UNIFLEX

WIRES AND CABLES LTD

Transforming cables for Energy Efficiency

ISO 9001 14001 45001

Zambia Bureau of Standards ZABS ZS 688 Certified Product

PROUDLY ZAMBIAN think local first.

Content

Company Profile

Uniflex Wires and Cables Limited an ISO 9001:2018, ISO 14001:2015 and ISO 45001:2018 certified company, was established in 2022 as a privately owned greenfield manufacturing project in Lusaka with a vision to manufacture and distribute the **best-in-class Energy Efficient Cables** in Zambia & its neighbouring countries and thereby contribute critically in expanding the national Industrial capacity. To realize this vision the management of Uniflex has invested in Zambia's Energy future and also to strengthen the philosophy of **"Make in Zambia"**.

UNIFLEX believes that with the availability of current Copper resources & manufacturing ecosystem which Zambia possess, it is high time for Zambia to emerge as a Copper Cable manufacturing hub of Africa. This will enable the nation's economy to dominantly increase its exports of Copper Finished Products and minimize the imports of the same, eventually leading to positive Trade Flows for Copper Finished Products. Also, considering the key economic development policies of the Government of the Republic of Zambia such as **VISION 2030**, 8th National Development Plan, Rural Electrification Master Plan, Proudly Zambian initiatives and it can be aptly concluded that the nation has already embarked on and shall experience exponential growth in near future in the areas of Grid Expansion, Electrification, Agriculture, Renewable Energy, Mining and Infrastructure. Therefore, it can be aptly summarized with conviction that now it is the most conducive economical phase whereby the Zambian Copper Manufacturer ecosystem should come together to contribute effectively to the nation's development by producing the Energy efficient Copper products and distributing them locally & internationally at a highly competitive price.

The Company has the fundamental philosophy of **"Quality and Trust is our DNA"** and therefore the manufacturing facility of Uniflex Wires and Cables Limited is one of the State-of-art in the region. The facility is equipped with state-of-art Production Machines and Testing Laboratory, further enhanced by our team of highly experienced & skilled Human Resources from the cable manufacturing industry.

Uniflex Wires and Cables are manufactured as per **ZABS**, **SABS** and other International Specifications and hence its uniqueness is portrayed in its relentless commitment to optimum specifications of **Product Quality** which is complemented by its best-in-class industry Technical Expertise, specialized Research & Development initiatives and extensive **manufacturing** capabilities which allows it to serve the Customer with the superior quality product.

Uniflex range of Cables products as of date includes Low Voltage Cables having Voltage ratings up to **3.3kV**, Overhead Conductors and Customized cables for specialized applications which shall actively cater to the demand of Mining, Agriculture, Construction, Energy Utilities, Industries, Renewable Energy and Retail market segments of Zambia and neighbouring countries.

Uniflex Cables has always positioned **Customer Delight** as its top priority and this is achieved by working closely with consultants, contractors and other premium customers to deliver high-quality products and solutions. We combine our cables with technical expertise, tailored logistics, project management, and a strong drive for sustainability. We have extensive stockholding available for immediate dispatch, and we offer the shortest manufacturing lead times in the industry.

Vision

Our vision is to manufacture and distribute the best-in-class Energy Efficient Cables made in Zambia, locally & neighbouring regions, to become the most preferred cable brand globally by emerging as the pioneers in the sector of cable manufacturing and thereby contribute critically to expanding Zambia's Industrial Capacity for achieving national economic development.

Strategic Goals & Values

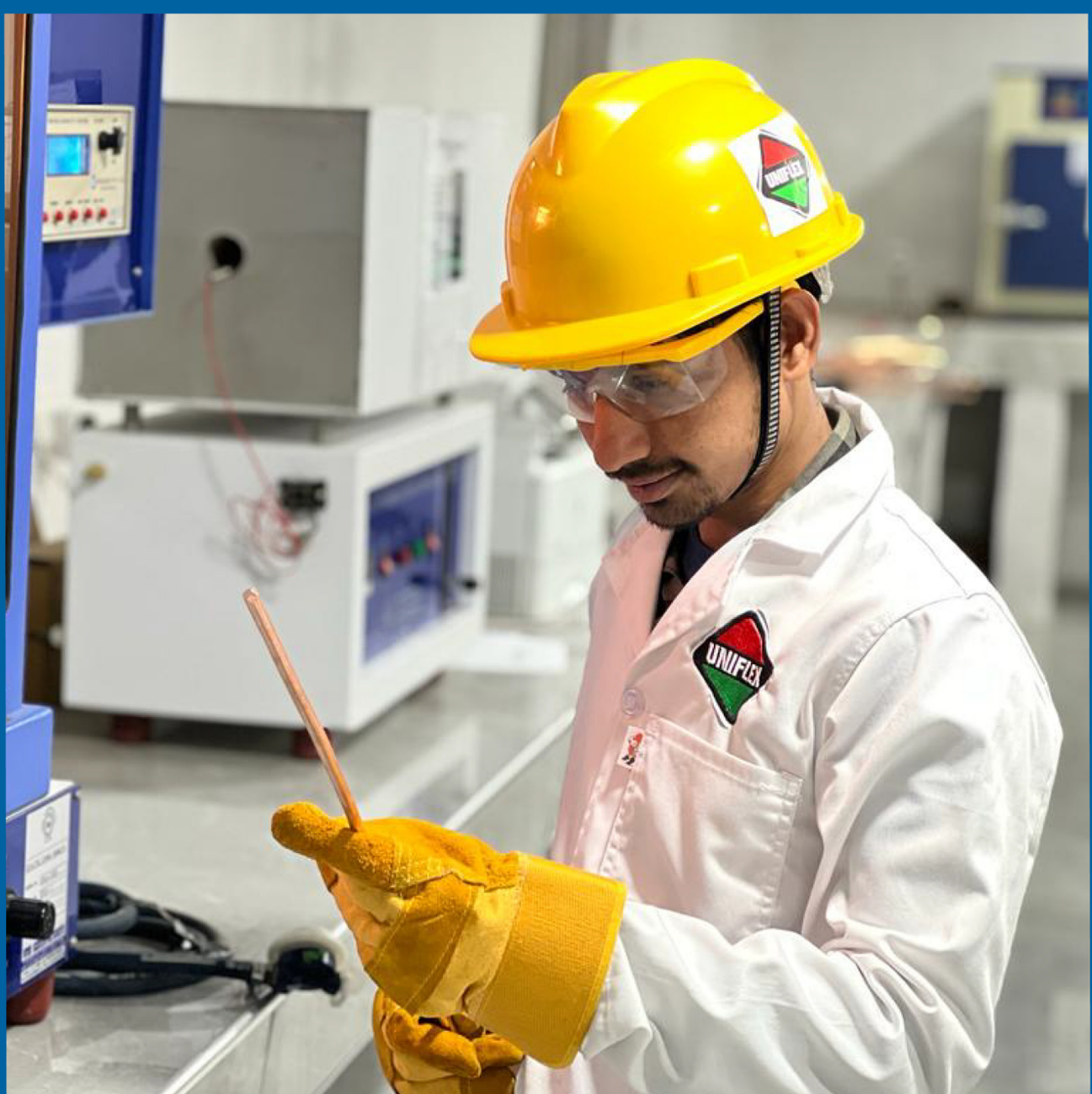
To become a responsible Corporate Citizen of Zambia by investing in Zambia's Energy future and contributing to national economic development.

Deliver long-term financial returns and continued sustainable growth by adhering to our core values of Integrity and Responsibility towards society and the environment.

Quality and Accreditation

The management of Uniflex Wires and Cables Limited has a strong commitment & adherence to the Manufacturing Process & Products Quality. We believe that the fundamental ingredient in catering to overall customer satisfaction is “Quality Product”; to realize a Quality Product, the most critical element is “Process Quality”.

To reinforce this concept, Uniflex Wires and Cables Ltd implemented an integrated Quality Management System which comprises ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018, which together form our Process Certification and the output of this system is superior Quality Cables which are manufactured and certified by SABS and ZABS.



Quality Certifications

CERTIFICATE OF CONFORMITY

ZABS
Zambia Bureau of Standards
" for Safety and Quality Assurance "

(The Standard Act No. 4)

Lechwe House, Freedom Way - South End
P.O. Box 50259 ZA 15101, Ridgeway Lusaka Zambia
E-mail: info@zabs.org.zm
Tel: +260 211 231385 / 0777 764421
Telefax: +260 211 238483

Zambia Bureau of Standards
ZABS
Certified Product

Certificate No. 023-07-05CRT

Awarded To

Uniflex Wires and Cables Ltd
Plot # 11022, Chinika Area, off Mumbwa Road
Lusaka
Zambia

The Zambia Bureau of Standards certifies that the aforementioned organization:

Manufactures and Supplies	Electric cables with solid Dielectric insulation for fixed insulation
	Additional product details are listed in the annex to the certificate bearing the above certificate number.
In compliance with	ZS 688-1 to 5:2011
Site(s)	This is a single site certificate.
Certification Scheme	In order to grant this certificate, ZABS has assessed and has verified the Factory Process Control (s) implemented for the manufacture of the product(s) detailed above. ZABS performs these tasks periodically while the certificate is valid, in accordance with the General Scheme Rules for the Certification of Products, R3300.

First issued on 31-07-2023
Latest issue on 31-07-2023
Modified on n/a
Expiry date 30-07-2026

Certification Authority

ZAMBIA BUREAU OF STANDARDS
Lechwe House, Freedom way – South End
PO Box 50259 ZA 15101, Ridgeway Lusaka
Zambia

E-mail: info@zabs.org.zm
Tel: +260211231385
Telefax: +260211238483

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TQV

CERTIFICATE

Certificate No. : 231010705029

This is to Certify that the
Quality management systems of

UNIFLEX WIRES AND CABLES LIMITED

Plot No. 11022, Off Mumbwa Road,
Chinika Industrial Area, Lusaka,
Zambia, Africa.

has been independently assessed and is compliant
with the requirements of

ISO 9001:2018

For the following activities

Manufacturing & Exporter Of range of Domestic and industrial copper cables including Rod, Multicore Cables, Low Voltage and High Voltage cables, bare overhead aluminium conductor product portfolio to cater to a wide range of power transmission and distribution applications with supply and service for power distribution (0.415kV- 33kV).

05 July, 2023 Original Registered
05 July, 2023 Latest Issued
04 July, 2026 Valid Until

July, 2024 1st Surveillance Audit
July, 2025 2nd Surveillance Audit

DIRECTOR
TQV Private Limited
(Formerly known as TQV Certification Services Private Limited)

The Certificate of Registration remains the property of TQV
and shall be returned immediately upon request. for more information
(For current validity of the certificate, visit our website : www.tqvcertification.com)
This registration is subject to the company maintaining its system to the required standard, which will be monitored by TQV.

MANAGEMENT SYSTEM
ASCAB
QUALITY MANAGEMENT

TQV

CERTIFICATE

Certificate No. : 231010705030

This is to Certify that the
Environmental Management System Of

UNIFLEX WIRES AND CABLES LIMITED

Plot No. 11022, Off Mumbwa Road,
Chinika Industrial Area, Lusaka,
Zambia, Africa.

has been independently assessed and is compliant
with the requirements of

ISO 14001:2015

For the following activities

Manufacturing & Exporter Of range of Domestic and industrial copper cables including Rod, Multicore Cables, Low Voltage and High Voltage cables, bare overhead aluminium conductor product portfolio to cater to a wide range of power transmission and distribution applications with supply and service for power distribution (0.415kV- 33kV).

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MANAGEMENT SYSTEM
ASCAB
QUALITY MANAGEMENT

TQV

CERTIFICATE

Certificate No. : 231010705031

This is to Certify that the
Occupational Health and Safety Management System Of

UNIFLEX WIRES AND CABLES LIMITED

Plot No. 11022, Off Mumbwa Road,
Chinika Industrial Area, Lusaka,
Zambia, Africa.

has been independently assessed and is compliant
with the requirements of

ISO 45001:2018

For the following activities

Manufacturing & Exporter Of range of Domestic and industrial copper cables including Rod, Multicore Cables, Low Voltage and High Voltage cables, bare overhead aluminium conductor product portfolio to cater to a wide range of power transmission and distribution applications with supply and service for power distribution (0.415kV- 33kV).

05 July, 2023 Original Registered
05 July, 2023 Latest Issued
04 July, 2026 Valid Until

July, 2024 1st Surveillance Audit
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MANAGEMENT SYSTEM
ASCAB
QUALITY MANAGEMENT

Solutions for critical Market Sectors

Mining & Mineral Processing

Enery Utilities

Agriculture

Solutions for critical Market Sectors

Industries

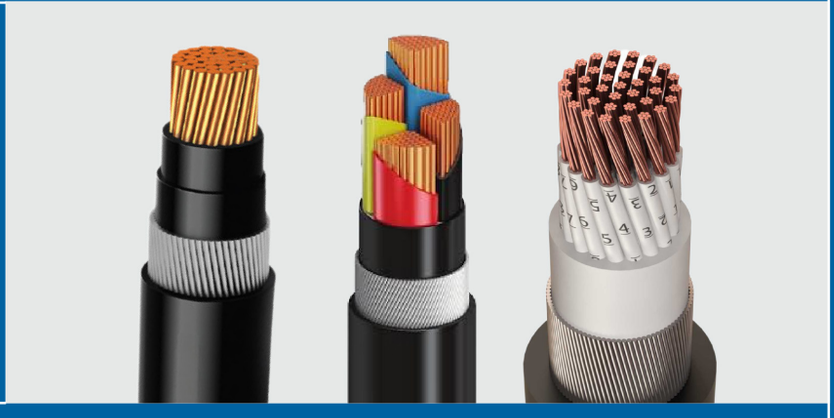
Construction & EPC

Renewable Energy

Product Range

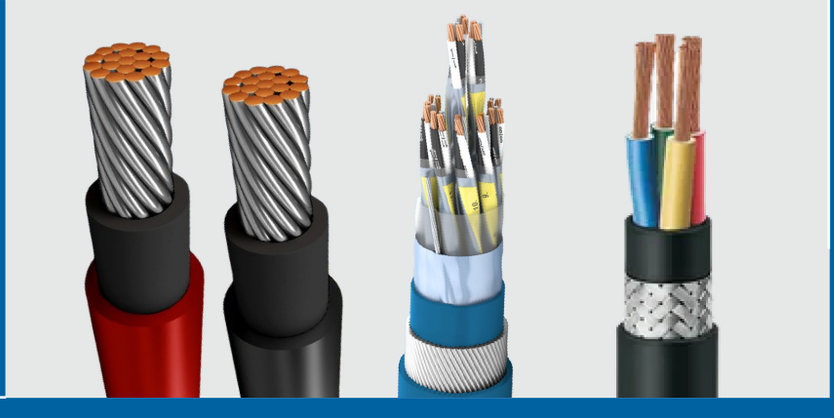
General Wires and Cables

LV Power and Control Cables



Overhead Conductors

Solar PV & Special Cables



General Wires and Cables

Single Core Building Wires

Product Application: General Wiring, Industrial Wiring in Conduits, protected installation in switchgear, lighting and appliances.
Product Standard: As per SANS 1507-2&3, ZS 688-2&3.
Type of Conductor: As per SANS:1411-1, ZS 756-1.
Type of Insulation Material: PVC as per SANS: 1411-2 , ZS 756-2.
Insulation Type: General Purpose PVC, Heat Resistant PVC, Flame Retardant PVC, Flame Retardant Low Smoke Material
Insulation Colour: RED, YELLOW, BLUE, BLACK, GREEN/YELLOW and all other colours as per ZS 688/SANS 1507
Voltage Rating: 600/1000V
Maximum Conductor Temperature: 70°C, 85°C,105°C
Short Circuit Rating: 160°C

Single Core Building Wires with Solid Copper Conductor having Voltage Rating 600/1000V

Physical Parameters

Nominal Cross Section Area of Conductor (Sqmm)	Conductor Configuration		Nominal Thickness of the Insulation (mm)	Overall Diameter of Insulated Wire (mm)	Current Carrying Capacity in Air (Amps)	Maximum DC Resistance at 20°C (Ohm/KM)	Minimum Insulation Resistance at 23°C (MΩ-KM)	Approximate Weight of Finished Insulated Wire (Kg/KM)
	Nos. of Wires/ Wire Size (Nos./mm)	Solid Conductor Diameter Approx. (mm)						
1.00	1/1.13	1.13	0.80	2.60	15	18.10	25	19
1.50	1/1.38	1.38	0.80	3.00	19	12.10	24	22
2.50	1/1.78	1.78	0.80	3.40	27	7.41	20	32
4.00	1/2.25	2.25	1.00	4.25	35	4.61	19	51
6.00	1/2.78	2.78	1.00	4.80	45	3.08	17	72

Single Core Building Wires with Stranded Copper Conductor having Voltage Rating 600/1000V

Physical Parameters

Nominal Cross Section Area of Conductor (Sqmm)	Conductor Configuration		Nominal Thickness of the Insulation (mm)	Overall Diameter of Insulated Wire (mm)	Current Carrying Capacity in Air (Amps)	Maximum DC Resistance at 20°C (Ohm/KM)	Minimum Insulation Resistance at 23°C (MΩ-KM)	Approximate Weight of Finished Insulated Wire (Kg/KM)
	Nos. of Wires/ Wire Size (Nos./mm)	Stranded Conductor Diameter Approx. (mm)						
1.00	7/0.43	1.29	0.80	2.90	15	18.10	25	20
1.50	7/0.53	1.59	0.80	3.20	19	12.10	24	23
2.50	7/0.67	2.01	0.80	3.60	27	7.41	20	34
4.00	7/0.85	2.55	1.00	4.55	35	4.61	19	53
6.00	7/1.04	3.12	1.00	5.10	45	3.08	17	76
10.00	7/1.35	4.05	1.00	6.00	62	1.83	14	117
16.00	7/1.70	5.10	1.00	7.00	87	1.15	11	175
25.00	7/2.14	6.42	1.20	9.00	116	0.727	11	271
35.00	7/2.52	7.56	1.20	10.10	139	0.524	9	367
50.00	7/3.00	9.00	1.40	12.00	171	0.387	9	518
70.00	19/2.16	10.80	1.40	13.80	220	0.268	8	710
95.00	19/2.52	12.60	1.60	16.00	273	0.193	8	962
120.00	19/2.84	14.20	1.60	17.60	313	0.153	7	1205
150.00	19/3.16	15.80	1.80	19.60	365	0.124	7	1500
185.00	37/2.52	17.64	2.00	21.80	429	0.0991	7	1860
240.00	37/2.86	20.02	2.20	24.60	507	0.0754	7	2400
300.00	37/3.20	22.40	2.40	27.40	582	0.0601	7	2996
400.00	61/2.88	25.92	2.60	31.50	673	0.0470	6	3955

Single Core Flexible Wires

Product Application: Wiring of Control Panel, Industrial Wiring, Domestic Wiring, Wiring for lightning Circuits & Appliances.
Product Standard: As per SANS 1574
Type of Conductor: Flexible (Class 5) as per SANS 1411-1
Type of Insulation Material: PVC as per SANS: 1411-2
Insulation Type: Flexible Grade PVC as per SANS 1411-2
Insulation Colour: RED, YELLOW, BLUE, BLACK, GREEN/YELLOW and all other colours as per SANS 1574
Voltage Rating: 600/1000V
Maximum Conductor Temperature: 70°C, 85°C,105°C
Short Circuit Rating:160°C

Single Core Flexible Wires with Flexible Copper Conductor having Voltage Rating 300/500V

Physical Parameters

Nominal Cross Section Area of Conductor (Sqmm)	Maximum Diameter of Wires in Conductor (mm)	Nominal Thickness of the Insulation (mm)	Maximum Overall Diameter of Insulated Wire (mm)	Current Rating in Air (Amps)	Maximum DC Resistance at 20°C (Ohm/KM)	Insulation Resistance at 23°C (MΩ-KM)	Weight of Finished Cable Approx (Kg/KM)
0.50	0.21	0.60	2.20	7	39.00	0.012	10
0.75	0.21	0.60	2.40	12	26.00	0.011	13
1.00	0.21	0.60	2.60	15	19.50	0.010	16
1.50	0.26	0.70	3.10	18	13.30	0.010	21
2.50	0.26	0.80	3.80	26	7.98	0.009	31

Single Core Flexible Wires with Flexible Copper Conductor having Voltage Rating 450/750V

Physical Parameters

Nominal Cross Section Area of Conductor (Sqmm)	Maximum Diameter of Wires in Conductor (mm)	Nominal Thickness of the Insulation (mm)	Maximum Overall Diameter of Insulated Wire (mm)	Current Rating in Air (Amps)	Maximum DC Resistance at 20°C (Ohm/KM)	Insulation Resistance at 23°C (MΩ-KM)	Weight of Finished Cable Approx (Kg/KM)
1.50	0.26	0.70	3.10	18	13.30	0.0100	21
2.50	0.26	0.80	3.80	26	7.98	0.0090	31
4.00	0.31	0.80	4.20	34	4.95	0.0074	46
6.00	0.31	0.80	4.90	44	3.30	0.0061	75
10.00	0.41	1.00	6.30	61	1.91	0.0061	125
16.00	0.41	1.00	7.50	82	1.21	0.0051	199
25.00	0.41	1.00	8.80	113	0.78	0.0051	299

Single Core Flexible Wires with Flexible Copper Conductor having Voltage Rating 600/1000V

Nominal Cross Section Area of Conductor (Sqmm)	Max. Diameter of Flexible Wire Strand in Conductor (mm)	Nominal Thickness of the Insulation (mm)	Maximum Overall Diameter of Insulated Wire (mm)	Current Carrying Capacity in Air (Amps)	Maximum DC Resistance at 20°C (Ohm/KM)	Minimum Insulation Resistance at 23°C (MΩ-KM)	Approximate Weight of Finished Insulated Wire (Kg/KM)
0.50	0.21	0.80	2.70	7	39.00	0.012	12
0.75	0.21	0.80	2.90	12	26.00	0.011	15
1.00	0.21	0.80	3.10	15	19.50	0.010	18
1.50	0.26	0.80	3.40	18	13.30	0.010	21
2.50	0.26	0.80	3.80	26	7.98	0.009	31
4.00	0.31	1.00	4.70	34	4.95	0.0074	52
6.00	0.31	1.00	5.20	44	3.30	0.0061	75
10.00	0.41	1.00	6.40	61	1.91	0.0061	120
16.00	0.41	1.00	7.80	82	1.21	0.0051	180
25.00	0.41	1.20	9.70	113	0.78	0.0047	280
35.00	0.41	1.20	11.10	136	0.554	0.0040	370
50.00	0.41	1.40	13.10	168	0.386	0.0038	520
70.00	0.51	1.40	15.20	214	0.272	0.0034	730
95.00	0.51	1.60	17.70	261	0.206	0.0033	980
120.00	0.51	1.60	19.50	305	0.161	0.0033	1220
150.00	0.51	1.80	21.70	352	0.129	0.0030	1530
185.00	0.51	2.00	24.40	421	0.106	0.0029	1890

Twinflex Ripcord

Product Application: Can be used in Alarm Systems, Intercom, Audio System and Lighting Appliances
Product Standard: SANS 1574-2
Type of Conductor: Flexible copper (Class 6) conductors to SANS:1411-1
Type of Insulation Material: General Purpose and Special Requirement HR,FR
Insulation Type: PVC (Polyvinyl Chloride) as per SANS: 1411-2
Insulation Colour: 2 Core insulated with White or Black with Ridge Identification
Voltage Rating: 300/300V
Temperature Rating: -5°C to +70°C
Short Circuit Rating: 160°C

PVC Insulated and Flexible Ripcord Cable.Rated Voltage 300/300V

Physical Parameters

Nominal Cross Section Area of Conductor (Sqmm)	Maximum Wire Diameter in Conductor (mm)	Nominal Thickness of the Insulation (mm)	Approximate Overall Diameter of Cable (mm x mm)	Current Rating (Amps)	AC Voltage Drop (mV/A/m)	Maximum DC Resistance at 20°C (Ohm/Km)	Minium Insulation Resistance at 23°C (MΩ-km,Min)	Approximate Weight of Finished Cable (Kg/KM)
0.50	0.20	0.60	2.5 X 5.0	3	93	39.00	0.012	22
0.75	0.20	0.60	2.8 X 5.5	6	62	26.00	0.011	29
1.00	0.20	0.60	3.2 X 6.2	10	46	19.50	0.010	38
1.50	0.20	0.70	3.4 X 6.8	16	32	13.30	0.010	48
2.50	0.20	0.80	3.8 X 7.7	25	19	7.98	0.009	70
4.00	0.20	0.80	4.8 X 9.5	32	12	4.95	0.0074	110

Twin Flat Cable With Earth Continuity Conductor

Product Application: Used in Domestic wiring, fixed installations in dry or damp premises clipped to surfaces, on trays or in free air where the risk of mechanical damage is minimal. Suitable for laying in conduit or trunking where mechanical protection is required.
Product Standard: As per SANS 1507-2, ZS 688-2
Type of Conductor: Solid (Class 1) & Stranded (Class 2) plain copper conductors as per SANS:1411-1
Type of Insulation Material: PVC (Polyvinyl Chloride) as per & SANS: 1411-2
Insulation Type: General Purpose PVC, HR & FR PVC on Request
Insulation Colour: RED & BLACK or BLUE & BROWN
Outer Sheath Material: PVC (Polyvinyl Chloride) as per SANS: 1411-2, IEC:60502-1
Types of Sheath: General Purpose PVC, LSFR or LHFR on Request
Outer Sheath Colour: Grey or White
Voltage Rating: 300/500V
Temperature Rating: -15°C to +70°C (Special Requirement -15°C to +105°C)
Short Circuit Rating: 160°C

PVC Insulated and Sheathed Twin Flat Cables with Earth Continuity Conductor 300/500V

Physical Parameters

Number of Core and Nominal Cross Section Area of Conductor (Nos. x Sqmm)	Conductors		Nominal Thickness of Insulation (mm)	Nominal Thickness of Outer Sheath (mm)	Nominal Cross Section Area of Earth Continuity Conductor Sqmm)	Overall Diameter of Cable		Approximate Weight of Finished Cable (Kg/KM)
	Number of Wires in Conductor/Size (Nos./mm)	Approximate Diameter of Conductor (mm)				Lower Limit (mm x mm)	Upper Limit (mm x mm)	
2 X 1.00	1/1.13	1.13	0.60	0.90	1.0	4.0 X 7.2	4.7 X 8.6	69
2 X 1.00	7/0.43	1.29	0.60	0.90	1.0	4.0 X 7.2	4.7 X 8.6	72
2 X 1.50	1/1.38	1.38	0.70	0.90	1.0	4.4 X 8.2	5.4 X 9.6	86
2 X 1.50	7/0.53	1.59	0.70	0.90	1.0	4.4 X 8.2	5.4 X 9.6	92
2 X 2.50	1/1.78	1.78	0.80	1.00	1.5	5.2 X 9.8	6.2 X 11.5	126
2 X 2.50	7/0.67	2.01	0.80	1.00	1.5	5.2 X 9.8	6.2 X 11.5	130
2 X 4.00	7/0.85	2.55	0.80	1.10	1.5	5.6 X 10.5	7.2 X 13.0	198
2 X 6.00	7/1.04	3.12	0.80	1.10	2.5	6.4 X 12.5	8.0 X 15.0	255
2 X 10.00	7/1.35	4.05	0.90	1.20	4.0	7.8 X 15.5	9.6 X 19.0	390
2 X 16.00	7/1.70	5.10	0.90	1.30	6.0	9.0 X 18.0	11.0 X 22.0	568

Electrical Parameters

Cable Size (Sqmm)	Current Rating (Clipped Direct) (Amps)	Maximum DC Resistance at 20°C (Ohm/Km)	Insulation Resistance at 23°C (MΩ-km,Min)
1.00	16	18.10	10
1.50	21	12.10	10
2.50	30	7.41	10
4.00	39	4.61	10
6.00	50	3.08	10
10.00	68	1.83	10
16.00	93	1.15	10

Surfix Cables



Product Application: Used for wiring in roof spaces, hollow walls, Under -plastering and surface wiring.
Product Standard: As per SANS 1507-2, ZS 688-2
Type of Conductor: Plain copper (Class 1 & 2) conductors as per SANS:1411-1
Type of Insulation Material: PVC (Polyvinyl Chloride) as per SANS: 1411-2
Insulation Type: General Purpose PVC, HR PVC, FR PVC
Insulation Colour: (i) 2 Core : RED, BLACK
(ii) 3 Core : RED, YELLOW, BLUE
(iii) 4 Core: RED, YELLOW, BLUE, BLACK
Screening: Laid up Cores are screened with Aluminium Mylar tape which is helically applied with the metallic side down,in electrical contact with a annealed tinned copper earth continuity Conductor
Type of Outer Sheath: General Purpose PVC, Low Smoke Flame Retardant Material (LSFR) on request
Outer Sheath Colour: White or Black
Voltage Rating: 300/500V
Temperature Rating: -15°C to +70°C (Specical Requirement -15°C to +105°C)
Short Circuit Rating: 160°C

PVC Insulated and Sheathed Surfix Cables with Tinned Copper Earth Continuity Conductors 300/500V

Physical Parameters

Number of Core and Nominal Cross Section Area of Conductor	Conductor		Nominal Thickness of Insulation	Nominal Thickness of Outer Sheath	Cross Section Area of Earth Continuity Conductor	Approximate Overall Diameter of Cable	Approximate Weight of Finished Cable
	Number & Size of Wires in Conductor	Approximate Diameter of Conductor					
(Nos. x Sqmm)	(No./mm)	(mm)	(mm)	(mm)	(Sqmm)	(mm)	(Kg/Km)
2 X 1.50	7/0.53	1.59	0.70	0.90	1.00	8.0	108
2 X 2.50	7/0.67	2.01	0.80	1.00	1.50	9.0	146
2 X 4.00	7/0.85	2.55	0.80	1.10	1.50	10.2	210
2 X 6.00	7/1.05	3.15	0.80	1.10	2.50	11.5	260
3 X 1.50	7/0.53	1.59	0.70	0.90	1.00	8.2	112
3 X 2.50	7/0.67	2.01	0.80	1.00	1.50	9.5	160
3 X 4.00	7/0.85	2.55	0.80	1.10	1.50	11.0	213
3 X 6.00	7/1.05	3.15	0.80	1.10	2.50	12.2	290
4 X 1.50	7/0.53	1.59	0.70	1.00	1.00	8.9	135
4 X 2.50	7/0.67	2.01	0.80	1.10	1.50	10.3	195
4 X 4.00	7/0.85	2.55	0.80	1.20	1.50	12.0	268
4 X 6.00	7/1.05	3.15	0.80	1.20	2.50	12.8	338

Electrical Properties

Cable Size	Current Rating (Clipped Direct)	Maximum DC Resistance at 20°C		Insulation Resistance at 23°C
		Phase	Earth	
(Sqmm)	(Amps)	(Ohm/Km)		(MΩ-km,Min)
1.50	17	12.10	18.20	10
2.50	23	7.41	12.20	10
4.00	30	4.61	12.20	10
6.00	38	3.08	7.56	10

Multicore Flexible Cables

Multicore Flexible Cables 600/1000V

Product Application: Used in Industrial applications, Secondary side connections, Heavy duty portable supply, Fixed Wiring applications at 600/1000V power supply.
Product Standard: As per SANS 1574
Type of Conductor: Flexible (Class 5) as per SANS 1411-1
Type of Insulation Material: PVC as per SANS:1411-2
Insulation Type: Flexible Grade PVC suitable to flexible conductors
Core Colours: (i) 2 Core: Red, Black; (ii) 3 Core: Red, Yellow, Blue; (iii) 4 Core: Red, Yellow, Blue, Black; (iv) 5 Core: Red, Yellow, Blue, Black, Grey; (v) 5 Core & above: Cores are either Grey or Black with serial numbers printing for core identification
Outer Sheath: PVC as per SANS: 1411-2
Type of Outer Sheath: General Purpose Flexible Grade PVC with FR, LSFR, ZHLSFR Properties
Outer Sheath Colour: BLACK
Voltage Grade: 600/1000V
Temperature Rating: -5°C to +70°C
Short Circuit Rating:160°C

Multicore Flexible Cable With FLEXIBLE Copper Conductor having Voltage Rating 600/1000V

Nominal Cross Section Area of Conductor	Maximum Diameter of Stranding Wire in Conductor	Nominal Thickness of PVC Insulation	2Core		3Core		4Core	
			Nominal Thickness of Outer Sheath	Approximate Overall Cable Diameter	Nominal Thickness of Outer Sheath	Approximate Overall Cable Diameter	Nominal Thickness of Outer Sheath	Approximate Overall Cable Diameter
(Sqmm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
1.50	0.26	0.80	1.60	9.50	1.60	10.30	1.60	11.15
2.50	0.26	0.80	1.60	10.80	1.60	11.32	1.60	12.28
4.00	0.31	1.00	1.60	12.60	1.60	13.32	1.80	14.90
6.00	0.31	1.00	1.80	14.15	1.80	15.00	1.80	16.35
10.00	0.41	1.00	1.80	16.00	1.80	16.98	1.80	18.56
16.00	0.41	1.00	1.80	19.56	1.80	20.80	1.80	22.86
25.00	0.41	1.20	2.00	23.70	2.00	25.20	2.00	27.75
35.00	0.41	1.20	2.00	26.52	2.00	28.30	2.00	31.20
50.00	0.41	1.40	2.00	30.55	2.00	32.65	2.20	36.56
70.00	0.51	1.40	2.20	35.05	2.20	37.50	2.20	41.45

Multicore Flexible Cables 450/750V

Product Application: Used in Industrial Applications wherein the flexibility is required such as Heavy-duty portable supply for Motor Connections and other similar usage.
Product Standard: As per SANS 1574
Type of Conductor: Flexible (Class 5) as per SANS 1411-1
Type of Insulation Material: PVC as per SANS:1411-2
Insulation Type: Flexible Grade PVC suitable to flexible conductors
Core Colours: (i) 2 Core: Blue, Brown; (ii) 3 Core: Blue, Brown, Green/Yellow; (iii) 4 Core: Blue, Brown, Black, Green/Yellow; (iv) 5 Core: Blue, Brown, Black, Grey, Green/Yellow; (v) 5 Core & above: Either Grey/Black core with serial numbers printing for identification
Outer Sheath: PVC as per SANS: 1411-2
Type of Outer Sheath: General Purpose Flexible Grade PVC

Multicore Flexible Cables 450/750V

Outer Sheath Colour: WHITE
Voltage Grade: 450/750V
Temperature Rating: -5°C to +70°C
Short Circuit Rating:160°C

Multicore Flexible Cable With FLEXIBLE Copper Conductor having Voltage Rating 450/750V

Nominal Cross Section Area of Conductor (Sqmm)	Maximum Diameter of Stranding Wire in Conductor (mm)	Nominal Thickness of PVC Insulation (mm)	2Core		3Core		4Core	
			Nominal Thickness of Outer Sheath (mm)	Approximate Overall Cable Diameter (mm)	Nominal Thickness of Outer Sheath (mm)	Approximate Overall Cable Diameter (mm)	Nominal Thickness of Outer Sheath (mm)	Approximate Overall Cable Diameter (mm)
1.50	0.26	0.70	1.60	9.50	1.60	9.90	1.60	10.65
2.50	0.26	0.80	1.60	10.80	1.60	11.40	1.60	12.35
4.00	0.31	0.80	1.60	11.70	1.60	12.36	1.60	13.45
6.00	0.31	0.80	1.60	12.80	1.60	13.60	1.80	15.30
10.00	0.41	1.00	1.80	15.60	1.80	16.55	1.80	18.10
16.00	0.41	1.00	1.80	17.60	1.80	18.70	1.80	20.50
25.00	0.41	1.00	2.00	21.00	2.00	22.35	2.00	24.55

Multicore Flexible Cables 300/500V

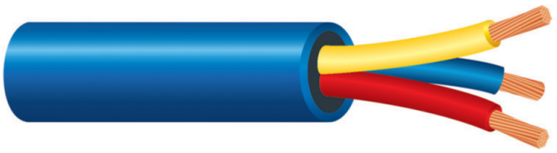
Product Application: Used for Domestic Wiring Applications and Wiring of Lightning Circuits
Product Standard: As per SANS 1574
Type of Conductor: Flexible (Class 5) as per SANS 1411-1
Type of Insulation Material & Type: Flexible Grade PVC as per SANS:1411-2
Core Colours: (i) 2 Core: Blue, Brown; (ii) 3 Core: Blue, Brown, Green/Yellow; (iii) 4 Core: Blue, Brown, Black, Green/Yellow; (iv) 5 Core: Blue, Brown, Black, Grey, Green/Yellow; (v) 5 Core & above : Either Grey/Black core with serial numbers printing for identification
Outer Sheath: PVC as per SANS: 1411-2
Type of Outer Sheath: General Purpose Flexible Grade PVC
Outer Sheath Colour: WHITE
Voltage Grade: 300/500V
Temperature Rating: -5°C to +70°C
Short Circuit Rating:160°C

Multicore Flexible Cable With FLEXIBLE Copper Conductor Having Voltage Rating 300/500V

Physical Parameters

Nominal CSA of Conductor & Nos. of Cores (Sqmm x Cores)	Maximum Diameter of Stranding Wire in Conductor (mm)	Nominal Thickness of PVC Insulation (mm)	Nominal Thickness of Outer Sheath (mm)	Overall Diameter		Weight of Finished Cable Approx (Kg/KM)
				Minimum (mm)	Maximum (mm)	
0.50 x 2	0.21	0.60	0.80	5.60	7.00	50
0.75 x 2	0.21	0.60	0.80	5.70	7.20	54
1.00 x 2	0.21	0.60	0.80	5.90	7.50	68
1.50 x 2	0.26	0.70	0.80	6.80	8.60	89
2.50 x 2	0.26	0.80	1.00	8.40	10.60	137
0.50 x 3	0.21	0.60	0.80	5.80	7.20	55
0.75 x 3	0.21	0.60	0.80	6.00	7.60	69
1.00 x 3	0.21	0.60	0.80	6.30	8.00	80
1.50 x 3	0.26	0.70	0.90	7.40	9.40	110
2.50 x 3	0.26	0.80	1.10	9.20	11.40	164
0.50 x 4	0.21	0.60	0.80	6.60	8.30	66
0.75 x 4	0.21	0.60	0.80	6.90	8.60	80
1.00 x 4	0.21	0.60	0.90	7.10	9.00	98
1.50 x 4	0.26	0.70	1.00	8.40	10.50	138
2.50 x 4	0.26	0.80	1.10	10.10	12.50	205
0.50 x 5	0.21	0.60	0.90	7.00	8.90	80
0.75 x 5	0.21	0.60	0.90	7.40	9.30	98
1.00 x 5	0.21	0.60	0.90	7.80	9.80	115
1.50 x 5	0.26	0.70	1.10	9.30	11.60	162
2.50 x 5	0.26	0.80	1.20	11.20	13.90	244

Submersible Cables



3 Core
Blue

Product Application: Used with Submersible Pumps in Agricultural Sector, Mining Sector and other similar applications wherein the cable is subjected to Water exposure.

Product Standard: As per SANS 1574

Type of Conductor: Flexible (Class 5) Conductor with Plain Copper as per SANS 1411-1

Type of Insulation Material: Flexible Grade waterproof PVC as per SANS:1411-2

Insulation Type: Flexible Grade PVC suitable to flexible conductors

Core Colours: (i) 3 Core: Red, Yellow, Blue (ii) 4 Core: Red, Yellow, Blue, Black

Outer Sheath: PVC as per SANS: 1411-2

Type of Outer Sheath: Flexible Grade waterproof PVC

Outer Sheath Colour: BLUE

Voltage Grade: 600/1000V

Temperature Rating: -5°C to +70°C

Short Circuit Rating:160°C

PVC Insulated & Sheathed Submersible Cables with Circular & Flat Shape and having Voltage Rating 600/1000V

Physical Parameters

Nominal Cross Section Area of Conductor	Maximum Diameter of Stranding Wire in Conductor	Nominal Thickness of PVC Insulation	2Core		3Core		4Core	
			Nominal Thickness of Outer Sheath	Approximate Overall Cable Diameter	Nominal Thickness of Outer Sheath	Approximate Overall Cable Diameter	Nominal Thickness of Outer Sheath	Approximate Overall Cable Diameter
(Sqmm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
1.50 Round	0.26	0.80	1.50	10.10	1.50	11.15	125	150
1.50 Flat	0.26	0.80	1.50	5.10 x 12.00	1.50	5.10 x 13.25	132	156
2.50 Round	0.26	0.80	1.80	11.90	1.80	12.90	170	200
2.50 Flat	0.26	0.80	1.80	5.80 x 14.80	1.80	5.80 x 18.85	180	210
4.00 Round	0.31	1.00	1.80	13.95	1.80	15.20	240	312
4.00 Flat	0.31	1.00	1.80	8.40 x 17.85	1.80	8.40 x 22.60	252	325
6.00 Round	0.31	1.00	1.80	12.20	1.80	16.60	340	450
6.00 Flat	0.31	1.00	1.80	9.00 x 19.60	1.80	9.00 x 24.96	354	462
10.00 Round	0.41	1.00	1.80	17.10	1.80	18.80	530	662
10.00 Flat	0.41	1.00	1.80	9.90 x 22.30	1.80	9.90 x 28.56	545	675

Welding Cable

Product Application: Used in electric automatic/Manual welding machine.
Product Standards: As per SANS 1576
Type of Conductor: Extra Flexible copper (Class 6) conductor as per SANS:1411-1
Conductor Material: Plain Copper or Tinned Copper
Type of Insulation Material: PVC Nitrile as per SANS: 1411-2
Insulation Colour: Red, Black and Other Colour Available on request
Outer Sheath Material: PVC Nitrile as per SANS: 1411-2
Sheath Colour: Red, Black and Other Colour Available on request
Voltage Rating:100V
Temperature Rating: -15°C to +70°C
Short Circuit Rating: 160°C

PVC Nitrile Insulated and Sheathed Flexible Welding Cable 100V

Physical Parameters

Nominal Cross Section Area (Sqmm)	Maximum Diameter of Wires in Conductor (mm)	Nominal Thickness of Insulation (mm)	Nominal Thickness of Outer Sheath (mm)	Approximate Overall Diameter of Cable (mm)	Maximum DC Resistance at 20°C Plain Wires (Ohm/Km)	Maximum DC Resistance at 20°C Metal-Coated Wires (Ohm/Km)
16.00	0.21	0.80	1.20	10.15	1.210	1.240
25.00	0.21	0.80	1.20	11.50	0.780	0.795
35.00	0.21	0.80	1.20	12.80	0.554	0.565
50.00	0.31	0.85	1.35	15.00	0.386	0.393
70.00	0.31	0.95	1.45	17.25	0.272	0.277
95.00	0.31	1.00	1.60	19.50	0.206	0.210
120.00	0.31	1.10	1.70	21.50	0.161	0.164

Electrical Parameters

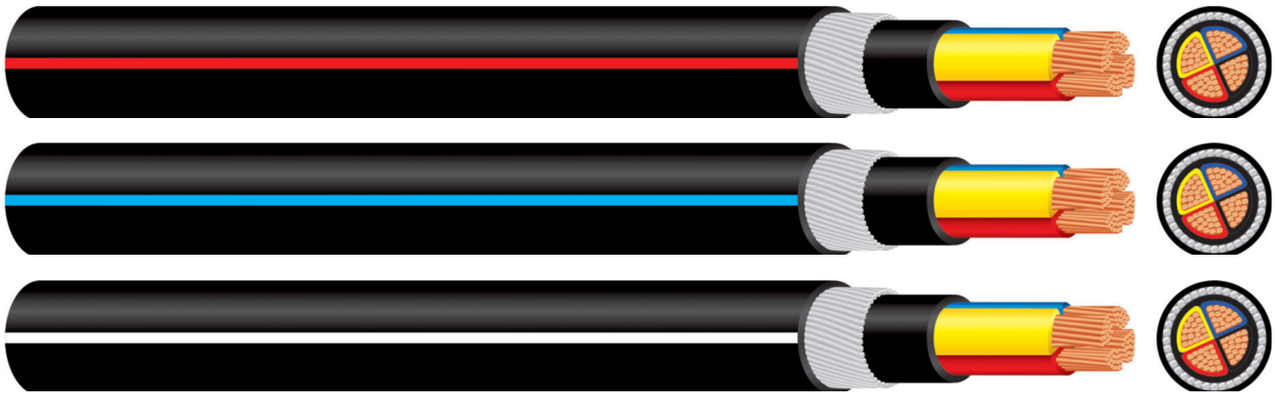
Cable Size (Sqmm)	Class of Welding				Voltage Drop/100 (mV/A/m)
	Automatic		Manual		
	Semi-automatic				
	Maximum Current Rating (A) for duty cycles of				
	100%	85%	60%	30%	
16	110	120	140	200	1.448
25	140	150	180	255	0.993
35	185	200	240	340	0.633
50	230	250	295	420	0.462
70	290	315	375	530	0.325
95	350	380	450	640	0.246
120	405	440	525	740	0.193

Low Voltage
Power & Control Cables

Low Voltage Power and Control Cables

PVC/XLPE Insulated Low Voltage Power Cables with Copper/ Aluminium Conductors upto 3.3kV

Product Application: The Power Cables are used for the distribution of electrical supply having voltage grades from 600/1000V to 1900/3300V. The LV Power Cables are well suited for the underground laying, outdoor installation and has an extensive usage in the Industrial applications wherein the enhanced chemical & mechanical protection is of prime importance. Also, based on the type of Outer Sheathing materials the LV Power Cables are categorised as Flame Retardant (FR), Flame Retardant Low Smoke (LHFR) and Flame Retardant Zero Halogen Low Smoke (ZHLSFR).



Product Standards: As per ZS 688, SANS 1507, IEC 60502-1

Construction Overview:

CONDUCTOR:
Conductor Material: Aluminium or Copper
Type of Conductor: Stranded Conductor (Class-2) as per ZS 756-1, SANS 1411-1, IEC 60228
Conductor Shape: Round or Shaped

CONDUCTOR INSULATION:
Insulation Material: Polyvinyl Chloride (PVC) as per ZS 756-2, SANS 1411-2, IEC 60502-1 and Cross-Linked Polyethylene (XLPE) as per ZS 752-4, SANS 1411-4, IEC 60502-1
Core Colours for Identification: (i) 1Core: Red or Yellow or Blue or Black; (ii) 2Core: Red and Black; (iii)3Core: Red, Yellow and Blue; (d) 4Core: Red, Yellow, Blue and Black; (e) 5Core: Red, Yellow, Blue, Black and Grey; (f) Above 5Core: Grey or Black Core with Number Printing

INNER BEDDING:
Bedding Material: Polyvinyl Chloride (PVC) with Flame Retardant Property, Low Halogen Flame Retardant Low Smoke (LHFR) and Zero Halogen Low Smoke Flame Retardant (ZHLSFR) material.
Reference Specification: As per ZS 756-2 & 5, SANS 1411-2 & 5 and IEC 60502-1

ARMOURING:
Material: Aluminium Wire for Single Core Cables and Galvanised Steel Wires for Multicore Cables
Reference Specification: As per ZS 756-6, SANS 1411-6, IEC 60502-1

OUTER SHEATH:
Material: PVC with Flame Retardant Property (RED Stripe), LHFR (Blue Stripe) and ZHLSFR (White Stripe)
Reference Specification: As per ZS 756-2 & 5, SANS 1411-2 & 5, IEC 60502-1

PVC/XLPE Insulated Low Voltage Power Cables with Copper/ Aluminium Conductors upto 3.3kV

1Core PVC Insulated Power Cable with Copper/Aluminium Conductor, Aluminium Wire Armour (AWA), PVC Outer Sheath, 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the PVC Insulation	Nominal Thickness of Inner Sheath/ Bedding	Nominal Diameter of Aluminium Wire used in Armour	Nominal Thickness of the Outer Sheath	Approximate Overall Cable Diameter
(Sqmm)	Copper	Aluminium	(mm)	(mm)	(mm)	(mm)	(mm)
50	6	6	1.40	0.80	1.25	1.50	19.00
70	12	12	1.40	0.80	1.25	1.60	21.00
95	15	15	1.60	0.80	1.25	1.60	23.20
120	18	15	1.60	1.00	1.60	1.70	26.10
150	18	15	1.80	1.00	1.60	1.70	28.10
185	30	30	2.00	1.00	1.60	1.80	30.60
240	34	30	2.20	1.00	1.60	1.90	33.90
300	34	30	2.40	1.00	1.60	1.90	36.80
400	53	53	2.60	1.20	2.00	2.10	41.80
500	53	53	2.80	1.20	2.00	2.10	45.40
630	53	53	2.80	1.20	2.00	2.20	49.50
800	53	53	2.80	1.40	2.50	2.40	55.60
1000	53	53	3.00	1.40	2.50	2.50	61.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance	Maximum DC Resistance at 20°C		Short Circuit Rating for 1 Sec.	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil		Single Core Cable	Single Core Cable (Approx)				
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
50	165	155	150	130	120	115	0.828	1.35	0.11	1.03	0.387	0.641	5.75	3.8
70	205	190	175	155	140	135	0.587	0.94	0.103	1.21	0.268	0.443	8.05	5.32
95	245	220	200	190	175	155	0.442	0.691	0.101	1.27	0.193	0.320	10.925	7.22
120	280	250	220	220	195	170	0.365	0.558	0.098	1.42	0.153	0.253	13.8	9.12
150	320	280	245	250	220	190	0.314	0.464	0.094	1.42	0.124	0.206	17.25	11.4
185	370	305	260	290	240	210	0.268	0.383	0.092	1.44	0.0991	0.164	21.275	14.06
240	425	345	285	335	270	225	0.229	0.31	0.09	1.53	0.0754	0.125	27.6	18.24
300	475	375	310	380	295	245	0.206	0.265	0.088	1.56	0.0601	0.100	34.5	22.8
400	550	400	335	435	325	275	0.191	0.230	0.088	1.59	0.0470	0.0778	41.12	27.2
500	590	425	355	480	345	295	0.178	0.210	0.087	1.67	0.0366	0.0605	51.4	34
630	660	470	375	550	390	320	0.166	0.185	0.086	1.67	0.0283	0.0469	64.764	42.84
800	745	530	425	620	450	380	0.161	0.173	0.083	1.75	0.0221	0.0367	82.24	54.4
1000	870	590	470	700	500	415	0.156	0.163	0.082	1.94	0.0176	0.0291	102.8	68

PVC/XLPE Insulated Low Voltage Power Cables with Copper/ Aluminium Conductors upto 3.3kV

1Core XLPE Insulated LV Power Cable with Copper/Aluminium Conductor, Aluminium Wire Armour (AWA), PVC Outer Sheath 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the XLPE Insulation	Nominal Thickness of Inner Sheath/ Bedding	Nominal Diameter of Aluminium Wire used in Armour	Nominal Thickness of the Outer Sheath	Approximate Overall Cable Diameter
(Sqmm)	Copper	Aluminium	(mm)	(mm)	(mm)	(mm)	(mm)
50	6	6	1.00	0.80	0.90	1.50	18.50
70	12	12	1.10	0.80	1.25	1.50	20.50
95	15	15	1.10	0.80	1.25	1.60	22.50
120	18	15	1.20	0.80	1.25	1.60	23.50
150	18	15	1.40	1.00	1.60	1.70	26.50
185	30	30	1.60	1.00	1.60	1.80	28.50
240	34	30	1.70	1.00	1.60	1.80	31.50
300	34	30	1.80	1.00	1.60	1.90	34.50
400	53	53	2.00	1.20	2.00	2.00	38.50
500	53	53	2.20	1.20	2.00	2.10	42.50
630	53	53	2.40	1.20	2.00	2.20	46.50
800	53	53	2.60	1.40	2.50	2.40	53.00
1000	53	53	2.80	1.40	2.50	2.50	58.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance	Maximum DC Resistance at 20°C		Short Circuit Rating for 1 Sec.	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil		Single Core Cable	Single Core Cable (Approx)				
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
50	215	185	165	170	138	125	0.828	1.35	0.114	0.5	0.387	0.641	7.15	4.7
70	270	225	200	210	168	155	0.587	0.94	0.106	0.55	0.268	0.443	10.01	6.58
95	330	265	235	255	168	185	0.442	0.691	0.102	0.64	0.193	0.320	13.585	8.93
120	380	300	265	300	230	210	0.365	0.558	0.097	0.67	0.153	0.253	17.16	11.28
150	430	335	300	342	265	230	0.314	0.464	0.099	0.67	0.124	0.206	21.45	14.1
185	495	380	335	385	295	260	0.268	0.383	0.095	0.67	0.0991	0.164	26.455	17.39
240	590	435	385	450	340	300	0.229	0.31	0.093	0.72	0.0754	0.125	34.32	22.56
300	670	490	430	510	390	335	0.206	0.265	0.092	0.75	0.0601	0.100	42.9	28.2
400	780	550	480	605	450	380	0.191	0.230	0.090	0.75	0.0470	0.0778	57.2	37.6
500	900	610	530	700	500	430	0.178	0.210	0.089	0.77	0.0366	0.0605	71.5	47
630	1020	680	590	809	555	485	0.166	0.185	0.087	0.81	0.0283	0.0469	90.09	59.22
800	1140	740	630	935	825	530	0.161	0.173	0.086	0.88	0.0221	0.0367	114.4	75.2
1000	1250	780	660	1065	690	570	0.156	0.163	0.085	0.88	0.0176	0.0291	143	94

PVC/XLPE Insulated Low Voltage Power Cables with Copper/ Aluminium Conductors upto 3.3kV

1Core PVC Insulated LV Power Cable with Copper/Aluminium Conductor, UNARMOURED, PVC Outer Sheath 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors (Sqmm)	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the PVC Insulation (mm)	Nominal Thickness of Inner Sheath/ Bedding (mm)	Nominal Thickness of the Outer Sheath (mm)	Approximate Overall Cable Diameter (mm)
	Copper	Aluminium				
50	6	6	1.40	0.80	1.40	16.50
70	12	12	1.40	0.80	1.40	17.80
95	15	15	1.60	0.80	1.50	20.50
120	18	15	1.60	1.00	1.50	21.20
150	18	15	1.80	1.00	1.60	24.40
185	30	30	2.00	1.00	1.70	26.50
240	34	30	2.20	1.00	1.80	30.00
300	34	30	2.40	1.00	1.90	33.00
400	53	53	2.60	1.20	2.00	38.00
500	53	53	2.80	1.20	2.10	41.40
630	53	53	2.80	1.20	2.20	45.20
800	53	53	2.80	1.40	2.30	50.00
1000	53	53	3.00	1.40	2.50	55.20
1000	53	53	2.80	1.40	2.50	2.50

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance	Maximum DC Resistance at 20°C		Short Circuit Rating for 1 Sec.	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil		Single Core Cable	Single Core Cable (Approx)				
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
50	165	155	150	130	120	115	0.828	1.35	0.098	1.22	0.387	0.641	5.75	3.8
70	205	190	175	155	140	135	0.587	0.94	0.092	1.43	0.268	0.443	8.05	5.32
95	245	220	200	190	175	155	0.442	0.691	0.090	1.47	0.193	0.320	10.925	7.22
120	280	250	220	220	195	170	0.365	0.558	0.089	1.62	0.153	0.253	13.8	9.12
150	320	280	245	250	220	190	0.314	0.464	0.088	1.62	0.124	0.206	17.25	11.4
185	370	305	260	290	240	210	0.268	0.383	0.086	1.62	0.0991	0.164	21.275	14.06
240	425	345	285	335	270	225	0.229	0.31	0.084	1.72	0.0754	0.125	27.6	18.24
300	475	375	310	380	295	245	0.206	0.265	0.084	1.74	0.0601	0.100	34.5	22.8
400	550	400	335	435	325	275	0.191	0.230	0.082	1.81	0.0470	0.0778	41.12	27.2
500	590	425	355	480	345	295	0.178	0.210	0.081	1.86	0.0366	0.0605	51.4	34
630	660	470	375	550	390	320	0.166	0.185	0.078	1.87	0.0283	0.0469	64.764	42.84
800	745	530	425	620	450	380	0.161	0.173	0.077	1.98	0.0221	0.0367	82.24	54.4
1000	870	590	470	700	500	415	0.156	0.163	0.077	2.2	0.0176	0.0291	102.8	68

PVC/XLPE Insulated Low Voltage Power Cables with Copper/ Aluminium Conductors upto 3.3kV

1Core XLPE Insulated LV Power Cable with Copper/Aluminium Conductor, UNARMOURED, PVC Outer Sheath 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors (Sqmm)	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the XLPE Insulation (mm)	Nominal Thickness of Inner Sheath/ Bedding (mm)	Nominal Thickness of the Outer Sheath (mm)	Approximate Overall Cable Diameter (mm)
	Copper	Aluminium				
16	6	6	0.70	0.80	1.40	9.00
25	6	6	0.90	0.80	1.40	11.00
35	6	6	0.90	0.80	1.40	12.00
50	6	6	1.00	0.80	1.40	13.00
70	12	12	1.10	0.80	1.40	15.00
95	15	15	1.10	0.80	1.50	17.00
120	18	15	1.20	0.80	1.50	19.00
150	18	15	1.40	1.00	1.60	21.00
185	30	30	1.60	1.00	1.60	23.00
240	34	30	1.70	1.00	1.70	26.00
300	34	30	1.80	1.00	1.80	28.00
400	53	53	2.00	1.20	1.90	32.00
500	53	53	2.20	1.20	2.00	35.00
630	53	53	2.40	1.20	2.20	40.00
800	53	53	2.60	1.40	2.30	44.00
1000	53	53	2.80	1.40	2.40	49.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance	Maximum DC Resistance at 20°C		Short Circuit Rating for 1 Sec.	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil		Single Core Cable	Single Core Cable (Approx)				
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
16	106	104	102	83	81	80	2.94	4.90	0.103	0.5	1.15	1.91	2.288	1.504
25	145	130	115	115	99	90	1.86	3.08	0.103	0.52	0.727	1.20	3.575	2.35
35	155	155	140	135	117	110	1.35	2.23	0.098	0.6	0.524	0.868	5.005	3.29
50	215	185	165	170	138	125	0.828	1.35	0.093	0.63	0.387	0.641	7.15	4.7
70	270	225	200	210	168	155	0.587	0.94	0.088	0.68	0.268	0.443	10.01	6.58
95	330	265	235	255	204	185	0.442	0.691	0.086	0.79	0.193	0.320	13.585	8.93
120	380	300	265	300	230	210	0.365	0.558	0.085	0.79	0.153	0.253	17.16	11.28
150	430	335	300	342	265	230	0.314	0.464	0.085	0.79	0.124	0.206	21.45	14.1
185	495	380	335	385	295	260	0.268	0.383	0.083	0.79	0.0991	0.164	26.455	17.39
240	590	435	385	450	340	300	0.229	0.31	0.082	0.84	0.0754	0.125	34.32	22.56
300	670	490	430	510	390	335	0.206	0.265	0.079	0.86	0.0601	0.100	42.9	28.2
400	780	550	480	605	450	380	0.191	0.230	0.080	0.88	0.0470	0.0778	57.2	37.6
500	900	610	530	700	500	430	0.178	0.210	0.078	0.9	0.0366	0.0605	71.5	47
630	1020	680	590	809	555	485	0.166	0.185	0.078	0.94	0.0283	0.0469	90.09	59.22
800	1140	740	630	935	825	530	0.161	0.173	0.076	0.97	0.0221	0.0367	114.4	75.2
1000	1250	780	660	1065	690	570	0.156	0.163	0.075	1.01	0.0176	0.0291	143	94

PVC/XLPE Insulated Low Voltage Power Cables with Copper/ Aluminium Conductors upto 3.3kV

2Core PVC Insulated Power Cable with Copper/Aluminium Conductor, Steel Wire Armoured (SWA), PVC Outer Sheath, 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the PVC Insulation	Nominal Thickness of Inner Sheath/ Bedding	Nominal Diameter of Galvanised Steel Wire used in Armour	Nominal Thickness of the Outer Sheath	Approximate Overall Cable Diameter
(Sqmm)	Copper	Aluminium	(mm)	(mm)	(mm)	(mm)	(mm)
1.5	6	6	0.80	0.80	0.90	1.40	13.00
2.5	6	6	0.80	0.80	0.90	1.40	13.50
4	6	6	1.00	0.80	0.90	1.40	15.50
6	6	6	1.00	0.80	0.90	1.50	17.00
10	6	6	1.00	0.80	1.25	1.60	19.50
16	6	6	1.00	0.80	1.25	1.60	21.50
25	6	6	1.20	1.00	1.60	1.70	22.00
35	6	6	1.20	1.00	1.60	1.80	24.00
50	6	6	1.40	1.00	1.60	1.90	27.00
70	12	12	1.40	1.00	1.60	1.90	30.00
95	15	15	1.60	1.20	2.00	2.10	34.00
120	18	15	1.60	1.20	2.00	2.20	36.50
150	18	15	1.80	1.20	2.00	2.30	40.00
185	30	30	2.00	1.40	2.50	2.40	43.20
240	34	30	2.20	1.40	2.50	2.50	51.00
300	34	30	2.40	1.60	2.50	2.70	56.00
400	53	53	2.60	1.60	2.50	2.90	64.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance for Cable (APPROX)	Short Circuit Rating for 1 Sec.		Maximum DC Resistance at 20°C	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil		Single Core Cable					
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
1.5	20	23	20	16	18	16	28.96	.---	0.110	0.20	0.1725	0.114	12.1	18.1
2.5	27	32	27	21	25	15	17.74	---	0.103	0.22	0.2875	0.19	7.41	12.1
4	35	41	35	27	32	20	11.04	---	0.098	0.23	0.46	0.304	4.61	7.41
6	45	50	44	35	40	28	7.38	---	0.096	0.28	0.69	0.456	3.08	4.61
10	60	70	58	47	55	41	4.38	---	0.091	0.34	1.15	0.76	1.83	3.08
16	78	90	75	59	70	52	2.77	4.60	0.086	0.40	1.84	1.216	1.15	1.91
25	105	115	97	78	90	66	1.75	2.89	0.083	0.42	2.875	1.9	0.727	1.20
35	128	140	120	99	110	80	1.26	2.09	0.082	0.48	4.025	2.66	0.524	0.868
50	165	155	150	130	120	115	0.828	1.35	0.082	0.49	5.75	3.8	0.387	0.641
70	205	190	175	155	140	135	0.587	0.94	0.076	0.56	8.05	5.32	0.268	0.443
95	245	220	200	190	175	155	0.442	0.691	0.076	0.58	10.925	7.22	0.193	0.320
120	280	250	220	220	195	170	0.365	0.558	0.075	0.63	13.8	9.12	0.153	0.253
150	320	280	245	250	220	190	0.314	0.464	0.074	0.63	17.25	11.4	0.124	0.206
185	370	305	260	290	240	210	0.268	0.383	0.074	0.64	21.275	14.06	0.0991	0.164
240	425	345	285	335	270	225	0.229	0.31	0.073	0.67	27.6	18.24	0.0754	0.125
300	475	375	310	380	295	245	0.206	0.265	0.072	0.68	34.5	22.8	0.0601	0.100
400	550	400	335	435	325	275	0.191	0.230	0.072	0.70	41.12	27.2	0.0470	0.0778

2Core XLPE Insulated Power Cable with Copper/Aluminium Conductor, Steel Wire Armoured (SWA), PVC Outer Sheath, 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the XLPE Insulation	Nominal Thickness of Inner Sheath/ Bedding	Nominal Diameter of Galvanised Steel Wire used in Armour	Nominal Thickness of the Outer Sheath	Approximate Overall Cable Diameter
(Sqmm)	Copper	Aluminium	(mm)	(mm)	(mm)	(mm)	(mm)
1.5	6	6	0.70	0.80	0.90	1.40	13.00
2.5	6	6	0.70	0.80	0.90	1.40	14.00
4	6	6	0.70	0.80	0.90	1.40	15.00
6	6	6	0.70	0.80	0.90	1.40	16.00
10	6	6	0.70	0.80	0.90	1.50	18.00
16	6	6	0.70	0.80	1.25	1.50	20.00
25	6	6	0.90	0.80	1.25	1.60	20.00
35	6	6	0.90	1.00	1.60	1.70	23.00
50	6	6	1.00	1.00	1.60	1.80	25.00
70	12	12	1.10	1.00	1.60	1.90	28.00
95	15	15	1.10	1.20	2.00	2.00	32.00
120	18	15	1.20	1.20	2.00	2.10	34.00
150	18	15	1.40	1.20	2.00	2.20	38.00
185	30	30	1.60	1.40	2.50	2.40	42.00
240	34	30	1.70	1.40	2.50	2.50	49.00
300	34	30	1.80	1.60	2.50	2.60	53.00
400	53	53	2.00	1.60	2.50	2.80	58.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance for Cable (APPROX)	Short Circuit Rating for 1 Sec.		Maximum DC Resistance at 20°C	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil		Single Core Cable					
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
1.5	22	22	20	14	16	12	26.73	.---	0.102	0.09	12.1	18.1	0.2145	0.141
2.5	30	29	27	18	20	16	16.37	---	0.100	0.1	7.41	12.1	0.3575	0.235
4.0	39	44	37	30	34	28	10.19	---	0.098	0.11	4.61	7.41	0.572	0.376
6.0	50	55	47	40	43	37	6.81	---	0.09	0.13	3.08	4.61	0.858	0.564
10	67	74	61	53	57	48	4.04	---	0.084	0.16	1.83	3.08	1.43	0.94
16	85	94	78	70	78	61	2.94	4.90	0.08	0.14	1.15	1.91	2.288	1.504
25	125	120	100	99	95	80	1.86	3.08	0.08	0.2	0.727	1.20	3.575	2.35
35	155	145	120	117	116	94	1.35	2.23	0.08	0.23	0.524	0.868	5.005	3.29
50	190	170	145	140	140	110	0.828	1.35	0.078	0.24	0.387	0.641	7.15	4.7
70	235	210	175	176	170	140	0.587	0.94	0.077	0.26	0.268	0.443	10.01	6.58
95	290	250	210	221	200	165	0.442	0.691	0.074	0.29	0.193	0.320	13.585	8.93
120	330	285	240	258	225	185	0.365	0.558	0.072	0.29	0.153	0.253	17.16	11.28
150	375	315	270	294	255	210	0.314	0.464	0.072	0.29	0.124	0.206	21.45	14.1
185	435	355	300	339	285	235	0.268	0.383	0.072	0.29	0.0991	0.164	26.455	17.39
240	510	410	350	402	325	270	0.229	0.31	0.072	0.31	0.0754	0.125	34.32	22.56
300	590	460	390	461	370	305	0.206	0.265	0.071	0.33	0.0601	0.100	42.9	28.2
400	670	520	440	542	435	350	0.191	0.230	0.07	0.33	0.0470	0.0778	57.2	37.6

2Core PVC Insulated Power Cable with Copper/Aluminium Conductor, UNARMOURED, PVC Outer Sheath, 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors (Sqmm)	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the PVC Insulation (mm)	Nominal Thickness of Inner Sheath/ Bedding (mm)	Nominal Thickness of the Outer Sheath (mm)	Approximate Overall Cable Diameter (mm)
	Copper	Aluminium				
1.5	6	6	0.80	0.80	1.80	11.00
2.5	6	6	0.80	0.80	1.80	12.00
4	6	6	1.00	0.80	1.80	14.00
6	6	6	1.00	0.80	1.80	15.00
10	6	6	1.00	0.80	1.80	17.00
16	6	6	1.00	0.80	1.80	19.00
25	6	6	1.20	1.00	1.80	18.50
35	6	6	1.20	1.00	1.80	20.50
50	6	6	1.40	1.00	1.80	23.50
70	12	12	1.40	1.00	1.90	26.00
95	15	15	1.60	1.20	2.00	29.00
120	18	15	1.60	1.20	2.10	31.00
150	18	15	1.80	1.20	2.20	35.00
185	30	30	2.00	1.40	2.40	37.00
240	34	30	2.20	1.40	2.60	45.00
300	34	30	2.40	1.60	3.70	50.00
400	53	53	2.60	1.60	3.00	56.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance for Cable (APPROX)	Short Circuit Rating for 1 Sec.		Maximum DC Resistance at 20°C	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil							
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
1.5	20	23	20	16	18	16	28.96	.---	0.110	0.20	0.1725	0.114	12.1	18.1
2.5	27	32	27	21	25	18	17.74	---	0.103	0.22	0.2875	0.19	7.41	12.1
4	35	41	35	27	32	27	11.04	---	0.098	0.23	0.46	0.304	4.61	7.41
6	45	50	44	35	40	34	7.38	---	0.096	0.28	0.69	0.456	3.08	4.61
10	60	70	58	47	55	45	4.38	---	0.091	0.34	1.15	0.76	1.83	3.08
16	78	90	75	59	70	58	2.77	4.60	0.086	0.40	1.84	1.216	1.15	1.91
25	105	115	97	78	90	76	1.75	2.89	0.083	0.42	2.875	1.9	0.727	1.20
35	128	140	120	99	110	92	1.26	2.09	0.082	0.48	4.025	2.66	0.524	0.868
50	165	165	150	130	135	115	0.828	1.35	0.082	0.49	5.75	3.8	5.75	3.8
70	205	205	180	155	160	140	0.587	0.94	0.076	0.56	8.05	5.32	8.05	5.32
95	245	240	215	190	190	170	0.442	0.691	0.076	0.58	10.925	7.22	10.925	7.22
120	280	275	235	220	210	190	0.365	0.558	0.075	0.63	13.8	9.12	13.8	9.12
150	320	310	270	250	240	210	0.314	0.464	0.074	0.63	17.25	11.4	17.25	11.4
185	370	350	300	290	275	240	0.268	0.383	0.074	0.64	21.275	14.06	21.275	14.06
240	425	405	345	335	320	275	0.229	0.31	0.073	0.67	27.6	18.24	27.6	18.24
300	475	450	385	380	355	305	0.206	0.265	0.072	0.68	34.5	22.8	34.5	22.8
400	550	490	485	435	385	345	0.191	0.230	0.072	0.70	41.12	27.2	41.12	27.2

2Core XLPE Insulated Power Cable with Copper/Aluminium Conductor, UNARMOURED, PVC Outer Sheath, 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors (Sqmm)	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the XLPE Insulation (mm)	Nominal Thickness of Inner Sheath/ Bedding (mm)	Nominal Thickness of the Outer Sheath (mm)	Approximate Overall Cable Diameter (mm)
	Copper	Aluminium				
1.5	6	6	0.70	0.80	1.80	10.50
2.5	6	6	0.70	0.80	1.80	11.50
4	6	6	0.70	0.80	1.80	12.50
6	6	6	0.70	0.80	1.80	13.50
10	6	6	0.70	0.80	1.80	15.00
16	6	6	0.70	0.80	1.80	16.00
25	6	6	0.90	1.00	1.80	17.00
35	6	6	0.90	1.00	1.80	18.00
50	6	6	1.00	1.00	1.80	21.00
70	12	12	1.10	1.00	1.80	23.00
95	15	15	1.10	1.20	2.00	26.00
120	18	15	1.20	1.20	2.10	28.00
150	18	15	1.40	1.40	2.20	32.00
185	30	30	1.60	1.40	2.30	34.00
240	34	30	1.70	1.40	2.50	41.00
300	34	30	1.80	1.60	2.70	45.00
400	53	53	2.00	1.60	2.90	51.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance for Cable (APPROX)	Maximum DC Resistance at 20°C		Short Circuit Rating for 1 Sec.	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil							
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
1.5	22	22	20	14	16	12	26.73	.---	0.102	0.09	12.1	18.1	0.2145	0.141
2.5	30	29	27	18	20	16	16.37	---	0.100	0.1	7.41	12.1	0.3575	0.235
4.0	39	44	37	30	34	28	10.19	---	0.098	0.11	4.61	7.41	0.572	0.376
6.0	50	55	47	40	43	37	6.81	---	0.09	0.13	3.08	4.61	0.858	0.564
10	67	74	61	53	57	48	4.04	---	0.084	0.16	1.83	3.08	1.43	0.94
16	85	94	78	70	78	61	2.94	4.90	0.08	0.14	1.15	1.91	2.288	1.504
25	125	120	100	99	95	80	1.86	3.08	0.08	0.2	0.727	1.20	3.575	2.35
35	155	145	120	117	116	94	1.35	2.23	0.08	0.23	0.524	0.868	5.005	3.29
50	190	170	145	140	140	110	0.828	1.35	0.078	0.24	0.387	0.641	7.15	4.7
70	235	210	175	176	170	140	0.587	0.94	0.077	0.26	0.268	0.443	10.01	6.58
95	290	250	210	221	200	165	0.442	0.691	0.074	0.29	0.193	0.320	13.585	8.93
120	330	285	240	258	225	185	0.365	0.558	0.072	0.29	0.153	0.253	17.16	11.28
150	375	315	270	294	255	210	0.314	0.464	0.072	0.29	0.124	0.206	21.45	14.1
185	435	355	300	339	285	235	0.268	0.383	0.072	0.29	0.0991	0.164	26.455	17.39
240	510	410	350	402	325	270	0.229	0.31	0.072	0.31	0.0754	0.125	34.32	22.56
300	590	460	390	461	370	305	0.206	0.265	0.071	0.33	0.0601	0.100	42.9	28.2
400	670	520	440	542	435	350	0.191	0.230	0.07	0.33	0.0470	0.0778	57.2	37.6

3Core PVC Insulated Power Cable with Copper/Aluminium Conductor, Steel Wire Armoured (SWA), PVC Outer Sheath, 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the PVC Insulation	Nominal Thickness of Inner Sheath/ Bedding	Nominal Diameter of Galvanised Steel Wire used in Armour	Nominal Thickness of the Outer Sheath	Approximate Overall Cable Diameter
(Sqmm)	Copper	Aluminium	(mm)	(mm)	(mm)	(mm)	(mm)
1.5	6	6	0.80	0.80	0.90	1.40	14.00
2.5	6	6	0.80	0.80	0.90	1.40	15.00
4	6	6	1.00	0.80	0.90	1.40	16.50
6	6	6	1.00	0.80	1.25	1.50	19.00
10	6	6	1.00	0.80	1.25	1.60	21.00
16	6	6	1.00	0.80	1.25	1.60	23.00
25	6	6	1.20	1.00	1.60	1.70	24.50
35	6	6	1.20	1.00	1.60	1.80	27.00
50	6	6	1.40	1.00	1.60	1.90	31.00
70	12	12	1.40	1.20	2.00	2.00	35.00
95	15	15	1.60	1.20	2.00	2.10	39.00
120	18	15	1.60	1.20	2.00	2.20	44.00
150	18	15	1.80	1.40	2.50	2.40	49.00
185	30	30	2.00	1.40	2.50	2.50	51.00
240	34	30	2.20	1.60	2.50	2.60	58.50
300	34	30	2.40	1.60	2.50	2.80	64.50
400	53	53	2.60	1.60	2.50	3.00	69.00

Electrical Properties

Nominal Cross Section Area	Current Rating						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance for Cable (APPROX)	Short Circuit Rating for 1 Sec.		Maximum DC Resistance at 20°C	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil							
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
1.5	20	23	20	16	18	16	28.96	.---	0.110	0.20	0.1725	0.114	12.1	18.1
2.5	27	32	27	21	25	15	17.74	---	0.103	0.22	0.2875	0.19	7.41	12.1
4	35	41	35	27	32	20	11.04	---	0.098	0.23	0.46	0.304	4.61	7.41
6	45	50	44	35	40	28	7.38	---	0.096	0.28	0.69	0.456	3.08	4.61
10	60	70	58	47	55	41	4.38	---	0.091	0.34	1.15	0.76	1.83	3.08
16	78	90	75	59	70	52	2.77	4.60	0.086	0.40	1.84	1.216	1.15	1.91
25	105	115	97	78	90	66	1.75	2.89	0.083	0.42	2.875	1.9	0.727	1.20
35	128	140	120	99	110	80	1.26	2.09	0.082	0.48	4.025	2.66	0.524	0.868
50	165	155	150	130	120	115	0.828	1.35	0.082	0.49	5.75	3.8	0.387	0.641
70	205	190	175	155	140	135	0.587	0.94	0.076	0.56	8.05	5.32	0.268	0.443
95	245	220	200	190	175	155	0.442	0.691	0.076	0.58	10.925	7.22	0.193	0.320
120	280	250	220	220	195	170	0.365	0.558	0.075	0.63	13.8	9.12	0.153	0.253
150	320	280	245	250	220	190	0.314	0.464	0.074	0.63	17.25	11.4	0.124	0.206
185	370	305	260	290	240	210	0.268	0.383	0.074	0.64	21.275	14.06	0.0991	0.164
240	425	345	285	335	270	225	0.229	0.31	0.073	0.67	27.6	18.24	0.0754	0.125
300	475	375	310	380	295	245	0.206	0.265	0.072	0.68	34.5	22.8	0.0601	0.100
400	550	400	335	435	325	275	0.191	0.230	0.072	0.70	41.12	27.2	0.0470	0.0778

3Core XLPE Insulated Power Cable with Copper/Aluminium Conductor, Steel Wire Armoured (SWA), PVC Outer Sheath, 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the XLPE Insulation	Nominal Thickness of Inner Sheath/ Bedding	Nominal Diameter of Galvanised Steel Wire used in Armour	Nominal Thickness of the Outer Sheath	Approximate Overall Cable Diameter
(Sqmm)	Copper	Aluminium	(mm)	(mm)	(mm)	(mm)	(mm)
1.5	6	6	0.70	0.80	0.90	1.40	13.50
2.5	6	6	0.70	0.80	0.90	1.40	14.50
4	6	6	0.70	0.80	0.90	1.40	15.50
6	6	6	0.70	0.80	0.90	1.40	17.50
10	6	6	0.70	0.80	1.25	1.50	19.00
16	6	6	0.70	0.80	1.25	1.60	21.00
25	6	6	0.90	1.00	1.60	1.70	23.00
35	6	6	0.90	1.00	1.60	1.80	25.00
50	6	6	1.00	1.00	1.60	1.80	28.00
70	12	12	1.10	1.00	1.60	1.90	32.00
95	15	15	1.10	1.20	2.00	2.10	36.00
120	18	15	1.20	1.20	2.00	2.20	40.00
150	18	15	1.40	1.40	2.50	2.30	45.00
185	30	30	1.60	1.40	2.50	2.40	48.00
240	34	30	1.70	1.40	2.50	2.60	54.00
300	34	30	1.80	1.60	2.50	2.70	60.00
400	53	53	2.00	1.60	2.50	2.90	64.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance for Cable (APPROX)	Maximum DC Resistance at 20°C		Short Circuit Rating for 1 Sec.	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil							
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
1.5	22	22	20	14	16	12	26.73	.---	0.102	0.09	12.1	18.1	0.2145	0.141
2.5	30	29	27	18	20	16	16.37	---	0.100	0.1	7.41	12.1	0.3575	0.235
4.0	39	44	37	30	34	28	10.19	---	0.098	0.11	4.61	7.41	0.572	0.376
6.0	50	55	47	40	43	37	6.81	---	0.09	0.13	3.08	4.61	0.858	0.564
10	67	74	61	53	57	48	4.04	---	0.084	0.16	1.83	3.08	1.43	0.94
16	85	94	78	70	78	61	2.94	4.90	0.08	0.14	1.15	1.91	2.288	1.504
25	125	120	100	99	95	80	1.86	3.08	0.08	0.2	0.727	1.20	3.575	2.35
35	155	145	120	117	116	94	1.35	2.23	0.08	0.23	0.524	0.868	5.005	3.29
50	190	170	145	140	140	110	0.828	1.35	0.078	0.24	0.387	0.641	7.15	4.7
70	235	210	175	176	170	140	0.587	0.94	0.077	0.26	0.268	0.443	10.01	6.58
95	290	250	210	221	200	165	0.442	0.691	0.074	0.29	0.193	0.320	13.585	8.93
120	330	285	240	258	225	185	0.365	0.558	0.072	0.29	0.153	0.253	17.16	11.28
150	375	315	270	294	255	210	0.314	0.464	0.072	0.29	0.124	0.206	21.45	14.1
185	435	355	300	339	285	235	0.268	0.383	0.072	0.29	0.0991	0.164	26.455	17.39
240	510	410	350	402	325	270	0.229	0.31	0.072	0.31	0.0754	0.125	34.32	22.56
300	590	460	390	461	370	305	0.206	0.265	0.071	0.33	0.0601	0.100	42.9	28.2
400	670	520	440	542	435	350	0.191	0.230	0.07	0.33	0.0470	0.0778	57.2	37.6

3Core PVC Insulated Power Cable with Copper/Aluminium Conductor, UNARMOURED, PVC Outer Sheath, 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors (Sqmm)	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the PVC Insulation (mm)	Nominal Thickness of Inner Sheath/ Bedding (mm)	Nominal Thickness of the Outer Sheath (mm)	Approximate Overall Cable Diameter (mm)
	Copper	Aluminium				
1.5	6	6	0.80	0.80	1.80	12.00
2.5	6	6	0.80	0.80	1.80	13.00
4	6	6	1.00	0.80	1.80	15.00
6	6	6	1.00	0.80	1.80	16.50
10	6	6	1.00	0.80	1.80	18.50
16	6	6	1.00	0.80	1.80	20.00
25	6	6	1.20	1.00	1.80	22.00
35	6	6	1.20	1.00	1.80	24.00
50	6	6	1.40	1.00	1.80	27.50
70	12	12	1.40	1.20	2.00	31.00
95	15	15	1.60	1.20	2.10	35.00
120	18	15	1.60	1.20	2.20	38.00
150	18	15	1.80	1.40	2.30	42.00
185	30	30	2.00	1.40	2.50	44.00
240	34	30	2.20	1.60	2.70	51.00
300	34	30	2.40	1.60	2.90	57.00
400	53	53	2.60	1.60	3.10	62.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance for Cable (APPROX)	Short Circuit Rating for 1 Sec.		Maximum DC Resistance at 20°C	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil							
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
1.5	20	23	20	16	18	16	28.96	.---	0.110	0.20	0.1725	0.114	12.1	18.1
2.5	27	32	27	21	25	18	17.74	---	0.103	0.22	0.2875	0.19	7.41	12.1
4	35	41	35	27	32	27	11.04	---	0.098	0.23	0.46	0.304	4.61	7.41
6	45	50	44	35	40	34	7.38	---	0.096	0.28	0.69	0.456	3.08	4.61
10	60	70	58	47	55	45	4.38	---	0.091	0.34	1.15	0.76	1.83	3.08
16	78	90	75	59	70	58	2.77	4.60	0.086	0.40	1.84	1.216	1.15	1.91
25	105	115	97	78	90	76	1.75	2.89	0.083	0.42	2.875	1.9	0.727	1.20
35	128	140	120	99	110	92	1.26	2.09	0.082	0.48	4.025	2.66	0.524	0.868
50	165	165	150	130	135	115	0.828	1.35	0.082	0.49	5.75	3.8	5.75	3.8
70	205	205	180	155	160	140	0.587	0.94	0.076	0.56	8.05	5.32	8.05	5.32
95	245	240	215	190	190	170	0.442	0.691	0.076	0.58	10.925	7.22	10.925	7.22
120	280	275	235	220	210	190	0.365	0.558	0.075	0.63	13.8	9.12	13.8	9.12
150	320	310	270	250	240	210	0.314	0.464	0.074	0.63	17.25	11.4	17.25	11.4
185	370	350	300	290	275	240	0.268	0.383	0.074	0.64	21.275	14.06	21.275	14.06
240	425	405	345	335	320	275	0.229	0.31	0.073	0.67	27.6	18.24	27.6	18.24
300	475	450	385	380	355	305	0.206	0.265	0.072	0.68	34.5	22.8	34.5	22.8
400	550	490	485	435	385	345	0.191	0.230	0.072	0.70	41.12	27.2	41.12	27.2

3Core XLPE Insulated Power Cable with Copper/Aluminium Conductor, UNARMOURED, PVC Outer Sheath, 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors (Sqmm)	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the XLPE Insulation (mm)	Nominal Thickness of Inner Sheath/ Bedding (mm)	Nominal Thickness of the Outer Sheath (mm)	Approximate Overall Cable Diameter (mm)
	Copper	Aluminium				
1.5	6	6	0.70	0.80	1.80	11.00
2.5	6	6	0.70	0.80	1.80	12.00
4	6	6	0.70	0.80	1.80	13.00
6	6	6	0.70	0.80	1.80	14.00
10	6	6	0.70	0.80	1.80	16.00
16	6	6	0.70	0.80	1.80	18.00
25	6	6	0.90	1.00	1.80	18.00
35	6	6	0.90	1.00	1.80	21.00
50	6	6	1.00	1.00	1.80	23.00
70	12	12	1.10	1.00	1.90	27.00
95	15	15	1.10	1.20	2.00	30.00
120	18	15	1.20	1.20	2.10	34.00
150	18	15	1.40	1.40	2.30	38.00
185	30	30	1.60	1.40	2.40	40.00
240	34	30	1.70	1.40	2.60	47.00
300	34	30	1.80	1.60	2.80	52.00
400	53	53	2.00	1.60	3.10	57.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance for Cable (APPROX)	Maximum DC Resistance at 20°C		Short Circuit Rating for 1 Sec.	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil							
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
1.5	22	22	20	14	16	12	26.73	.---	0.102	0.09	12.1	18.1	0.2145	0.141
2.5	30	29	27	18	20	16	16.37	---	0.100	0.1	7.41	12.1	0.3575	0.235
4.0	39	44	37	30	34	28	10.19	---	0.098	0.11	4.61	7.41	0.572	0.376
6.0	50	55	47	40	43	37	6.81	---	0.09	0.13	3.08	4.61	0.858	0.564
10	67	74	61	53	57	48	4.04	---	0.084	0.16	1.83	3.08	1.43	0.94
16	85	94	78	70	78	61	2.94	4.90	0.08	0.14	1.15	1.91	2.288	1.504
25	125	120	100	99	95	80	1.86	3.08	0.08	0.2	0.727	1.20	3.575	2.35
35	155	145	120	117	116	94	1.35	2.23	0.08	0.23	0.524	0.868	5.005	3.29
50	190	170	145	140	140	110	0.828	1.35	0.078	0.24	0.387	0.641	7.15	4.7
70	235	210	175	176	170	140	0.587	0.94	0.077	0.26	0.268	0.443	10.01	6.58
95	290	250	210	221	200	165	0.442	0.691	0.074	0.29	0.193	0.320	13.585	8.93
120	330	285	240	258	225	185	0.365	0.558	0.072	0.29	0.153	0.253	17.16	11.28
150	375	315	270	294	255	210	0.314	0.464	0.072	0.29	0.124	0.206	21.45	14.1
185	435	355	300	339	285	235	0.268	0.383	0.072	0.29	0.0991	0.164	26.455	17.39
240	510	410	350	402	325	270	0.229	0.31	0.072	0.31	0.0754	0.125	34.32	22.56
300	590	460	390	461	370	305	0.206	0.265	0.071	0.33	0.0601	0.100	42.9	28.2
400	670	520	440	542	435	350	0.191	0.230	0.07	0.33	0.0470	0.0778	57.2	37.6

4Core PVC Insulated Power Cable with Copper/Aluminium Conductor, Steel Wire Armoured (SWA), PVC Outer Sheath, 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the PVC Insulation	Nominal Thickness of Inner Sheath/ Bedding	Nominal Diameter of Galvanised Steel Wire used in Armour	Nominal Thickness of the Outer Sheath	Approximate Overall Cable Diameter
(Sqmm)	Copper	Aluminium	(mm)	(mm)	(mm)	(mm)	(mm)
1.50	6	6	0.80	0.80	0.90	1.40	14.50
2.50	6	6	0.80	0.80	0.90	1.40	16.00
4	6	6	1.00	0.80	1.25	1.50	18.00
6	6	6	1.00	0.80	1.25	1.50	20.50
10	6	6	1.00	0.80	1.25	1.60	23.50
16	6	6	1.00	1.00	1.60	1.70	26.50
25	6	6	1.20	1.00	1.60	1.80	28.50
35	6	6	1.20	1.00	1.60	1.90	31.00
50	6	6	1.40	1.20	2.00	2.00	35.00
70	12	12	1.40	1.20	2.00	2.10	39.00
95	15	15	1.60	1.20	2.00	2.20	43.50
120	18	15	1.60	1.40	2.50	2.40	50.50
150	18	15	1.80	1.40	2.50	2.50	54.50
185	30	30	2.00	1.60	2.50	2.60	60.50
240	34	30	2.20	1.60	2.50	2.80	66.00
300	34	30	2.40	1.60	2.50	3.00	72.00
400	53	53	2.60	1.80	3.15	3.30	83.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance for Cable (APPROX)	Short Circuit Rating for 1 Sec.		Maximum DC Resistance at 20°C	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil							
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
1.5	20	23	20	16	18	16	28.96	.---	0.110	0.20	0.1725	0.114	12.1	18.1
2.5	27	32	27	21	25	15	17.74	---	0.103	0.22	0.2875	0.19	7.41	12.1
4	35	41	35	27	32	20	11.04	---	0.098	0.23	0.46	0.304	4.61	7.41
6	45	50	44	35	40	28	7.38	---	0.096	0.28	0.69	0.456	3.08	4.61
10	60	70	58	47	55	41	4.38	---	0.091	0.34	1.15	0.76	1.83	3.08
16	78	90	75	59	70	52	2.77	4.60	0.086	0.40	1.84	1.216	1.15	1.91
25	105	115	97	78	90	66	1.75	2.89	0.083	0.42	2.875	1.9	0.727	1.20
35	128	140	120	99	110	80	1.26	2.09	0.082	0.48	4.025	2.66	0.524	0.868
50	165	155	150	130	120	115	0.828	1.35	0.082	0.49	5.75	3.8	0.387	0.641
70	205	190	175	155	140	135	0.587	0.94	0.076	0.56	8.05	5.32	0.268	0.443
95	245	220	200	190	175	155	0.442	0.691	0.076	0.58	10.925	7.22	0.193	0.320
120	280	250	220	220	195	170	0.365	0.558	0.075	0.63	13.8	9.12	0.153	0.253
150	320	280	245	250	220	190	0.314	0.464	0.074	0.63	17.25	11.4	0.124	0.206
185	370	305	260	290	240	210	0.268	0.383	0.074	0.64	21.275	14.06	0.0991	0.164
240	425	345	285	335	270	225	0.229	0.31	0.073	0.67	27.6	18.24	0.0754	0.125
300	475	375	310	380	295	245	0.206	0.265	0.072	0.68	34.5	22.8	0.0601	0.100
400	550	400	335	435	325	275	0.191	0.230	0.072	0.70	41.12	27.2	0.0470	0.0778

4Core XLPE Insulated Power Cable with Copper/Aluminium Conductor, Steel Wire Armoured (SWA), PVC Outer Sheath, 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the XLPE Insulation	Nominal Thickness of Inner Sheath/ Bedding	Nominal Diameter of Galvanised Steel Wire used in Armour	Nominal Thickness of the Outer Sheath	Approximate Overall Cable Diameter
(Sqmm)	Copper	Aluminium	(mm)	(mm)	(mm)	(mm)	(mm)
1.50	6	6	0.70	0.80	0.90	1.40	14.00
2.50	6	6	0.70	0.80	0.90	1.40	15.00
4	6	6	0.70	0.80	0.90	1.40	16.00
6	6	6	0.70	0.80	1.25	1.50	18.00
10	6	6	0.70	0.80	1.25	1.50	21.00
16	6	6	0.70	0.80	1.25	1.60	23.00
25	6	6	0.90	1.00	1.60	1.70	26.00
35	6	6	0.90	1.00	1.60	1.80	29.00
50	6	6	1.00	1.00	1.60	1.90	31.00
70	12	12	1.10	1.20	2.00	2.10	37.00
95	15	15	1.10	1.20	2.00	2.20	40.00
120	18	15	1.20	1.40	2.50	2.30	47.00
150	18	15	1.40	1.40	2.50	2.40	51.00
185	30	30	1.60	1.40	2.50	2.60	56.00
240	34	30	1.70	1.60	2.50	2.70	62.00
300	34	30	1.80	1.60	2.50	2.90	68.00
400	53	53	2.00	1.60	3.15	3.20	78.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance for Cable (APPROX)	Maximum DC Resistance at 20°C		Short Circuit Rating for 1 Sec.	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct	Trefoil							
	Single Core in Trefoil													
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
1.5	22	22	20	14	16	12	26.73	.---	0.102	0.09	12.1	18.1	0.2145	0.141
2.5	30	29	27	18	20	16	16.37	---	0.100	0.1	7.41	12.1	0.3575	0.235
4.0	39	44	37	30	34	28	10.19	---	0.098	0.11	4.61	7.41	0.572	0.376
6.0	50	55	47	40	43	37	6.81	---	0.09	0.13	3.08	4.61	0.858	0.564
10	67	74	61	53	57	48	4.04	---	0.084	0.16	1.83	3.08	1.43	0.94
16	85	94	78	70	78	61	2.94	4.90	0.08	0.14	1.15	1.91	2.288	1.504
25	125	120	100	99	95	80	1.86	3.08	0.08	0.2	0.727	1.20	3.575	2.35
35	155	145	120	117	116	94	1.35	2.23	0.08	0.23	0.524	0.868	5.005	3.29
50	190	170	145	140	140	110	0.828	1.35	0.078	0.24	0.387	0.641	7.15	4.7
70	235	210	175	176	170	140	0.587	0.94	0.077	0.26	0.268	0.443	10.01	6.58
95	290	250	210	221	200	165	0.442	0.691	0.074	0.29	0.193	0.320	13.585	8.93
120	330	285	240	258	225	185	0.365	0.558	0.072	0.29	0.153	0.253	17.16	11.28
150	375	315	270	294	255	210	0.314	0.464	0.072	0.29	0.124	0.206	21.45	14.1
185	435	355	300	339	285	235	0.268	0.383	0.072	0.29	0.0991	0.164	26.455	17.39
240	510	410	350	402	325	270	0.229	0.31	0.072	0.31	0.0754	0.125	34.32	22.56
300	590	460	390	461	370	305	0.206	0.265	0.071	0.33	0.0601	0.100	42.9	28.2
400	670	520	440	542	435	350	0.191	0.230	0.07	0.33	0.0470	0.0778	57.2	37.6

4Core PVC Insulated Power Cable with Copper/Aluminium Conductor, UNARMOURED, PVC Outer Sheath, 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors (Sqmm)	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the PVC Insulation (mm)	Nominal Thickness of Inner Sheath/ Bedding (mm)	Nominal Thickness of the Outer Sheath (mm)	Approximate Overall Cable Diameter (mm)
	Copper	Aluminium				
1.5	6	6	0.80	0.80	1.80	13.00
2.5	6	6	0.80	0.80	1.80	14.50
4	6	6	1.00	0.80	1.80	16.50
6	6	6	1.00	0.80	1.80	18.00
10	6	6	1.00	0.80	1.80	20.50
16	6	6	1.00	1.00	1.80	22.50
25	6	6	1.20	1.00	1.80	25.00
35	6	6	1.20	1.00	1.80	27.00
50	6	6	1.40	1.20	1.90	30.00
70	12	12	1.40	1.20	2.10	34.00
95	15	15	1.60	1.20	2.20	38.00
120	18	15	1.60	1.40	2.40	43.00
150	18	15	1.80	1.40	2.50	47.50
185	30	30	2.00	1.60	2.70	52.50
240	34	30	2.20	1.60	2.90	59.00
300	34	30	2.40	1.60	3.10	66.00
400	53	53	2.60	1.80	3.40	74.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance for Cable (APPROX)	Short Circuit Rating for 1 Sec.		Maximum DC Resistance at 20°C	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil							
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
1.5	20	23	20	16	18	16	28.96	.---	0.110	0.20	0.1725	0.114	12.1	18.1
2.5	27	32	27	21	25	18	17.74	---	0.103	0.22	0.2875	0.19	7.41	12.1
4	35	41	35	27	32	27	11.04	---	0.098	0.23	0.46	0.304	4.61	7.41
6	45	50	44	35	40	34	7.38	---	0.096	0.28	0.69	0.456	3.08	4.61
10	60	70	58	47	55	45	4.38	---	0.091	0.34	1.15	0.76	1.83	3.08
16	78	90	75	59	70	58	2.77	4.60	0.086	0.40	1.84	1.216	1.15	1.91
25	105	115	97	78	90	76	1.75	2.89	0.083	0.42	2.875	1.9	0.727	1.20
35	128	140	120	99	110	92	1.26	2.09	0.082	0.48	4.025	2.66	0.524	0.868
50	165	165	150	130	135	115	0.828	1.35	0.082	0.49	5.75	3.8	5.75	3.8
70	205	205	180	155	160	140	0.587	0.94	0.076	0.56	8.05	5.32	8.05	5.32
95	245	240	215	190	190	170	0.442	0.691	0.076	0.58	10.925	7.22	10.925	7.22
120	280	275	235	220	210	190	0.365	0.558	0.075	0.63	13.8	9.12	13.8	9.12
150	320	310	270	250	240	210	0.314	0.464	0.074	0.63	17.25	11.4	17.25	11.4
185	370	350	300	290	275	240	0.268	0.383	0.074	0.64	21.275	14.06	21.275	14.06
240	425	405	345	335	320	275	0.229	0.31	0.073	0.67	27.6	18.24	27.6	18.24
300	475	450	385	380	355	305	0.206	0.265	0.072	0.68	34.5	22.8	34.5	22.8
400	550	490	485	435	385	345	0.191	0.230	0.072	0.70	41.12	27.2	41.12	27.2

4Core XLPE Insulated Power Cable with Copper/Aluminium Conductor, UNARMOURED, PVC Outer Sheath, 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors (Sqmm)	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the XLPE Insulation (mm)	Nominal Thickness of Inner Sheath/ Bedding (mm)	Nominal Thickness of the Outer Sheath (mm)	Approximate Overall Cable Diameter (mm)
	Copper	Aluminium				
1.5	6	6	0.70	0.80	1.80	11.00
2.5	6	6	0.70	0.80	1.80	12.00
4	6	6	0.70	0.80	1.80	14.00
6	6	6	0.70	0.80	1.80	15.00
10	6	6	0.70	0.80	1.80	17.00
16	6	6	0.70	0.80	1.80	19.00
25	6	6	0.90	1.00	1.80	21.00
35	6	6	0.90	1.00	1.80	24.00
50	6	6	1.00	1.00	1.90	26.00
70	12	12	1.10	1.20	2.00	30.00
95	15	15	1.10	1.20	2.10	34.00
120	18	15	1.20	1.40	2.30	39.00
150	18	15	1.40	1.40	2.40	43.00
185	30	30	1.60	1.40	2.60	49.00
240	34	30	1.70	1.60	2.80	55.00
300	34	30	1.80	1.60	30.00	60.00
400	53	53	2.00	1.60	3.30	68.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance for Cable (APPROX)	Maximum DC Resistance at 20°C		Short Circuit Rating for 1 Sec.	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil							
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
1.5	22	22	20	14	16	12	26.73	.---	0.102	0.09	12.1	18.1	0.2145	0.141
2.5	30	29	27	18	20	16	16.37	---	0.100	0.1	7.41	12.1	0.3575	0.235
4.0	39	44	37	30	34	28	10.19	---	0.098	0.11	4.61	7.41	0.572	0.376
6.0	50	55	47	40	43	37	6.81	---	0.09	0.13	3.08	4.61	0.858	0.564
10	67	74	61	53	57	48	4.04	---	0.084	0.16	1.83	3.08	1.43	0.94
16	85	94	78	70	78	61	2.94	4.90	0.08	0.14	1.15	1.91	2.288	1.504
25	125	120	100	99	95	80	1.86	3.08	0.08	0.2	0.727	1.20	3.575	2.35
35	155	145	120	117	116	94	1.35	2.23	0.08	0.23	0.524	0.868	5.005	3.29
50	190	170	145	140	140	110	0.828	1.35	0.078	0.24	0.387	0.641	7.15	4.7
70	235	210	175	176	170	140	0.587	0.94	0.077	0.26	0.268	0.443	10.01	6.58
95	290	250	210	221	200	165	0.442	0.691	0.074	0.29	0.193	0.320	13.585	8.93
120	330	285	240	258	225	185	0.365	0.558	0.072	0.29	0.153	0.253	17.16	11.28
150	375	315	270	294	255	210	0.314	0.464	0.072	0.29	0.124	0.206	21.45	14.1
185	435	355	300	339	285	235	0.268	0.383	0.072	0.29	0.0991	0.164	26.455	17.39
240	510	410	350	402	325	270	0.229	0.31	0.072	0.31	0.0754	0.125	34.32	22.56
300	590	460	390	461	370	305	0.206	0.265	0.071	0.33	0.0601	0.100	42.9	28.2
400	670	520	440	542	435	350	0.191	0.230	0.07	0.33	0.0470	0.0778	57.2	37.6

3.5Core PVC Insulated Power Cable with Copper/Aluminium Conductor, Steel Wire Armoured (SWA), PVC Outer Sheath, 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors		Minimum Nos. of Strands in Conductor		Nominal Thickness of the PVC Insulation		Nominal Thickness of Inner Sheath/ Bedding	Nominal Diameter of Galvanised Steel Wire used in Armour	Nominal Thickness of the Outer Sheath	Approximate Overall Cable Diameter
Phase	Neutral	Cu	Al	Phase	Neutral				
(Sqmm)		(Nos)		(mm)		(mm)	(mm)	(mm)	(mm)
25	16	6	6	1.20	1.00	1.00	1.60	1.80	28.00
35	16	6	6	1.20	1.00	1.00	1.60	1.90	30.50
50	25	6	6	1.40	1.20	1.00	2.00	2.00	34.00
70	35	12	12	1.40	1.20	1.20	2.00	2.10	39.00
95	50	15	15	1.60	1.40	1.20	2.00	2.30	43.50
120	70	18	15	1.60	1.40	1.40	2.50	2.50	50.00
150	70	18	15	1.80	1.40	1.40	2.50	2.60	54.00
185	95	30	30	2.00	1.60	1.40	2.50	2.70	60.00
240	120	34	30	2.20	1.60	1.60	2.50	2.90	66.00
300	150	34	30	2.40	1.80	1.60	2.50	3.10	72.00
400	185	53	53	2.60	2.00	1.80	3.15	3.40	83.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance for Cable (APPROX)	Short Circuit Rating for 1 Sec.		Maximum DC Resistance at 20°C	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil							
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
25	105	115	97	78	90	66	1.75	2.89	0.083	0.42	2.875	1.9	0.727	1.20
35	128	140	120	99	110	80	1.26	2.09	0.082	0.48	4.025	2.66	0.524	0.868
50	165	155	150	130	120	115	0.828	1.35	0.082	0.49	5.75	3.8	0.387	0.641
70	205	190	175	155	140	135	0.587	0.94	0.076	0.56	8.05	5.32	0.268	0.443
95	245	220	200	190	175	155	0.442	0.691	0.076	0.58	10.925	7.22	0.193	0.320
120	280	250	220	220	195	170	0.365	0.558	0.075	0.63	13.8	9.12	0.153	0.253
150	320	280	245	250	220	190	0.314	0.464	0.074	0.63	17.25	11.4	0.124	0.206
185	370	305	260	290	240	210	0.268	0.383	0.074	0.64	21.275	14.06	0.0991	0.164
240	425	345	285	335	270	225	0.229	0.31	0.073	0.67	27.6	18.24	0.0754	0.125
300	475	375	310	380	295	245	0.206	0.265	0.072	0.68	34.5	22.8	0.0601	0.100
400	550	400	335	435	325	275	0.191	0.230	0.072	0.70	41.12	27.2	0.0470	0.0778

3.5Core XLPE Insulated Power Cable with Copper/Aluminium Conductor, Steel Wire Armoured (SWA), PVC Outer Sheath, 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors		Minimum Nos. of Strands in Conductor		Nominal Thickness of the XLPE Insulation		Nominal Thickness of Inner Sheath/ Bedding	Nominal Diameter of Galvanised Steel Wire used in Armour	Nominal Thickness of the Outer Sheath	Approximate Overall Cable Diameter
Phase	Neutral	Cu	Al	Phase	Neutral				
(Sqmm)		(Nos)		(mm)		(mm)	(mm)	(mm)	(mm)
25	16	6	6	0.90	0.70	1.00	1.60	1.80	26.00
35	16	6	6	0.90	0.70	1.00	1.60	1.90	29.00
50	25	6	6	1.00	0.90	1.00	1.60	1.90	31.00
70	35	12	12	1.10	0.90	1.20	2.00	2.10	37.00
95	50	15	15	1.10	1.00	1.20	2.00	2.20	40.00
120	70	18	15	1.20	1.10	1.20	2.00	2.40	46.00
150	70	18	15	1.40	1.10	1.40	2.50	2.50	51.00
185	95	30	30	1.60	1.10	1.40	2.50	2.70	57.00
240	120	34	30	1.70	1.20	1.60	2.50	2.90	63.00
300	150	34	30	1.80	1.40	1.60	2.50	3.00	68.00
400	185	53	53	2.00	1.60	1.60	3.15	3.30	77.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance for Cable (APPROX)	Maximum DC Resistance at 20°C		Short Circuit Rating for 1 Sec.	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil							
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
25	125	120	100	99	95	80	1.86	3.08	0.08	0.2	0.727	1.20	3.575	2.35
35	155	145	120	117	116	94	1.35	2.23	0.08	0.23	0.524	0.868	5.005	3.29
50	190	170	145	140	140	110	0.828	1.35	0.078	0.24	0.387	0.641	7.15	4.7
70	235	210	175	176	170	140	0.587	0.94	0.077	0.26	0.268	0.443	10.01	6.58
95	290	250	210	221	200	165	0.442	0.691	0.074	0.29	0.193	0.320	13.585	8.93
120	330	285	240	258	225	185	0.365	0.558	0.072	0.29	0.153	0.253	17.16	11.28
150	375	315	270	294	255	210	0.314	0.464	0.072	0.29	0.124	0.206	21.45	14.1
185	435	355	300	339	285	235	0.268	0.383	0.072	0.29	0.0991	0.164	26.455	17.39
240	510	410	350	402	325	270	0.229	0.31	0.072	0.31	0.0754	0.125	34.32	22.56
300	590	460	390	461	370	305	0.206	0.265	0.071	0.33	0.0601	0.100	42.9	28.2
400	670	520	440	542	435	350	0.191	0.230	0.07	0.33	0.0470	0.0778	57.2	37.6

3.5Core PVC Insulated Power Cable with Copper/Aluminium Conductor, UNARMOURED, PVC Outer Sheath, 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors		Minimum Nos. of Strands in Conductor		Nominal Thickness of the PVC Insulation		Nominal Thickness of Inner Sheath/ Bedding	Nominal Thickness of the Outer Sheath	Approximate Overall Cable Diameter
Phase	Neutral	Cu	Al	Phase	Neutral			
(Sqmm)		(Nos)		(mm)		(mm)	(mm)	(mm)
25	16	6	6	1.20	1.00	1.00	1.80	24.00
35	16	6	6	1.20	1.00	1.00	1.80	26.50
50	25	6	6	1.40	1.20	1.00	1.90	29.00
70	35	12	12	1.40	1.20	1.20	2.00	33.00
95	50	15	15	1.60	1.40	1.20	2.20	37.50
120	70	18	15	1.60	1.40	1.40	2.30	43.00
150	70	18	15	1.80	1.40	1.40	2.40	47.00
185	95	30	30	2.00	1.60	1.40	2.60	52.50
240	120	34	30	2.20	1.60	1.60	2.80	59.00
300	150	34	30	2.40	1.80	1.60	3.00	65.00
400	185	53	53	2.60	2.00	1.80	3.20	73.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance for Cable (APPROX)	Short Circuit Rating for 1 Sec.		Maximum DC Resistance at 20°C	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil							
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
Amps(A)	105	115	97	78	90	76	1.75	2.89	0.083	0.42	2.875	1.9	0.727	1.20
35	128	140	120	99	110	92	1.26	2.09	0.082	0.48	4.025	2.66	0.524	0.868
50	165	165	150	130	135	115	0.828	1.35	0.082	0.49	5.75	3.8	5.75	3.8
70	205	205	180	155	160	140	0.587	0.94	0.076	0.56	8.05	5.32	8.05	5.32
95	245	240	215	190	190	170	0.442	0.691	0.076	0.58	10.925	7.22	10.925	7.22
120	280	275	235	220	210	190	0.365	0.558	0.075	0.63	13.8	9.12	13.8	9.12
150	320	310	270	250	240	210	0.314	0.464	0.074	0.63	17.25	11.4	17.25	11.4
185	370	350	300	290	275	240	0.268	0.383	0.074	0.64	21.275	14.06	21.275	14.06
240	425	405	345	335	320	275	0.229	0.31	0.073	0.67	27.6	18.24	27.6	18.24
300	475	450	385	380	355	305	0.206	0.265	0.072	0.68	34.5	22.8	34.5	22.8
400	550	490	485	435	385	345	0.191	0.230	0.072	0.70	41.12	27.2	41.12	27.2

3.5Core XLPE Insulated Power Cable with Copper/Aluminium Conductor, UNARMOURED, PVC Outer Sheath, 600/1000V (1.1kV)

Physical Parameters

Nominal Cross Section Area of Conductors		Minimum Nos. of Strands in Conductor		Nominal Thickness of the XLPE Insulation		Nominal Thickness of Inner Sheath/ Bedding	Nominal Thickness of the Outer Sheath	Approximate Overall Cable Diameter
Phase	Neutral	Cu	Al	Phase	Neutral			
(Sqmm)		(Nos)		(mm)		(mm)	(mm)	(mm)
25	16	6	6	0.90	0.70	1.00	1.80	21.00
35	16	6	6	0.90	0.70	1.00	1.80	24.00
50	25	6	6	1.00	0.90	1.00	1.80	26.00
70	35	12	12	1.10	0.90	1.20	1.90	30.00
95	50	15	15	1.10	1.00	1.20	2.10	34.00
120	70	18	15	1.20	1.10	1.20	2.20	39.00
150	70	18	15	1.40	1.10	1.40	2.30	43.00
185	95	30	30	1.60	1.10	1.40	2.50	49.00
240	120	34	30	1.70	1.20	1.60	2.70	54.00
300	150	34	30	1.80	1.40	1.60	2.90	60.00
400	185	53	53	2.00	1.60	1.60	3.10	68.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance for Cable (APPROX)	Maximum DC Resistance at 20°C		Short Circuit Rating for 1 Sec.	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil							
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
25	125	120	100	99	95	80	1.86	3.08	0.08	0.2	0.727	1.20	3.575	2.35
35	155	145	120	117	116	94	1.35	2.23	0.08	0.23	0.524	0.868	5.005	3.29
50	190	170	145	140	140	110	0.828	1.35	0.078	0.24	0.387	0.641	7.15	4.7
70	235	210	175	176	170	140	0.587	0.94	0.077	0.26	0.268	0.443	10.01	6.58
95	290	250	210	221	200	165	0.442	0.691	0.074	0.29	0.193	0.320	13.585	8.93
120	330	285	240	258	225	185	0.365	0.558	0.072	0.29	0.153	0.253	17.16	11.28
150	375	315	270	294	255	210	0.314	0.464	0.072	0.29	0.124	0.206	21.45	14.1
185	435	355	300	339	285	235	0.268	0.383	0.072	0.29	0.0991	0.164	26.455	17.39
240	510	410	350	402	325	270	0.229	0.31	0.072	0.31	0.0754	0.125	34.32	22.56
300	590	460	390	461	370	305	0.206	0.265	0.071	0.33	0.0601	0.100	42.9	28.2
400	670	520	440	542	435	350	0.191	0.230	0.07	0.33	0.0470	0.0778	57.2	37.6

1Core PVC Insulated Power Cable with Copper/Aluminium Conductor, Aluminium Wire Armoured (AWA), PVC Outer Sheath, 1900/3300 V (3.3kV)

Physical Parameters

Nominal Cross Section Area of Conductors	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the PVC Insulation	Nominal Thickness of Inner Sheath/ Bedding	Nominal Diameter of Aluminium Wire used in Armour	Nominal Thickness of the Outer Sheath	Approximate Overall Cable Diameter
(Sqmm)	Copper	Aluminium	(mm)	(mm)	(mm)	(mm)	(mm)
50	6	6	2.20	0.80	1.25	1.60	20.50
70	12	12	2.20	0.80	1.25	1.60	22.00
95	15	15	2.20	1.00	1.60	1.70	25.00
120	18	15	2.20	1.00	1.60	1.70	26.50
150	18	15	2.20	1.00	1.60	1.80	28.00
185	30	30	2.20	1.00	1.60	1.80	29.50
240	34	30	2.20	1.00	1.60	1.90	32.50
300	34	30	2.40	1.00	1.60	1.90	35.00
400	53	53	2.60	1.20	2.00	2.10	39.50
500	53	53	2.80	1.20	2.00	2.10	43.00
630	53	53	2.80	1.20	2.00	2.20	47.00
800	53	53	2.80	1.40	2.50	2.40	53.00
1000	53	53	3.00	1.40	2.50	2.50	58.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance	Maximum DC Resistance at 20°C		Short Circuit Rating for 1 Sec.	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil							
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
50	165	155	150	130	120	115	0.828	1.35	0.11	1.03	0.387	0.641	5.75	3.8
70	205	190	175	155	140	135	0.587	0.94	0.103	1.21	0.268	0.443	8.05	5.32
95	245	220	200	190	175	155	0.442	0.691	0.101	1.27	0.193	0.320	10.925	7.22
120	280	250	220	220	195	170	0.365	0.558	0.098	1.42	0.153	0.253	13.8	9.12
150	320	280	245	250	220	190	0.314	0.464	0.094	1.42	0.124	0.206	17.25	11.4
185	370	305	260	290	240	210	0.268	0.383	0.092	1.44	0.0991	0.164	21.275	14.06
240	425	345	285	335	270	225	0.229	0.31	0.09	1.53	0.0754	0.125	27.6	18.24
300	475	375	310	380	295	245	0.206	0.265	0.088	1.56	0.0601	0.100	34.5	22.8
400	550	400	335	435	325	275	0.191	0.230	0.088	1.59	0.0470	0.0778	41.12	27.2
500	590	425	355	480	345	295	0.178	0.210	0.087	1.67	0.0366	0.0605	51.4	34
630	660	470	375	550	390	320	0.166	0.185	0.086	1.67	0.0283	0.0469	64.764	42.84
800	745	530	425	620	450	380	0.161	0.173	0.083	1.75	0.0221	0.0367	82.24	54.4
1000	870	590	470	700	500	415	0.156	0.163	0.082	1.94	0.0176	0.0291	102.8	68

1Core XLPE Insulated Power Cable with Copper/Aluminium Conductor, Aluminium Wire Armoured (AWA), PVC Outer Sheath, 1900/3300 V (3.3kV)

Physical Parameters

Nominal Cross Section Area of Conductors	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the XLPE Insulation	Nominal Thickness of Inner Sheath/ Bedding	Nominal Diameter of Aluminium Wire used in Armour	Nominal Thickness of the Outer Sheath	Approximate Overall Cable Diameter
(Sqmm)	Copper	Aluminium	(mm)	(mm)	(mm)	(mm)	(mm)
50	6	6	2.00	0.80	1.25	1.60	20.50
70	12	12	2.00	0.80	1.25	1.60	22.50
95	15	15	2.00	0.80	1.25	1.60	23.50
120	18	15	2.00	1.00	1.60	1.70	26.50
150	18	15	2.00	1.00	1.60	1.70	27.50
185	30	30	2.00	1.00	1.60	1.80	29.50
240	34	30	2.00	1.00	1.60	1.90	32.50
300	34	30	2.00	1.00	1.60	2.00	34.50
400	53	53	2.00	1.20	2.00	2.10	38.50
500	53	53	2.20	1.20	2.00	2.20	42.50
630	53	53	2.40	1.20	2.00	2.20	46.50
800	53	53	2.60	1.40	2.50	2.40	52.50
1000	53	53	2.80	1.40	2.50	2.50	57.50

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance	Maximum DC Resistance at 20°C		Short Circuit Rating for 1 Sec.	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil							
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
50	215	185	165	170	138	125	0.828	1.35	0.114	0.5	0.387	0.641	7.15	4.7
70	270	225	200	210	168	155	0.587	0.94	0.106	0.55	0.268	0.443	10.01	6.58
95	330	265	235	255	204	185	0.442	0.691	0.102	0.64	0.193	0.320	13.585	8.93
120	380	300	265	300	230	210	0.365	0.558	0.097	0.67	0.153	0.253	17.16	11.28
150	430	335	300	342	265	230	0.314	0.464	0.099	0.67	0.124	0.206	21.45	14.1
185	495	380	335	385	295	260	0.268	0.383	0.095	0.67	0.0991	0.164	26.455	17.39
240	590	435	385	450	340	300	0.229	0.31	0.093	0.72	0.0754	0.125	34.32	22.56
300	670	490	430	510	390	335	0.206	0.265	0.092	0.75	0.0601	0.100	42.9	28.2
400	780	550	480	605	450	380	0.191	0.230	0.090	0.75	0.0470	0.0778	57.2	37.6
500	900	610	530	700	500	430	0.178	0.210	0.089	0.77	0.0366	0.0605	71.5	47
630	1020	680	590	809	555	485	0.166	0.185	0.087	0.81	0.0283	0.0469	90.09	59.22
800	1140	740	630	935	825	530	0.161	0.173	0.086	0.88	0.0221	0.0367	114.4	75.2
1000	1250	780	660	1065	690	570	0.156	0.163	0.085	0.88	0.0176	0.0291	143	94

3Core PVC Insulated Power Cable with Copper/Aluminium Conductor, Steel Wire Armoured (SWA), PVC Outer Sheath, 1900/3300 V (3.3kV)

Physical Parameters

Nominal Cross Section Area of Conductors	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the PVC Insulation	Nominal Thickness of Inner Sheath/ Bedding	Nominal Diameter of Galvanised Steel Wire used in Armour	Nominal Thickness of the Outer Sheath	Approximate Overall Cable Diameter
(Sqmm)	Copper	Aluminium	(mm)	(mm)	(mm)	(mm)	(mm)
16	6	6	2.20	1.00	1.60	1.80	29.50
25	6	6	2.20	1.00	1.60	1.80	31.50
35	6	6	2.20	1.00	1.60	1.90	31.50
50	6	6	2.20	1.20	2.00	2.00	36.00
70	12	12	2.20	1.20	2.00	2.10	38.50
95	15	15	2.20	1.20	2.00	2.20	42.00
120	18	15	2.20	1.40	2.50	2.30	46.50
150	18	15	2.20	1.40	2.50	2.40	50.00
185	30	30	2.20	1.40	2.50	2.50	51.50
240	34	30	2.20	1.60	2.50	2.60	57.50
300	34	30	2.40	1.60	2.50	2.80	63.50
400	53	53	2.60	1.60	2.50	3.00	68.00

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance	Maximum DC Resistance at 20°C		Short Circuit Rating for 1 Sec.	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct								
	Single Core in Trefoil						Trefoil							
	Copper (Cu)			Aluminium (Al)			Cu	Al			Cu	Al	Cu	Al
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
16	78	90	75	59	70	52	2.77	4.60	0.086	0.40	1.84	1.216	1.15	1.91
25	105	115	97	78	90	66	1.75	2.89	0.083	0.42	2.875	1.9	0.727	1.20
35	128	140	120	99	110	80	1.26	2.09	0.082	0.48	4.025	2.66	0.524	0.868
50	165	155	150	130	120	115	0.828	1.35	0.11	1.03	0.387	0.641	5.75	3.8
70	205	190	175	155	140	135	0.587	0.94	0.103	1.21	0.268	0.443	8.05	5.32
95	245	220	200	190	175	155	0.442	0.691	0.101	1.27	0.193	0.320	10.925	7.22
120	280	250	220	220	195	170	0.365	0.558	0.098	1.42	0.153	0.253	13.8	9.12
150	320	280	245	250	220	190	0.314	0.464	0.094	1.42	0.124	0.206	17.25	11.4
185	370	305	260	290	240	210	0.268	0.383	0.092	1.44	0.0991	0.164	21.275	14.06
240	425	345	285	335	270	225	0.229	0.31	0.09	1.53	0.0754	0.125	27.6	18.24
300	475	375	310	380	295	245	0.206	0.265	0.088	1.56	0.0601	0.100	34.5	22.8
400	550	400	335	435	325	275	0.191	0.230	0.088	1.59	0.0470	0.0778	41.12	27.2
500	590	425	355	480	345	295	0.178	0.210	0.087	1.67	0.0366	0.0605	51.4	34
630	660	470	375	550	390	320	0.166	0.185	0.086	1.67	0.0283	0.0469	64.764	42.84
800	745	530	425	620	450	380	0.161	0.173	0.083	1.75	0.0221	0.0367	82.24	54.4
1000	870	590	470	700	500	415	0.156	0.163	0.082	1.94	0.0176	0.0291	102.8	68

3Core XLPE Insulated Power Cable with Copper/Aluminium Conductor, Steel Wire Armoured (SWA), PVC Outer Sheath, 1900/3300 V (3.3kV)

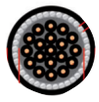
Physical Parameters

Nominal Cross Section Area of Conductors	Minimum Nos. of Strands in Conductor (Nos.)		Nominal Thickness of the XLPE Insulation	Nominal Thickness of Inner Sheath/ Bedding	Nominal Diameter of Galvanised Steel Wire used in Armour	Nominal Thickness of the Outer Sheath	Approximate Overall Cable Diameter
(Sqmm)	Copper	Aluminium	(mm)	(mm)	(mm)	(mm)	(mm)
16	6	6	2.00	1.00	1.60	1.80	28.50
25	6	6	2.00	1.00	1.60	1.80	31.50
35	6	6	2.00	1.00	1.60	1.90	30.50
50	6	6	2.00	1.20	2.00	2.00	34.50
70	12	12	2.00	1.20	2.00	2.10	37.50
95	15	15	2.00	1.20	2.00	2.20	40.50
120	18	15	2.00	1.40	2.50	2.30	45.50
150	18	15	2.00	1.40	2.50	2.40	48.50
185	30	30	2.00	1.40	2.50	2.50	50.50
240	34	30	2.00	1.60	2.50	2.60	56.50
300	34	30	2.00	1.60	2.50	2.70	61.50
400	53	53	2.00	1.60	2.50	2.90	64.50

Electrical Properties

Nominal Cross Section Area	Current Rating Amps(A)						Approx Voltage Drop of Single core cables		Reactance at 50 Hz	Capacitance	Maximum DC Resistance at 20°C		Short Circuit Rating for 1 Sec.	
	In Air	In Ground	In Duct	In Air	In Ground	In Duct	Trefoil				Cu	Al	Cu	Al
	Single Core in Trefoil													
	Copper (Cu)			Aluminium (Al)			Cu	Al						
(Sqmm)	Amps(A)						(V/A/KM)		(Ohm/KM)	(µF/KM)	(Ohm/KM)		kA(RMS)	
16	85	94	78	70	78	61	2.94	4.90	0.08	0.14	1.15	1.91	2.288	1.504
25	125	120	100	99	95	80	1.86	3.08	0.08	0.2	0.727	1.20	3.575	2.35
35	155	145	120	117	116	94	1.35	2.23	0.08	0.23	0.524	0.868	5.005	3.29
50	190	170	145	140	140	110	0.828	1.35	0.078	0.24	0.387	0.641	7.15	4.7
70	235	210	175	176	170	140	0.587	0.94	0.077	0.26	0.268	0.443	10.01	6.58
95	290	250	210	221	200	165	0.442	0.691	0.074	0.29	0.193	0.320	13.585	8.93
120	330	285	240	258	225	185	0.365	0.558	0.072	0.29	0.153	0.253	17.16	11.28
150	375	315	270	294	255	210	0.314	0.464	0.072	0.29	0.124	0.206	21.45	14.1
185	435	355	300	339	285	235	0.268	0.383	0.072	0.29	0.0991	0.164	26.455	17.39
240	510	410	350	402	325	270	0.229	0.31	0.072	0.31	0.0754	0.125	34.32	22.56
300	590	460	390	461	370	305	0.206	0.265	0.071	0.33	0.0601	0.100	42.9	28.2
400	670	520	440	542	435	350	0.191	0.230	0.07	0.33	0.0470	0.0778	57.2	37.6

PVC/XLPE Insulated Low Voltage Control Cables 600/1000V



1.5Sqmm PVC Insulated Multicore Control Cable with Copper Conductor, Galvanised Steel Wire (SWA), PVC Outer Sheath 600/1000V (1.1kV)

Physical Parameters

Nos. of Core in 1.5Sqmm Control Cable (Nos.)	Nominal Thickness of the PVC Insulation (mm)	Nominal Thickness of Inner Sheath/ Bedding (mm)	Nominal Diameter of Steel Wire Armour (mm)	Nominal Thickness of Outer Sheath (mm)		Approximate Overall Diameter of Cable (mm)		Current Carrying Capacity in Air (Amp)	Reactance of Cable at 50 Hz (Ohm/KM)	Short Circuit Rating of Cable for 1Second duration (kA RMS)	Maximum DC Resistance of Conductor at 20°C (Ohm/KM)
				Arm	Unarm	Arm	Unarm				
5	0.80	0.80	0.90	1.40	1.80	16.00	14.50	20	0.110	0.173	12.10
6	0.80	0.80	0.90	1.40	1.80	18.00	15.00	15	0.110	0.173	12.10
7	0.80	0.80	0.90	1.40	1.80	18.00	15.00	14	0.110	0.173	12.10
10	0.80	0.80	1.25	1.50	1.80	20.50	17.00	13	0.110	0.173	12.10
12	0.80	0.80	1.25	1.50	1.80	22.00	18.50	12	0.110	0.173	12.10
14	0.80	0.80	1.25	1.50	1.80	23.00	19.50	11	0.110	0.173	12.10
16	0.80	0.80	1.25	1.50	1.80	24.00	20.50	11	0.110	0.173	12.10
19	0.80	0.80	1.25	1.60	1.80	26.00	22.00	10	0.110	0.173	12.10
24	0.80	1.00	1.60	1.70	1.80	29.00	24.00	9	0.110	0.173	12.10
27	0.80	1.00	1.60	1.70	1.80	30.50	25.50	9	0.110	0.173	12.10
30	0.80	1.00	1.60	1.70	1.80	32.00	27.00	9	0.110	0.173	12.10
37	0.80	1.00	1.60	1.80	1.80	34.00	29.00	8	0.110	0.173	12.10
44	0.80	1.00	1.60	1.80	1.90	36.00	31.00	7	0.110	0.173	12.10
52	0.80	1.20	1.60	1.90	1.90	39.00	35.00	7	0.110	0.173	12.10
61	0.80	1.20	1.60	2.00	2.00	42.00	39.00	6	0.110	0.173	12.10

2.5Sqmm PVC Insulated Multicore Control Cable with Copper Conductor, Galvanised Steel Wire (SWA), PVC Outer Sheath 600/1000V (1.1kV)

Physical Parameters

Nos. of Core in 2.5Sqmm Control Cable (Nos.)	Nominal Thickness of the PVC Insulation (mm)	Nominal Thickness of Inner Sheath/ Bedding (mm)	Nominal Diameter of Steel Wire Armour (mm)	Nominal Thickness of Outer Sheath (mm)		Approximate Overall Diameter of Cable (mm)		Current Carrying Capacity in Air (Amp)	Reactance of Cable at 50 Hz (Ohm/KM)	Short Circuit Rating of Cable for 1Second duration (kA RMS)	Maximum DC Resistance of Conductor at 20°C (Ohm/KM)
				Arm	Unarm	Arm	Unarm				
5	0.80	0.80	0.90	1.50	1.80	17.50	15.50	27	0.107	0.288	7.41
6	0.80	0.80	1.25	1.50	1.80	18.50	16.50	18	0.107	0.288	7.41
7	0.80	0.80	1.25	1.50	1.80	19.00	17.00	17	0.107	0.288	7.41
10	0.80	0.80	1.25	1.60	1.80	23.00	19.00	15	0.107	0.288	7.41
12	0.80	0.80	1.25	1.70	1.80	24.00	21.00	14	0.107	0.288	7.41
14	0.80	0.80	1.25	1.70	1.80	25.00	22.00	13	0.107	0.288	7.41
16	0.80	0.80	1.25	1.70	1.80	26.00	23.00	12	0.107	0.288	7.41
19	0.80	1.00	1.60	1.80	2.00	30.00	25.50	12	0.107	0.288	7.41
24	0.80	1.00	1.60	1.80	2.00	32.00	27.50	11	0.107	0.288	7.41
27	0.80	1.00	1.60	1.80	2.00	33.50	29.00	10	0.107	0.288	7.41
30	0.80	1.00	1.60	1.80	2.00	34.00	30.50	10	0.107	0.288	7.41
37	0.80	1.00	2.00	1.90	2.00	37.00	33.00	9	0.107	0.288	7.41
44	0.80	1.20	2.00	1.90	2.00	40.00	35.50	9	0.107	0.288	7.41
52	0.80	1.20	2.00	2.10	2.20	43.00	39.00	8	0.107	0.288	7.41
61	0.80	1.40	2.00	2.20	2.20	47.00	42.00	8	0.107	0.288	7.41

PVC/XLPE Insulated Low Voltage Control Cables 600/1000V

1.5Sqmm XLPE Insulated Multicore Control Cable with Copper Conductor, Galvanised Steel Wire (SWA), PVC Outer Sheath 600/1000V (1.1kV)

Physical Parameters

Nos. of Core in 1.5Sqmm Control Cable	Nominal Thickness of the XLPE Insulation	Nominal Thickness of Inner Sheath/ Bedding	Nominal Diameter of Steel Wire Armour	Nominal Thickness of Outer Sheath (mm)		Approximate Overall Diameter of Cable (mm)		Current Carrying Capacity in Air	Reactance of Cable at 50 Hz	Short Circuit Rating of Cable for 1Second duration	Maximum DC Resistance of Conductor at 20°C
(Nos.)	(mm)	(mm)	(mm)	Arm	Unarm	Arm	Unarm	(Amp)	(Ohm/KM)	(kA RMS)	(Ohm/KM)
5	0.70	0.80	0.90	1.40	1.80	15.00	12	22	0.102	0.215	12.10
6	0.70	0.80	0.90	1.40	1.60	15.50	13	19	0.102	0.215	12.10
7	0.70	0.80	0.90	1.40	1.60	16.50	14	18	0.102	0.215	12.10
10	0.70	0.80	1.25	1.50	1.80	19.00	16	16	0.102	0.215	12.10
12	0.70	0.80	1.25	1.50	1.80	20.00	17	15	0.102	0.215	12.10
14	0.70	0.80	1.25	1.50	1.80	21.00	18	14	0.102	0.215	12.10
16	0.70	0.80	1.25	1.50	1.80	22.00	19	14	0.102	0.215	12.10
19	0.70	0.80	1.25	1.60	1.80	23.00	21	13	0.102	0.215	12.10
24	0.70	1.00	1.60	1.70	1.80	27.00	23	12	0.102	0.215	12.10
27	0.70	1.00	1.60	1.70	1.80	28.00	24	11	0.102	0.215	12.10
30	0.70	1.00	1.60	1.70	1.80	29.00	25	11	0.102	0.215	12.10
37	0.70	1.00	1.60	1.80	2.00	31.00	28	10	0.102	0.215	12.10
44	0.70	1.00	1.60	1.80	2.00	33.00	30	9	0.102	0.215	12.10
52	0.70	1.20	2.00	1.90	2.00	37.00	33	9	0.102	0.215	12.10
61	0.70	1.20	2.00	2.00	2.00	40.00	35	8	0.102	0.215	12.10

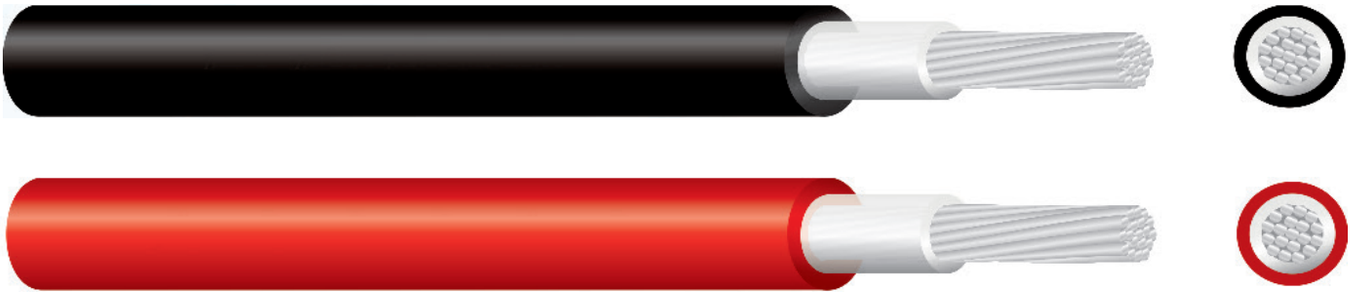
2.5Sqmm XLPE Insulated Multicore Control Cable with Copper Conductor, Galvanised Steel Wire (SWA), PVC Outer Sheath 600/1000V (1.1kV)

Physical Parameters

Nos. of Core in 2.5Sqmm Control Cable	Nominal Thickness of the XLPE Insulation	Nominal Thickness of Inner Sheath/ Bedding	Diameter of Steel Wire Armour	Nominal Thickness of Outer Sheath (mm)		Approximate Overall Diameter of Cable (mm)		Current Carrying Capacity in Air	Reactance of Cable at 50 Hz	Short Circuit Rating of Cable for 1Second duration	Maximum DC Resistance of Conductor at 20°C
(Nos.)	(mm)	(mm)	(mm)	Arm	Unarm	Arm	Unarm	(Amp)	(Ohm/KM)	W(kA RMS)	(Ohm/KM)
5	0.70	0.80	0.90	1.40	1.80	16.0	13.0	30	0.100	0.3575	7.41
6	0.70	0.80	0.90	1.40	1.80	16.6	15.6	26	0.100	0.3575	7.41
7	0.70	0.80	0.90	1.40	1.80	17.4	16.4	25	0.100	0.3575	7.41
10	0.70	0.80	1.25	1.60	1.80	20.7	18.6	21	0.100	0.3575	7.41
12	0.70	0.80	1.25	1.60	1.80	22.0	19.9	20	0.100	0.3575	7.41
14	0.70	0.80	1.25	1.60	1.80	23.2	21.1	19	0.100	0.3575	7.41
16	0.70	0.80	1.25	1.60	1.80	24.3	22.2	18	0.100	0.3575	7.41
19	0.70	0.80	1.25	1.70	1.80	26.0	23.7	17	0.100	0.3575	7.41
24	0.70	1.00	1.60	1.80	1.80	29.6	26.4	16	0.100	0.3575	7.41
27	0.70	1.00	1.60	1.80	1.80	30.9	27.7	16	0.100	0.3575	7.41
30	0.70	1.00	1.60	1.80	2.00	32.1	29.3	14	0.100	0.3575	7.41
37	0.70	1.00	1.60	1.80	2.00	34.6	31.8	13	0.100	0.3575	7.41
44	0.70	1.00	1.60	1.80	2.00	37.0	34.2	13	0.100	0.3575	7.41
52	0.70	1.20	2.00	1.80	2.00	40.6	37.0	12	0.100	0.3575	7.41
61	0.70	1.20	2.00	2.00	2.20	43.6	40.0	11	0.100	0.3575	7.41

Solar Cables

Solar PV Cables



Product Application: The Solar PVC Cables are suitable for the interconnection of Solar Photovoltaic panels and connections to the combiner boxes and AC/DC inverters and are suitable for both indoor and outdoor use. The complete range of Solar PV Cables is designed specifically for the connection of PV Panels and DC applications in compliance with the discrete Standards. The cables are suitable for installation in conduit or trunking systems and are not suitable for direct burial.

Product Standards: As per BS EN 50618, IEC 62930
Conductor Material: Tinned Copper
Conductor Type: Flexible Conductor (Class-5)
Conductor Shape: Round

CONDUCTOR INSULATION:
Insulation Material: Cross Linked Halogen Free & Flame-retardant compound

OUTER SHEATH:
Material: Cross Linked Halogen Free & Flame-retardant compound
Outer Sheath Identification: Red or Black

Range of Size & Core: 1.5Sqmm to 16Sqmm with Single Core
Range of Size: 1.5Sqmm to 16Sqmm
Ambient Temperature: -40°C to 90°C
Maximum Conductor Temperature: 40°C to 120°C
Voltage Rating: 1.5/ 1.5 kV DC
Voltage Test: 6500V as per EN 50395
Maximum Permissible Operating Voltage: DC 1.5kV (Conductor-Conductor, non-earthed system)
Nominal Voltage: AC-0.6/1.0 kV; DC-900/1.5 kV
Minimum Bending radius: 5 x Outer Diameter for fixed installation
Packaging Length: 100Mtr Coil or 500Mtr Drum or as per Customer's request

Overhead Conductors

Overhead Conductors

Aluminum Conductor Steel Reinforced (ACSR)

Product Application: Aluminium Conductors Steel-Reinforced (ACSR) is used in Medium, High and Extra-High voltage transmission lines. Apart from this, ACSR is also used for primary and secondary distribution lines.

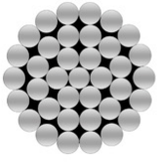
Product Standard: As per BS 215-2, SANS 182-3

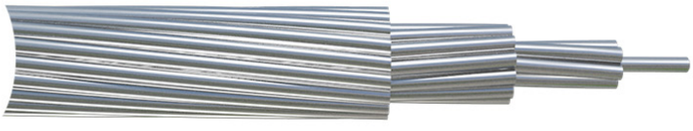
Conductor Construction: ACSR is composed of a concentric lay stranded conductor consisting of High Carbon Tensile Steel Galvanised core with one more layers of hard drawn stranded aluminium sires laid helically over the steel core. The Steel Core is responsible for providing the Mechanical Strength whereas the Aluminium Conductor is responsible for the conduction of current in the ACSR Conductors.

ACSR Code Name	Nominal Area of Cross Section (Sqmm)	Nos of Wires/Nominal Diameter of Wires (Nos./mm)		Approximate Overall Diameter of Conductor (mm)	Nominal Mass of ACSR Conductor (Kg/KM)	Maximum DC Resistance at 20°C (Ω/km)	Minimum Breaking Load (kN)
		Aluminium	Steel				
GOPHER	25	6/2.36	1/2.36	7.08	106	1.0930	9.61
WEASEL	30	6/2.59	1/2.59	7.77	128	0.9077	11.45
FERRET	40	6/3.00	1/3.00	9.00	172	0.6766	15.20
RABBIT	50	6/3.35	1/3.35	10.05	214	0.5426	18.35
HORSE	70	12/2.79	7/2.79	13.95	538	0.3936	61.20
DOG	100	6/4.72	7/1.57	14.15	394	0.2733	32.70
WOLF	150	30/2.59	7/2.59	18.13	726	0.1828	69.20
DINGO	150	18/3.35	1/3.35	16.75	506	0.1815	35.70
LYNX	175	30/2.79	7/2.79	19.53	842	0.1576	79.80
CARACAL	175	18/3.61	1/3.61	18.05	587	0.1563	41.10
PANTHER	200	30/3.00	7/3.00	21.00	974	0.1363	92.25
JAGUAR	200	18/3.86	1/3.86	19.30	671	0.1367	46.55
ZEBRA	400	54/3.18	7/3.18	28.62	1621	0.06740	131.90

ACSR Code Name	Nominal Area of Cross Section (Sqmm)	Nos of Wires/Nominal Diameter of Wires (Nos./mm)		Approximate Overall Diameter of Conductor (mm)	Nominal Mass of ACSR Conductor (Kg/KM)	Maximum DC Resistance at 20°C (Ω/km)	Minimum Breaking Load (kN)
		Aluminium	Steel				
SQUIRREL	20	6/2.11	1/2.11	6.39	85	1.3950	7.71
GOPHER	25	6/2.36	1/2.36	7.16	106	1.1160	9.61
FOX	35	6/2.79	1/2.79	8.45	148	0.7981	13.15
FERRET	40	6/3.00	1/3.00	9.09	172	0.6903	15.20
RABBIT	50	6/3.35	1/3.35	10.15	214	0.5534	18.40
MINK	60	6/3.66	1/3.66	11.09	255	0.4639	22.50
HARE	100	6/4.72	1/4.72	14.30	425	0.2788	36.54
DOG	100	6/4.72	7/1.57	14.29	394	0.2788	32.64
WOLF	150	30/2.59	7/2.59	18.31	726	0.1866	69.25
BEAR	250	30/3.35	7/3.35	23.69	1.214	0.1115	111.40
ZEBRA	400	54/3.18	7/3.18	28.91	1621	0.6878	131.90
DINOSAUR	660	54/3.95	19/2.37	35.94	2489	0.0445	205.50
ZEBRA	400	54/3.18	7/3.18	28.62	1621	0.0674	131.90

All Aluminium Conductor (AAC)





Product Application: Used as an Overhead Conductor for Power Distribution Lines.

Product Standard: As per BS 215-1, SANS 182-2

Conductor Construction: AAC is a concentric lay stranded conductor consisting of hard drawn aluminium wires in single layer and multi-layer construction

AAC Code Name	Nominal Area of Cross Section (Sqmm)	Nos of Wires/ Nominal Diameter of Wires (Nos./mm)	Approximate Overall Diameter of Conductor (mm)	Nominal Mass of AAC Conductor (Kg/KM)	Maximum DC Resistance at 20°C (Ω/km)	Minimum Breaking Load (kN)
MIDGE	22	7/2.06	6.18	64	1.2270	3.99
ANT	50	7/3.10	9.30	145	0.5419	8.28
FLY	60	7/3.40	10.20	174	0.4505	9.90
WASP	100	7/4.39	13.17	290	0.2702	16.0
HORNET	150	19/3.25	16.25	434	0.1825	25.70
CHAFER	200	19/3.78	18.90	587	0.1349	32.40
COCKROACH	250	19/4.22	21.10	731	0.1083	40.40
BUTTERFLY	300	19/4.65	23.25	888	0.0891	48.75
CENTIPEDE	400	37/3.78	26.46	1145	0.0694	63.10

Hard-Drawn Bare Copper Conductor (HDBC)

Product Application: Used in applications such as Overhead Transmission & Distribution networks, Transformer Earthing wherein the highest electrical conductivity per unit area and good strength to weight ratio are required.

Product Standard: As per BS 7884, SANS 182-1

Type of Conductor: Stranded (Class 2) Conductor as per SANS 1411-1

Conductor Construction: Conductor shall be concentric-lay and consisting of hard drawn copper wires in single layer and multi-layer construction.

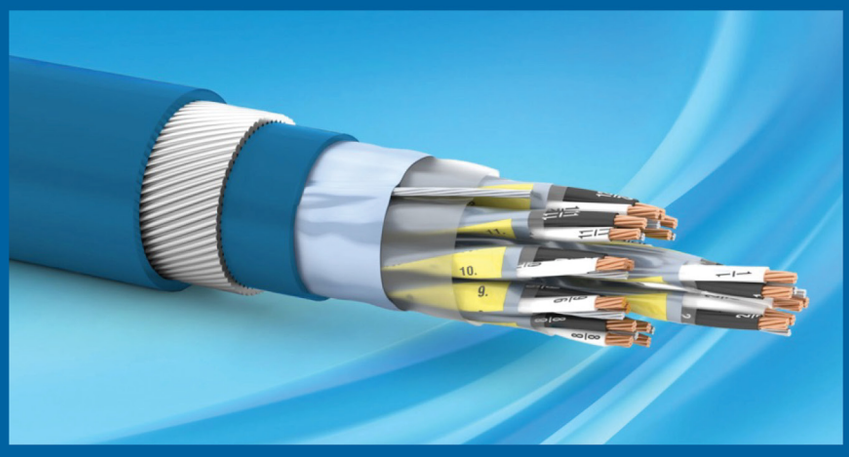
Nominal Area of Cross Section (Sqmm)	Nos. of Wires / Wire Size (Nos./mm)	Approximate Overall Diameter (mm)	Nominal Mass (Kg/KM)	Maximum DC Resistance of Conductor at 20°C (Ω/KM)	Minimum Breaking Load (kN)
10	7/1.35	4.05	89.82	1.8290	3.752
14	7/1.60	4.80	126.20	1.3030	5.267
16	3/2.65	5.70	148.30	1.1060	6.194
16	7/1.70	5.10	142.40	1.1540	5.946
25	7/2.10	6.30	217.30	0.75630	9.073
32	3/3.75	8.06	296.90	0.5520	12.400
32	7/2.46	7.38	298.20	12.442	12.442
35	7/2.50	7.50	308.00	0.53370	12.860
50	7/3.00	9.00	443.50	0.37060	18.520
50	19/1.80	9.00	435.80	0.38190	17.70
70	7/3.55	10.65	621.10	0.26460	25.93
70	19/2.10	10.50	593.20	0.28060	24.09
95	19/2.50	12.50	840.70	0.1980	34.14
100	7/4.30	12.90	911.20	0.1810	36.54
120	19/2.80	14.0	1055.00	0.15780	42.83
125	19/2.90	14.50	1131.00	0.14710	45.940
150	19/3.20	16.00	1377.00	0.12080	55.940
150	37/2.25	15.75	1334.00	0.12640	53.880
185	19/3.55	17.75	1695.00	0.09815	68.860
185	37/2.50	17.50	1647.00	0.10240	66.490

Products for Special Applications

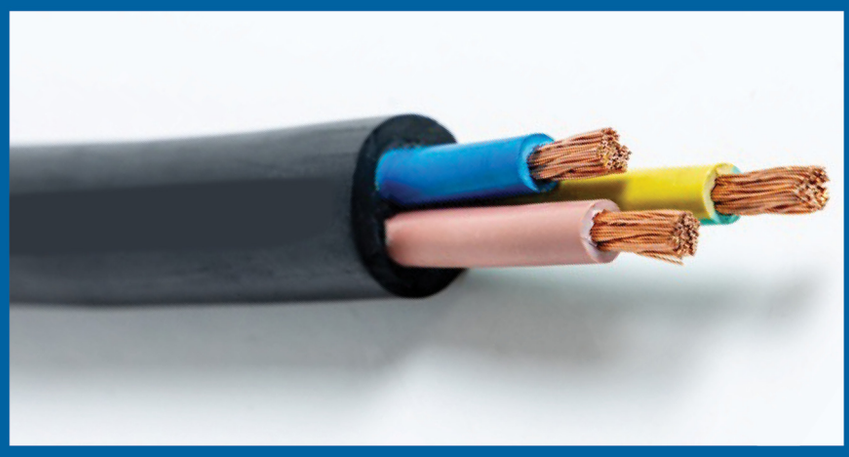
Uniflex has a unique strength of designing and manufacturing cables for special applications which includes the following:

Enamelled Copper Wires

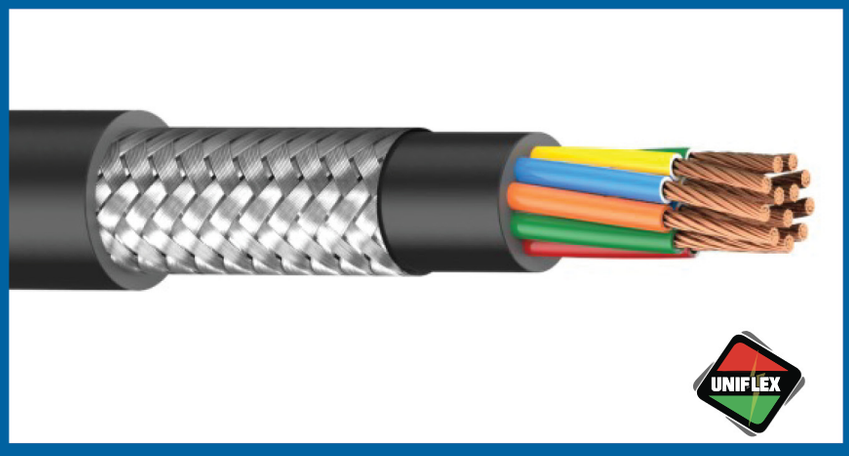
Instrumentation Cables



Nitrile Based Submersible Cables



Braiding Cables

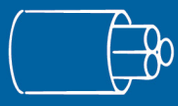


Unique Features of UNIFLEX Wires & Cables

High flame retardancy

Enhanced Layer of Insulation for better safety

99.999% pure copper



High conductivity of copper

High thermal stability

Smooth surface and hence increased easiness to be pulled easily in pipes during installation

Bunched conductor

High discoloration resistance capacity of copper conductors

High ageing property of PVC insulation

Better flexibility for easy wiring

100Meters assured seal

Notes

Notes

UNIFLEX WIRES AND CABLES LIMITED

Manufacturers of Copper Cables and Aluminium Conductors

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