.102	0.11	0.11	0.13
185	0.095	0.099	0.11	0.11	0.13
240	0.093	0.097	0.1	0.11	0.12
300	0.092	0.093	0.1	0.1	0.12
400	0.089	0.09	0.09	0.09	0.11
500	0.085	0.088	0.09	0.09	0.11



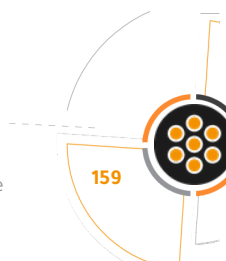


Area (mm ²)	Operating Capacitance (μF/km)				
	Rated Voltage of The Cable (kV)				
	3.6/6	6/10	8.5/15	12/20	18/30
35	0.28	0.22	0.18	0.16	-
50	0.31	0.25	0.2	0.18	0.14
70	0.35	0.28	0.23	0.2	0.15
95	0.39	0.31	0.25	0.22	0.17
120	0.43	0.34	0.27	0.24	0.18
150	0.47	0.37	0.3	0.26	0.2
185	0.52	0.4	0.32	0.28	0.21
240	0.56	0.45	0.36	0.3	0.23
300	0.58	0.49	0.39	0.33	0.25
400	0.6	0.54	0.43	0.37	0.27
500	0.63	0.6	0.48	0.4	0.3
630	0.75	0.7	0.57	0.47	0.34





Area (mm ²)	Operating Capacitance (μF/km)				
	Rated Voltage of The Cable (kV)				
	3.6/6	6/10	8.5/15	12/20	18/30
16	0.22	0.19	-	-	-
25	0.25	0.2	0.17	-	-
35	0.28	0.22	0.18	0.16	-
50	0.31	0.25	0.2	0.18	0.14
70	0.35	0.28	0.23	0.2	0.15
95	0.39	0.31	0.25	0.22	0.17
120	0.43	0.34	0.27	0.24	0.18
150	0.47	0.37	0.3	0.26	0.2
185	0.52	0.4	0.32	0.28	0.21
240	0.56	0.45	0.36	0.3	0.23
300	0.58	49	0.39	0.33	0.25
400	0.6	0.54	0.43	0.37	0.27
500	0.63	0.6	0.48	0.4	-



Variations in air ambient temperature

Insulation	Air Ambient Temperature (°C)						
	25	30	35	40	45	50	55
XLPE	1.14	1.1	1.05	1	0.95	0.89	0.84

Variations in ground temperature

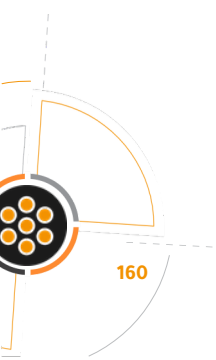
Insulation	Ground Temperature (°C)						
	20	25	30	35	40	45	50
XLPE	1.09	1.04	1	0.95	0.90	0.85	0.80

Variations in depth of burial
(to center of cable or trefoil group of cables)

Depth of Laying (m)	Up to 300 (mm ²)	Above 300 (mm ²)
0.8	1	1
1	0.98	0.97
1.25	0.96	0.95
1.5	0.95	0.93
1.75	0.94	0.91
2	0.92	0.89
2.5	0.91	0.88
3.00 or more	0.9	0.87

Variations in depth of burial
(to center of duct or trefoil group of ducts)

Depth of Laying (m)	Single core	Multi core
0.8	1	1
1	0.98	0.99
1.25	0.95	0.97
1.5	0.93	0.96
1.75	0.92	0.95
2	0.9	0.95
2.5	0.89	0.94
3.00 or more	0.88	0.93





Variations in thermal resistivity of soil for cables in duct banks (average value)

Conductor (mm ²)	Soil Thermal Resistivity In (°k.m/W)						
	0.8	0.9	1.0	1.2	1.5	2.0	2.5
Single core cables up to 150	1.10	1.07	1.04	1.00	0.95	0.87	0.81
from 185-400	1.11	1.08	1.05	1.00	0.94	0.86	0.79
from 500-630	1.13	1.09	1.06	1.00	0.93	0.84	0.77
from 800-1200	1.14	1.10	1.07	1.00	0.92	0.83	0.75
Multicore cables up to 25	1.05	1.04	1.03	1.00	0.97	0.93	0.87
from 16-150	1.07	1.05	1.03	1.00	0.96	0.90	0.85
from 400-185	1.09	1.06	1.04	1.00	0.95	0.87	0.82

Variations in thermal resistivity of soil

Conductor (mm ²)	Soil Thermal Resistivity In (°k.m/W)						
	0.8	0.9	1.0	1.2	1.5	2.0	2.5
Single core cables up to 150	1.16	1.11	1.07	1	0.91	0.81	0.73
from 185-400	1.17	1.12	1.07	1	0.9	0.8	0.72
from 500-630	1.18	1.13	1.08	1	0.9	0.79	0.71
from 800-1200	1.19	1.14	1.08	1	0.89	0.78	0.70
Multicore cables up to 25	1.14	1.10	1.07	1	0.93	0.84	0.76
from 16-150	1.16	1.11	1.07	1	0.92	0.82	0.74





Grouping variations for three single core cables in trefoil, and flat touching and horizontal (direct buried)

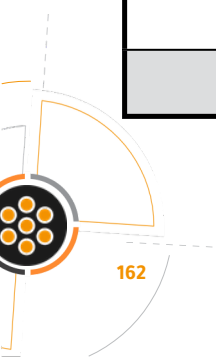
Number of circuits	Spacing (between centres of groups)				
	Trefoil	Touching	0.15m	0.30m	0.45m
2	0.78	0.8	0.81	0.85	0.88
3	0.66	0.7	0.71	0.76	0.8
4	0.61	0.65	0.65	0.72	0.76
5	0.56	0.59	0.61	0.68	0.73
6	0.53	0.56	0.58	0.66	0.72

Grouping variations for multicore cables in flat formation (direct buried)

Number of Cables In Group	Spacing (Between Cable Centres)				
	Touching	0.15m	0.30m	0.45m	0.60m
2	0.80	0.84	0.88	0.90	0.92
3	0.70	0.74	0.79	0.83	0.86
4	0.64	0.69	0.75	0.79	0.83
5	0.58	0.65	0.72	0.77	0.80
6	0.56	0.62	0.70	0.75	0.79

Grouping variations for three single core cables in trefoil, and flat touching and horizontal (in single way duct banks)

Number of Circuits	Spacing (Between Duct Centres)		
	Trefoil	0.45m	0.60m
2	0.85	0.88	0.90
3	0.76	0.80	0.83
4	0.71	0.76	0.80
5	0.67	0.73	0.77
6	0.65	0.71	0.76





Variations for multicore cables in single way duct banks in horizontal formation

Number of Ducts In Group	Spacing (Between Duct Centres)			
	Touching	0.30m	0.45m	0.60m
2	0.88	0.90	0.93	0.94
3	0.79	0.83	0.86	0.88
4	0.74	0.8	0.83	0.86
5	0.70	0.76	0.81	0.84
6	0.68	0.74	0.79	0.83

THERMAL SHORT-CIRCUIT CURRENT RATINGS

The following formula have been derived from IEC 60949:

Figure 1. Aluminium conductor

$$I_c = \frac{0.0937 \times q}{\sqrt{t}}$$

$$I_s = \frac{0.148 \times q}{\sqrt{t}}$$

Where:

I_c = Permissible short-circuit current for conductor (KA)

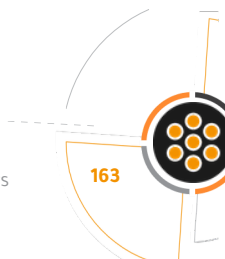
I_s = Permissible short-circuit current for screen (KA)

T = Permissible short-circuit current for screen (KA)

Q = Nomina; conductor area in mm², or nominal screen area in mm²

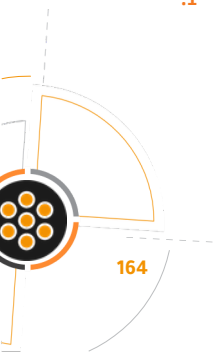
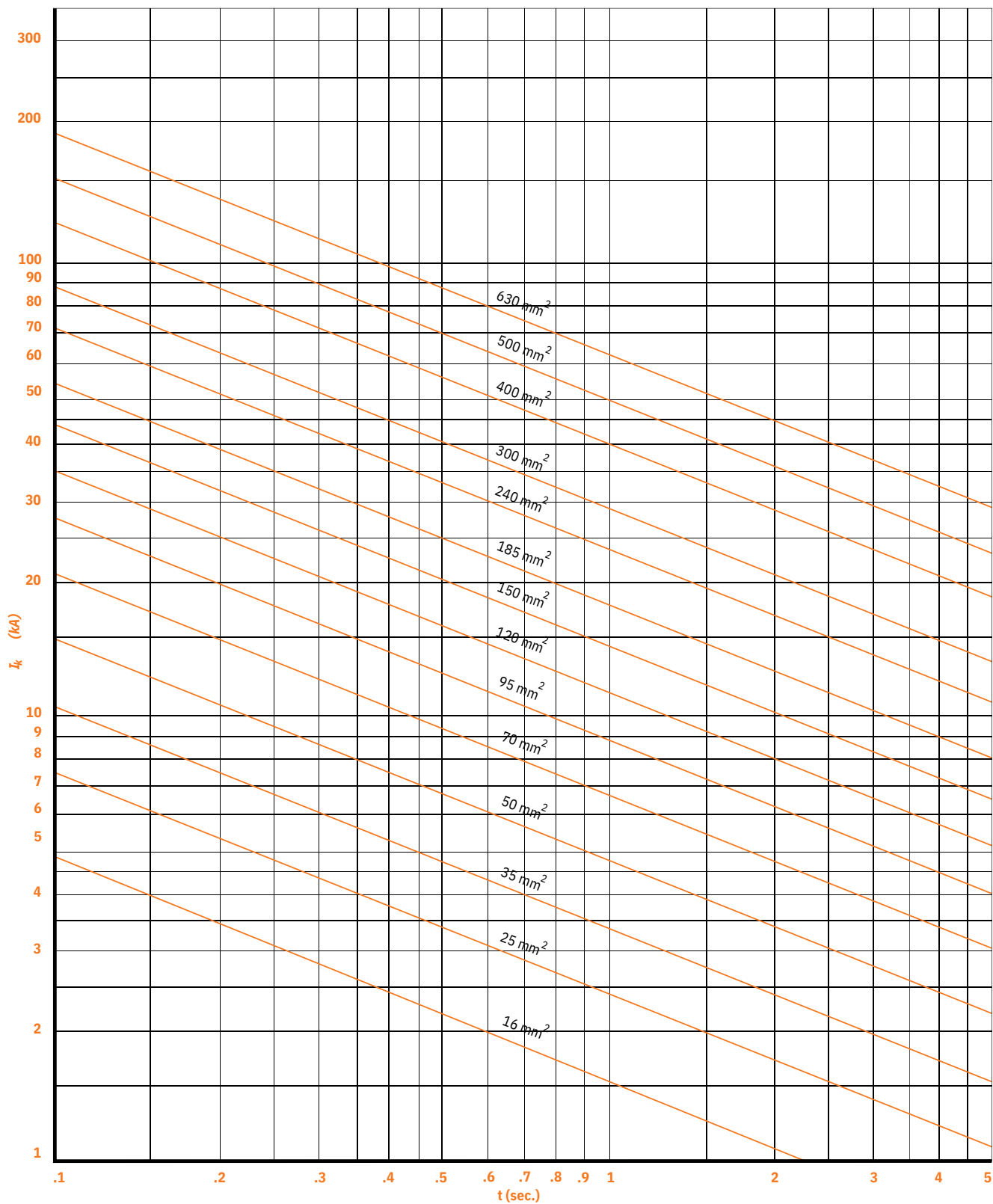
Where:

Conductor temp. before short circuit	90°C
Conductor temp. after short circuit	250°C
Screen temp. before short circuit	80°C
Screen temp. after short circuit	250°C



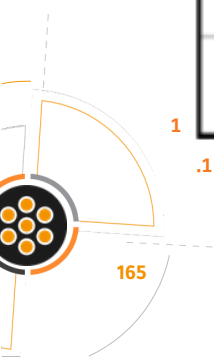
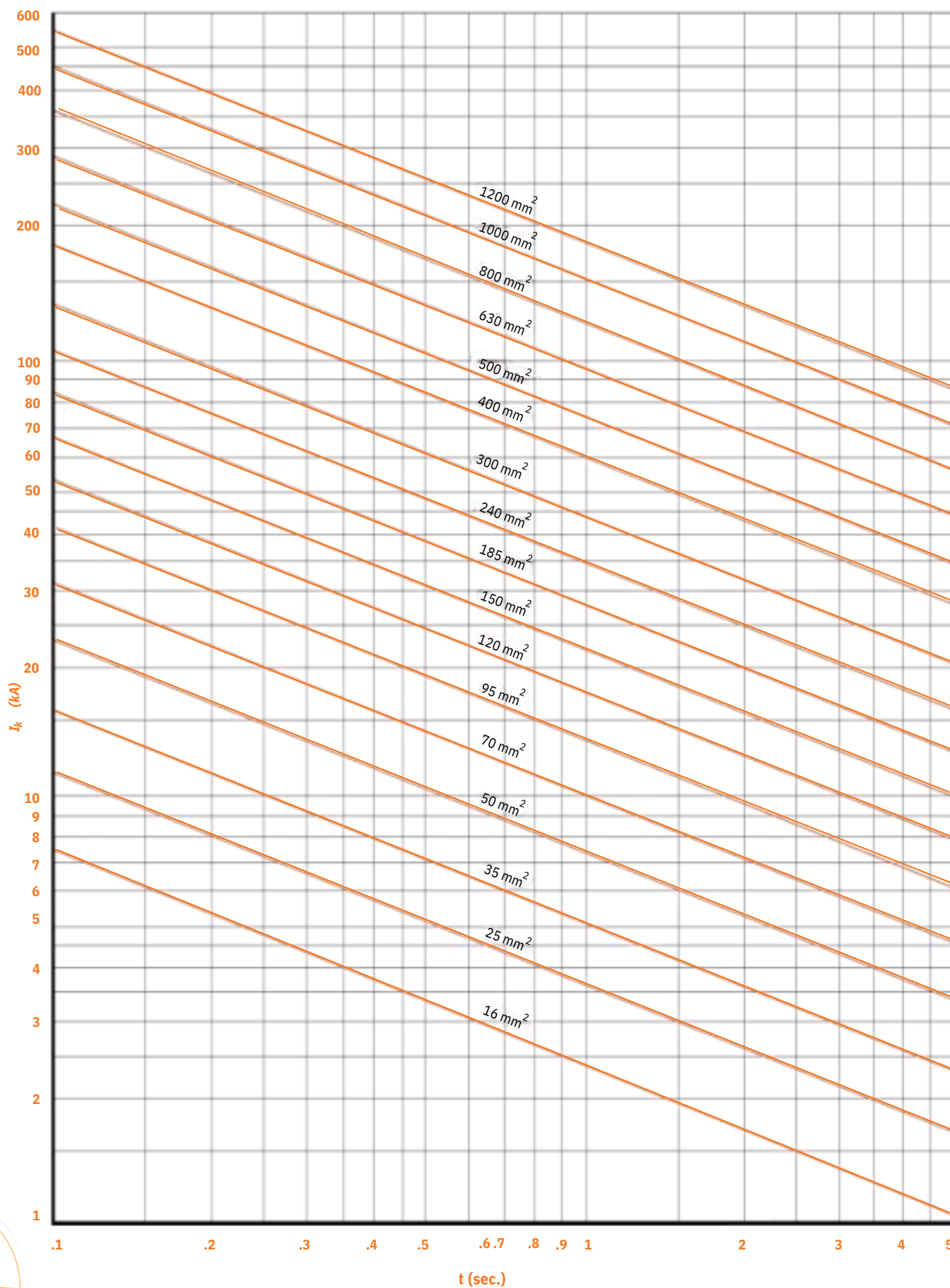


ALUMINIUM CONDUCTOR XLPE INSULATION





COPPER CONDUCTOR XLPE INSULATION





MEDIUM VOLTAGE CABLES
CABLE HANDLING AND LAYING PARAMETERS



MINIMUM RECOMMENDED BENDING RADIUS

Bending of power cables at short radii may permanently damage the insulation, shielding or jacket and ultimately result in a cable failure. It is therefore, very important that no sharp bends or twists are made.

Cable type	Radius (mm)
Single core cables Armoured or Unarmoured	15 D
Multicore cables Armoured	15 D
Multicore cables Unarmoured	12 D

Where D = Overall diameter of the cable

PULLING TENSIONS AND SIDE WALL PRESSURES

The maximum allowable pulling force is dependent on the cable design, the mechanical limitations, the conductor material, and the method of laying and pulling the cables. Each factor has finite limitations and should under no circumstances be exceeded.

The maximum pulling tension should not exceed as follows:

A) Cable equipped with a pulling eye attached to the conductor.

1. The maximum tension in kgs is 5 times the conductor cross sectional area in mm^2 for copper and 3 times the cross-sectional area for aluminum.
2. For multicore cables, the maximum tension can be increased by number of cores in the cable ,provided pulling eye is attached to each conductor.

B) Cable equipped with a cable stocking over the sheath.

1. For Unarmored cables, the maximum tension in kg is 0.5 times the square of the overall cable diameter (i.e. $0.5D^2$).
2. For armored cables, the maximum tension in kg is 1.2 times the square of the overall diameter (i.e. $1.2D^2$).
3. For laid up cables, when all conductors have the same cross-sectional area, the equivalent overall diameter of the assembly is given by:

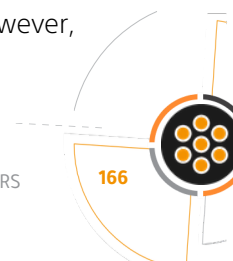
$$D_e = k \cdot D \text{ mm} \quad \text{Where:} \quad \begin{array}{ll} D^e & = \text{assembly diameter in mm} \\ k & = 2 \text{ for 2 cables} \\ & = 2.16 \text{ for 3 cables} \\ & = 2.42 \text{ for 4 cables} \\ D & = \text{overall cable diameter} \end{array}$$

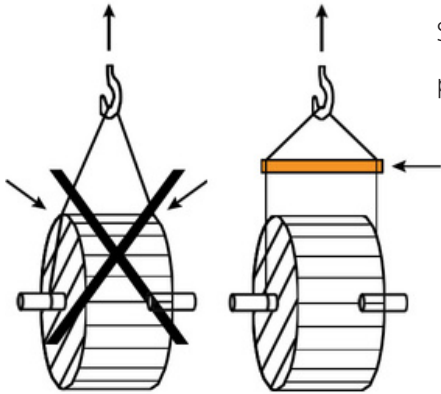
Maximum side wall pressure is given by the following formula:

$$\text{Max. side wall pressure} = \frac{\text{Max. Pulling tension}}{\text{Min. Bending radius}}$$

The maximum side wall pressure shall not exceed 500kg/m, i.e., the tension in the cable in kgs as it leaves the bend shall not exceed 500 times the radius of the bend in meters.

It is acceptable to pull the cable in either direction. As a matter of fact it is an intelligent design to select pulling direction resulting in minimum stress on both the cable and the pulling equipment. This, however, is controlled by the limitations of working space at the ends in consideration.





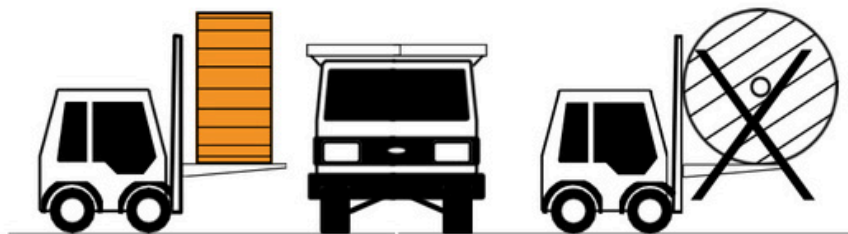
Lifting cable drums using crane.



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.

recognised 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.



الكابلات السعودية
Saudi Cable



@saudicable



@saudicableco



@Saudi Cable



@Saudi Cable Company



920005088

www.saudicable.com