HONREY CABLE

ELECTRIC POWER CABLE

HENAN HONREY CABLE CO., LTD.

COMPANY PROFILE

Honrey Cables, specialized in manufacturing and supplying extensive range of electrical cables for application in power transmission, power distribution, rail, petrochemical, mining, ports, airports, wholesale, construction and domestic building environments. We take pride in our ability to identify and satisfy customer needs through the development of innovative products coupled with unique, cost effective cabling solutions. This and our extensive project experience make us the supplier of choice for cable and special cable projects.

We can design and manufacture wires & cables according to the standards IEC, BS, DIN, ASTM, ICEA, JIS, NFC, AS/NZS, CSA, SANS etc.

Our products have been widely supplied to power utilities, electrical materials distributors and dealers, construction and engineering firms, electrical contractors or industrial companies all over the world, as well as Africa, Middle East, South-east Asia, South America, Central America, North America, Europe, Australia and so on.

We focus on customer's needs, and try our best to offer the best professional services, strive to meet the customers' needs. We pursue the aim of "quality, reputation and service first" and adhere to the trade principals of "equality and mutual benefits".

SABS

Permit to Apply Certification Mark

Subject to the provisions of the Standards Act, 2008 (Act 8 of 2008), the relevant regulations made thereunder and the permit conditions contained in the under mentioned schedules, this permit authorises

HENAN HONREY CABLE CO. LTD
HENAN, PROVINCE, PR OF CHINA

to apply the certification mark

SABS APPROVED

in respect of the mark specification

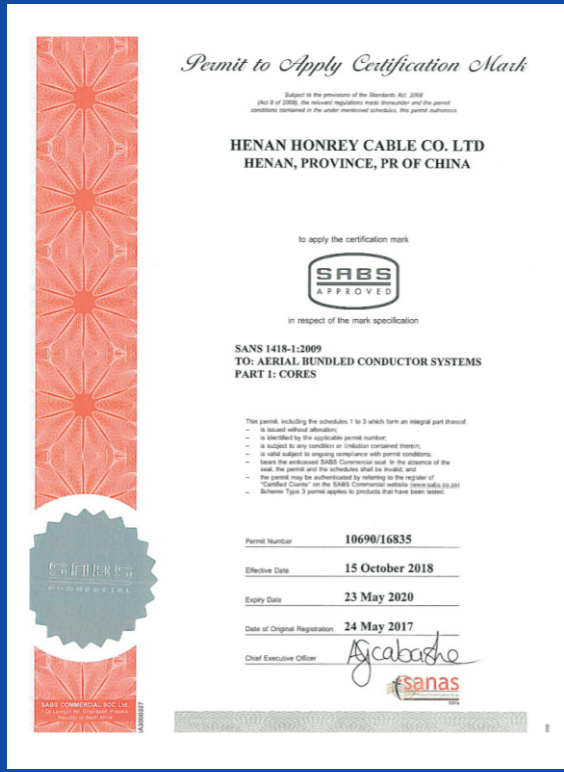
SANS 1418-1:2009
TO: AERIAL BUNDLED CONDUCTOR SYSTEMS
PART 1: CORES

This permit, including the schedules 1 to 3 which form an integral part thereof:
- is issued without alteration;
- is identified by the applicable permit number;
- is subject to any condition or limitation contained therein;
- is valid subject to ongoing compliance with permit conditions;
- bears the embossed SABS Commercial seal. In the absence of the seal, the permit and the schedules shall be invalid; and
- the permit may be authenticated by referring to the register of "Certified Clients" on the SABS Commercial website (www.sabs.co.za)
- Scheme Type 3 permit applies to products that have been tested.

Permit Number	10690/16835
Effective Date	15 October 2018
Expiry Date	23 May 2020
Date of Original Registration	24 May 2017
Chief Executive Officer	Ajcabashe

SABS COMMERCIAL SOC Ltd

sanas



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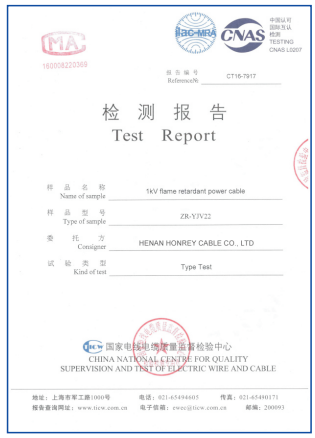
We will insist in specialized development strategy to look for the truth and be practical, and innovation. With the service objective that "our service is just as well as our quality", our company will insist in top-grade management, production of first-class products, offering tip top service and establishing firstclass enterprise.

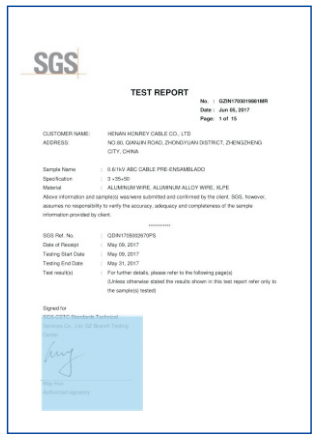
PRODUCTS SCOPE

· Overhead Aluminum Bare Conductor (AAC, AAAC, ACSR, ACAR, AACSR, ACSR/AW).
· Galvanized Steel Wire/Strand(GSW), Aluminum Clad Steel Wire/Strand(ACS).
· Aerial Bundled Cable 1kV-35kV(ABC overhead Cable, duplex, triplex, quadruplex service drop wire).
· PVC Insulated (Flexible) Wire and PVC Insulated and Sheathed (Armoured) Power Cable.
· Low, Medium, High Voltage (1kV-220kV) XLPE Insulated (Armoured) Power Cable.
· Rubber Cable, Welding Cable, Concentric Cable, Control Cable/Instrumental Cable.
· OPGW Cable, Fiber Optic Cable, Network Cable.


检 测 报 告
Test Report
1kV flame retardant power cable
ZR-YJV22
HENAN HONREY CABLE CO., LTD
Type Test
国家电线电缆质量监督检验中心
CHINA NATIONAL CENTRE FOR QUALITY SUPERVISION AND TEST OF ELECTRIC WIRE AND CABLE

检 测 报 告
Test Report
1kV XLPE Insulated Overhead Power Cable
JKLGYJ
ACSR Conductor XLPE Insulated Overhead Cable
HENAN HONREY CABLE CO., LTD
Type Test
国家电线电缆质量监督检验中心
CHINA NATIONAL CENTRE FOR QUALITY SUPERVISION AND TEST OF ELECTRIC WIRE AND CABLE

检 验 报 告
Test Report
钢芯铝绞线
Aluminium conductors, steel reinforced
ACSR/GA2 Bobolink
河南泓优电缆有限公司
Henan Honrey Cable Co., Ltd
型式试验
Type test
上海电缆研究所电工材料及特种线缆质检中心
QUALITY SUPERVISION AND TEST CENTER FOR ELECTRICAL MATERIALS AND SPECIAL WIRE AND CABLE OF SHANGHAI ELECTRIC CABLE RESEARCH INSTITUTE


SGS
TEST REPORT
No. : GZIN1703010661MR
Date : Jun 05, 2017
Page: 1 of 15
CUSTOMER NAME: HENAN HONREY CABLE CO., LTD
ADDRESS: NO 60, QINNUN ROAD, ZHONGYUAN DISTRICT, ZHENGZHENG CITY, CHINA
Sample Name 0.6/1kV ABC CABLE PRE-ENSAMBLADO
Specification 3 x35+50
Material ALUMINUM WIRE, ALUMINUM ALLOY WIRE, XLPE
Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.
SGS Ref. No. QDIN1705030705
Date of Receipt May 09, 2017
Testing Start Date May 09, 2017
Testing End Date May 31, 2017
Test result(s) For further details, please refer to the following page(s)
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)
Signed for
SGS CSTC Standards Technical Services Co., Ltd. GZ Branch Testing Centre
Title Hao
Authorized signatory

SGS
IND-F-INSP-PM-04-02
Inspection Order No.: IN-TJ-5801-13422
BOSS No.: 113432
Page No.: 1 of 6
Date of Issue: 2016-10-27
INSPECTION REPORT
(Non-negotiable)
-Description and Quantity of Commodity(As per Proforma Invoice): 35kV,ALTR,XLPE,CNESLLDPE Power Cable, 1/6Neutral, 1/35MCM/ 350Well
-Name & Address Of Buyer: Lucent AsiaMfg Inc
-Name & Address Of Seller: Henan Honrey Cable Co., Ltd. No.60, Qianjin Road, Zhongyuan District, Zhengzhou City, HENAN, CHINA.
-Inspection Date & Place: Oct.24-25, 2016 in Zhengzhou City, Henan Province, China
-Proforma Invoice No.: HRX161014 Date:Aug 14th,2016
-Nature Of Inspection:

Item	Comment
Packing and marking check	Subject to client's evaluation
Visual quality check	Acceptable
Witness Cable Structure test at mill	Subject to client's evaluation

-Inspector: Kevin Cui
-Reviewed by: Grace Chen
This is to report that we, SGS-CSTC (Tianjin) Co., Ltd. at the request of HenanHonreyCable Co., Ltd conducted the following inspection:
Instrument checklist
During the inspection, the following instrument calibration status has been checked for inspection

No.	MEASURING INSTRUMENT DESCRIPTION	CALIBRATION STATUS	CERTIFICATE NO.
1	Micrometer (ND.TJ-GF-08 0-25mm)	Effective	1403036
2	Micrometer (ND.TJ-GF-08 0-25mm)	Effective	1403035

Inspection Findings
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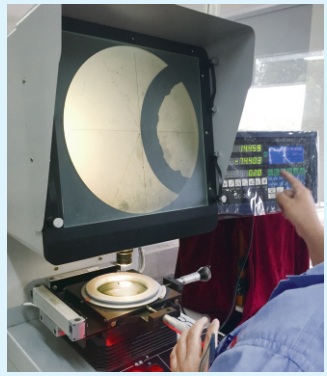
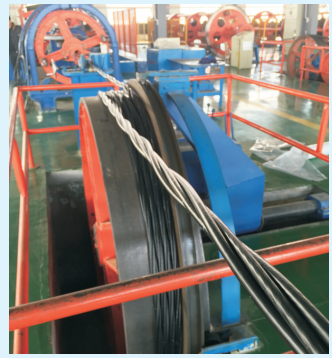
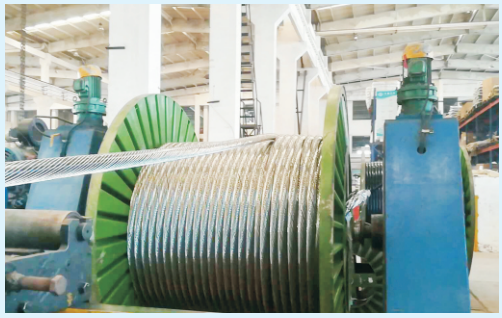
SGS-CSTC Standards Technical Services (Tianjin) Co., Ltd
SGS Mansion, No. 41 , The 9th Avenue, TEDA, Tianjin, China
T: +86(22) 65289000 F +86(22) 25280000
[V. 02 Jan.01st, 2012]
Member of the SGS Group (Société Générale de Surveillance)

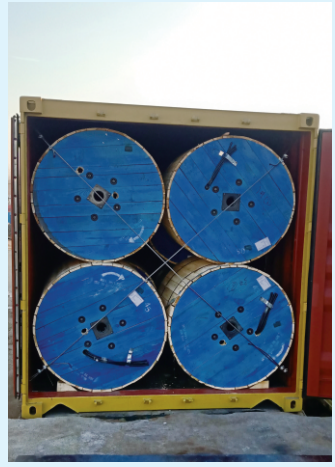
检 测 报 告
Test Report
1kV XLPE Insulated Overhead Power Cable
JKLGYJ
ACSR Conductor XLPE Insulated Overhead Cable
HENAN HONREY CABLE CO., LTD
Type Test
国家电线电缆质量监督检验中心
CHINA NATIONAL CENTRE FOR QUALITY SUPERVISION AND TEST OF ELECTRIC WIRE AND CABLE

FACTORY SIGHT









合格品区 A4

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- Voltage 8.7/15kV
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Low Voltage PVC/XLPE Insulated Power Cable

I Brief Introduction

DESCRIPTION

Single core and multicore cables with copper or aluminium conductors, XLPE insulated and PVC sheathed. Cables are rated 0.6/1 KV.

STANDARD

IEC502; SANS1507; CSA C22.2

CONSTRUCTION

- Conductor
  Plain circular or sector, solid or stranded, copper or aluminium conductors, per IEC:228 class 1 and 2.

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

- Armour
  For single core cables, a layer of aluminium wires applied concentrically over taped bedding. For multicore cables, galvanized steel tape or galvanized steel wires applied helically over PVC bedding.

- Assembly
  Two, three or four insulated cores are laid up and filled with non-hygroscopic material compatible with the insulation.

- Sheath
  PVC type ST2 to IEC 502, colour black.

- Colours for core identification
  Single core - red (black colour on request)
  Two cores - red and black
  Three cores - red, yellow and blue
  Four cores - red, yellow, blue and black

APPLICATION

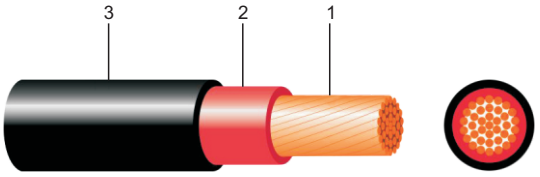
These cables have been designated for general purpose, including underground use where they are not likely to suffer mechanical damage.

Ⅱ Cable drawing

Unarmoured

SINGLE CORE

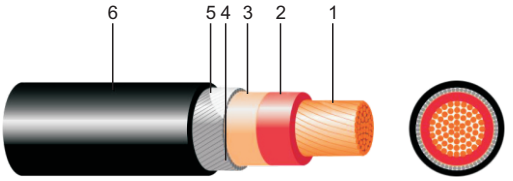
1. Stranded Conductor
2. XLPE Insulation
3. PVC Sheath



Armoured

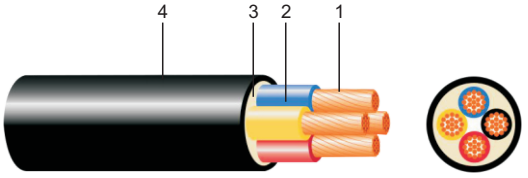
SINGLE CORE

1. Stranded Copper Conductor
2. XLPE Insulation
3. Bedding tape
4. Armour (AW)
5. Non-hygroscopic separation tape
6. PVC Sheath



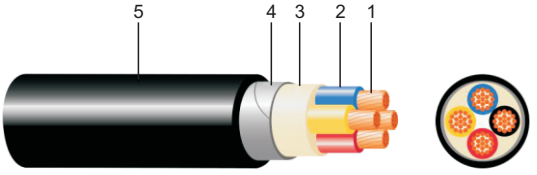
MULTICORE CIRCULAR STRANDED CONDUCTOR

1. Stranded Copper Conductor
2. XLPE Insulation
3. Extruded Bedding
4. PVC Sheath



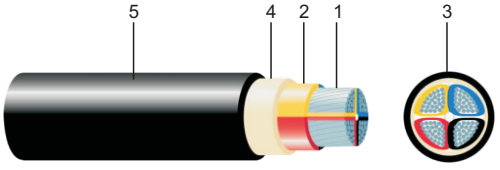
Steel Tape Armour

1. Stranded Copper Conductor
2. XLPE Insulation
3. Extruded Bedding
4. Double Steel Tape Armour
5. PVC Sheath



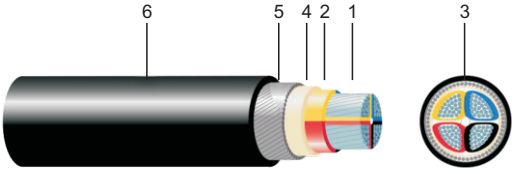
MULTICORE SECTORAL STRANDED CONDUCTOR

1. Sectoral Aluminium Conductor
2. XLPE Insulation
3. Centre Filler
4. Extruded bedding
5. PVC Sheath



MULTICORE SECTORAL STRANDED

1. Sectoral Aluminium Conductor
2. XLPE Insulation
3. Centre Filling
4. Extruded Bedding
5. Round Steel Wire Armour
6. PVC Sheath



Ⅲ Main technical Characteristics of Cable

A. D.C.Resistance: Conductor resistance of finished cable per kilometer at 20°C is not more than the following.

Nominal Cross Section mm²	1.5	2.5	4	6	10	16	25
Cu core Ohm/km	12.1	7.41	4.61	3.08	1.83	1.15	0.727
Al core Ohm/km	18.1	12.1	7.41	4.61	3.08	1.91	1.2
Nominal Cross Section mm²	35	50	70	95	120	150	185
Cu core Ohm/km	0.524	0.387	0.268	0.193	0.153	0.124	0.0991
Al core Ohm/km	0.868	0.641	0.443	0.32	0.253	0.206	0.164
Nominal Cross Section mm²	240	300	400	500	630	800	1000
Cu core Ohm/km	0.0754	0.06	0.047	0.0366	0.0283	0.0221	0.0176
Al core Ohm/km	0.125	0.10	0.0778	0.0605	0.0469	0.0367	0.0291

B. Voltagetest each drum of finished cable should withstand power frequency voltage 3.5kV for 5 minutes, the insulation is not breakdown.

C. Teston bunched cable under fire conditions.

Technical Specification: IEC60502 Standard

1) 0.6/1kV, Single Core, Cu or Al/XLPE/PVC Power Cable;
0.6/1kV, Single Core, Cu or Al/XLPE/PVC/AWA/PVC Power Cable;

Nominal Cross Section	Approx. Overall Diameter of Conductor	Nominal Thickness of XLPE Insulation	Nominal Thickness of PVC Inner Sheath	Diameter of Al Wires	Nominal Thickness of PVC Outer Sheath		Approx.Overall Diameter		Cu Conductor		Al Conductor	
			AWA	AWA	UnAr	AWA	UnAr	AWA	UnAr	AWA	UnAr	AWA
mm^2	mm	mm	mm	mm	mm	mm	mm	mm	kg/km	kg/km	kg/km	kg/km
1.5	1.6	0.7	—	—	1.4	—	5.7	—	44	—	—	—
2.5	2.0	0.7	—	—	1.4	—	6.2	—	57	—	—	—
4	2.6	0.7	—	—	1.4	—	6.7	—	74	—	—	—
6	3.1	0.7	—	—	1.4	—	7.3	—	96	—	—	—
10	3.8	0.7	1.0	0.8	1.4	1.4	7.9	12.4	134	235	74	175
16	4.8	0.7	1.0	0.8	1.4	1.4	8.9	13.4	196	307	99	209
25	6.0	0.9	1.0	0.8	1.4	1.4	10.6	15.1	289	417	139	267
35	7.1	0.9	1.0	0.8	1.4	1.4	11.7	16.2	382	522	172	309
50	8.4	1.0	1.0	1.25	1.4	1.5	13.2	18.7	503	710	220	427
70	10.0	1.1	1.0	1.25	1.4	1.5	15.0	20.5	702	936	293	522
95	11.7	1.1	1.0	1.25	1.5	1.5	16.8	22.4	950	1209	384	638
120	13.3	1.2	1.0	1.6	1.5	1.6	18.6	25.1	1186	1531	469	806
150	14.5	1.4	1.0	1.6	1.5	1.6	20.4	26.7	1458	1820	567	923
185	16.4	1.6	1.0	1.6	1.5	1.7	22.7	29.2	1810	2219	698	1105
240	18.7	1.7	1.0	1.6	1.6	1.8	25.4	31.9	2348	2802	889	1335
300	20.4	1.8	1.0	1.6	1.7	1.8	27.4	33.7	2917	3393	1091	1568
400	23.2	2.0	1.2	2.0	1.8	2.0	30.9	38.5	3713	4377	1379	2043
500	26.4	2.2	1.2	2.0	1.9	2.1	34.7	42.3	4770	5512	1767	2510
630	30.0	2.4	1.2	2.0	2.1	2.2	39.1	46.5	6105	6914	2248	3058
800	34.0	2.6	1.4	2.5	2.2	2.4	43.6	52.6	7893	9008	2867	3981
1000	41.4	2.8	1.4	2.5	2.3	2.5	51.6	60.8	10189	11524	3690	5025

Note: $1.5mm^2$ to $6mm^2$ are normal round stranded conductor, $10mm^2$ to $800mm^2$ are compact round condctor.
$1000m^2$ should be compact round segments conductor.
UnAr: Unarmoured/AWA: Aluminum Wire Amoured
Only the halogen free cables shall be generally complied with IEC61034 and 60754.

2) 0.6/1kV, Two Cores, Cu or Al/XLPE/PVC Power Cable;
0.6/1kV, Two Cores, Cu or Al/XLPE/PVC/STA/PVC Power Cable;
0.6/1kV, Two Cores, Cu or Al/XLPE/PVC/SWA/PVC Power Cable;

Nominal Cross Section	Approx. Overall Diameter of Conductor	Nominal Thickness of XLPE Insulation	Nominal Thickness of PVC Inner Sheath		Thickness of Steel Tape or Diameter of Steel Wire		Thickness of PVC Outer Sheath			Approx.Overall Diameter			Approx. Weight					
													Cu Conductor			Al Conductor		
			STA	SWA	STA	SWA	UnAr	STA	SWA	UnAr	STA	SWA	UnAr	STA	SWA	UnAr	STA	SWA
mm^2	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg/km	kg/km	kg/km	kg/km	kg/km	kg/km
1.5	1.6	0.7	1.2	1.0	0.2	0.8	1.7	1.5	1.7	10.2	13.0	14.7	110	227	325	—	—	—
2.5	2.0	0.7	1.2	1.0	0.2	0.8	1.7	1.5	1.7	11.2	14.0	15.7	142	270	378	—	—	—
4	2.6	0.7	1.2	1.0	0.2	0.8	1.7	1.5	1.7	12.2	15.0	16.7	181	321	438	—	—	—
6	3.1	0.7	1.2	1.0	0.2	0.8	1.7	1.5	1.7	13.4	16.2	17.9	233	386	516	—	—	—
10	3.8	0.7	1.2	1.0	0.2	1.3	1.7	1.5	1.7	14.8	17.6	20.2	315	483	763	194	363	643
16	4.8	0.7	1.2	1.0	0.2	1.3	1.7	1.5	1.7	16.9	19.6	22.3	455	646	963	259	450	767
25	6.0	0.9	1.2	1.0	0.2	1.6	1.7	1.5	1.7	20.2	23.0	26.3	646	892	1413	363	591	1112
35	7.1	0.9	1.2	1.0	0.2	1.6	1.7	1.5	1.7	22.5	25.2	28.6	857	1110	1682	434	683	1242
50	8.4	1.0	1.2	1.0	0.2	1.6	1.7	1.5	1.7	25.6	28.3	31.7	1123	1411	2061	555	838	1474
70	10.0	1.1	1.2	1.0	0.2	1.6	1.7	1.6	1.9	22.7	25.6	29.1	1427	1692	2295	591	836	1382
95	11.7	1.1	1.2	1.2	0.2	2.0	1.9	1.7	2.0	25.8	28.6	33.3	1935	2222	3132	782	1050	1914
120	13.3	1.2	1.2	1.2	0.5	2.0	2.0	1.9	2.1	29.2	33.6	36.7	2431	3072	3777	971	1573	2226
150	14.5	1.4	1.3	1.2	0.5	2.0	2.1	2.0	2.2	31.9	36.5	39.3	2984	3696	4450	1171	1845	2545
185	16.4	1.6	1.3	1.4	0.5	2.5	2.2	2.1	2.4	36.5	41.2	45.4	3721	4545	5840	1461	2246	3442
240	18.7	1.7	1.4	1.4	0.5	2.5	2.4	2.2	2.5	41.3	46.0	50.3	4841	5770	7190	1924	2852	4272
300	20.4	1.8	1.5	1.5	0.5	2.5	2.5	2.4	2.6	44.7	49.6	53.8	6023	7041	8575	2363	3381	4915

3) 0.6/1kV, Three Cores, Cu or Al/XLPE/PVC Power Cable;
0.6/1kV, Three Cores, Cu or Al/XLPE/PVC/STA/PVC Power Cable;
0.6/1kV, Three Cores, Cu or Al/XLPE/PVC/SWA/PVC Power Cable;

Nominal Cross Section	Approx. Overall Diameter of Conductor	Nominal Thickness of XLPE Insulation	Nominal Thickness of PVC Inner Sheath		Thickness of Steel Tape or Diameter of Steel Wire		Thickness of PVC Outer Sheath			Approx.Overall Diameter			Approx. Weight					
													Cu Conductor			Al Conductor		
			STA	SWA	STA	SWA	UnAr	STA	SWA	UnAr	STA	SWA	UnAr	STA	SWA	UnAr	STA	SWA
mm^2	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg/km	kg/km	kg/km	kg/km	kg/km	kg/km
1.5	1.6	0.7	1.2	1.0	0.2	0.8	1.7	1.5	1.7	10.7	13.5	15.2	130	253	355	—	—	—
2.5	2.0	0.7	1.2	1.0	0.2	0.8	1.7	1.5	1.7	11.7	14.5	16.2	173	308	420	—	—	—
4	2.6	0.7	1.2	1.0	0.2	0.8	1.7	1.5	1.7	12.9	15.7	17.4	227	374	500	—	—	—
6	3.1	0.7	1.2	1.0	0.2	0.8	1.7	1.5	1.7	14.1	16.9	18.6	297	458	596	—	—	—
10	3.8	0.7	1.2	1.0	0.2	1.25	1.7	1.5	1.7	15.7	18.4	21.1	413	591	886	236	414	709
16	4.8	0.7	1.2	1.0	0.2	1.25	1.7	1.5	1.7	17.9	20.7	23.3	609	811	1142	314	517	847
25	6.0	0.9	1.2	1.0	0.2	1.6	1.7	1.5	1.7	21.5	24.3	27.6	903	1145	1691	451	694	1240
35	7.1	0.9	1.2	1.0	0.2	1.6	1.7	1.5	1.7	23.9	26.7	30.0	1187	1456	2068	550	814	1413
50	8.4	1.0	1.2	1.0	0.2	1.6	1.7	1.6	1.8	27.3	30.2	33.6	1563	1881	2571	712	1025	1701
70	10.0	1.1	1.2	1.2	0.2	2.0	1.8	1.7	1.9	26.4	29.4	33.9	2097	2403	3321	849	1133	1981
95	11.7	1.1	1.2	1.2	0.5	2.0	1.9	2.0	2.2	29.8	34.6	37.6	2834	3517	4238	1111	1751	2420
120	13.3	1.2	1.3	1.4	0.5	2.5	2.0	2.0	2.3	33.2	38.2	42.4	3560	4332	5510	1377	2105	3226
150	14.5	1.4	1.3	1.4	0.5	2.5	2.2	2.0	2.4	37.9	42.5	46.9	4406	5247	6577	1693	2492	3762
185	16.4	1.6	1.4	1.4	0.5	2.5	2.3	2.2	2.5	42.9	47.8	52.1	5491	6476	7960	2109	3050	4473
240	18.7	1.7	1.5	1.5	0.5	2.5	2.4	2.4	2.6	48.0	53.1	57.4	7144	8261	9914	2707	3779	5368
300	20.4	1.8	1.5	1.5	0.5	2.5	2.6	2.5	2.8	52.5	57.5	61.8	8903	10119	11914	3337	4508	6235

Note: $1.5mm^2$ to $6mm^2$ are normal round stranded conductor, $10mm^2$ to $50mm^2$ are compact round condctor.
Above $70m^2$ are compact semicircle conductor.
UnAr: Unarmoured/STA: Double Steel Tape Armoured/SWA: Galvanized Steel Wire Amoured
Only the halogen free cables shall be generally complied with IEC61034 and 60754.

Medium Voltage XLPE Insulated Power Cable

Ⅰ Brief Introduction

DESCRIPTION

Circular stranded compacted copper conductor, XLPE insulated, with copper wire or copper tape screen and PVC outer sheath. Complies with IEC 502.

CONSTRUCTION

- Conductor
  Plain circular compacted copper conductor to IEC 228 class 2. Aluminium conductor available on request.
- Conductor Screen
  Extruded semiconductive compound.
- Insulation Screen (non-metallic part)
  Graphite layer covered with semiconductive tape(s) or extruded layer of semiconductive compound firmly bonded to insulation. Semiconductive compound easy strippable from insulation available on request.
- Insulation
  XLPE (cross-linked polyethylene) rated 90°C.
- Insulation Screen (metallic part)
  Copper wires screen or copper tape screen.
- Outer Sheath
  PVC type ST2 to IEC 502 colour red (black on request). Special PVC formulations with flame retardant and/or anti-termite properties available on request. Low smoke halogen free sheaths available on request.

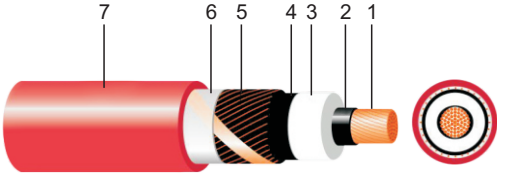
APPLICATION

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

Ⅱ Cable drawing

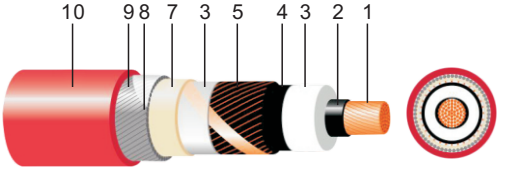
XLPE INSULATED SINGLE CORE UN-ARMOURED CABLE
WITH COPPER CONDUCTOR

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



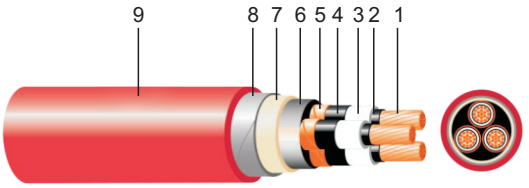
XLPE INSULATED SINGLE CORE ARMOURED CABLE
WITH COPPER CONDUCTOR (Aluminium wire armoured)

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



XLPE INSULATED THREE CORECABLE
WITH COPPER CONDUCTOR

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



Ⅲ Main Technical Characteristics

D.C Resistance: D.C Resistance of finished cable at 20°C per km is not more than the following.

Nominal CrossSection mm²	25	35	50	70	95	120	150	185	240	300
Cu core Ohm/km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601
Al core Ohm/km	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100

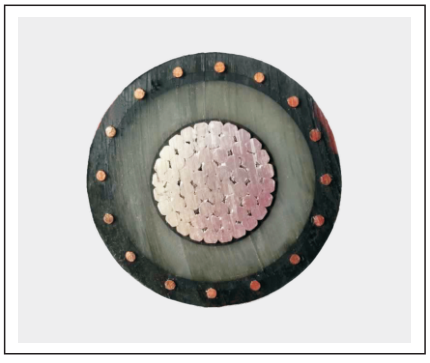
Nominal Cross Section mm²	400	500	630	800	1000	1200	1400	1600	1800	2000
Cu core Ohm/km	0.0470	0.0366	0.0283	0.0221	0.0176	0.0151	0.0123	0.0108	0.0096	0.0086
Al core Ohm/km	0.0778	0.0605	0.0469	0.0367	0.0291	0.0247	0.0202	0.0177	0.0157	0.0141

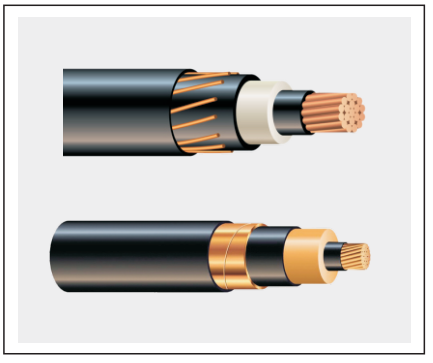
Voltage Test and Partial Discharge Test

Rated Voltage U_0/U kV		0.6/1	1	1.8/3	3/3	3.6/6	6/6 6/10	8.7/10 8.7/15	12/20	18/20 18/30	21/35	26/35
Voltage Test	TestVoltage kV	3.5	4.5	6.5	9.5	11	15	22	30	45	53	65
	Test Time min	5	5	5	5	5	5	5	5	5	5	5
Partial Discharge Test	Test Voltage kV	-	-	-	-	6.3	10.4	15.1	20.8	31.2	36.4	45
	DischargeCapacity<PC	-	-	-	-	20	20	20	20	20	10	10

Ⅳ Service Conditions and Parameter

Max.Conductor Operating Temperature: 90°C
Short Circuit Temperature: 250°C Not more than 5 seconds
Environmental temperature of operating: In air: 40°C
Underground: 25°C
Depth of laying in direct: 80cm
Thermal Resistance of soil: 100°C.cm/W





Technical Specification: IEC60502 Standard

1) 3.6/6(7.2)kV, 3.6/6.6(7.2)kV, Single Core, Al or Cu/XLPE/CTS/PVC Unarmoured Power Cable

Normal Cross Section of Conductor	Normal Diameter of Conductor	Normal Thickness of Insulation	Normal Thickness of Copper Tape	Normal Thickness of Outer Sheath	Approx. OverallDia.	Approx. Net Weight		Max. D.C. Resistance of Conductor at 20℃	
						Al Conductor	Cu Conductor	Al Conductor	Cu Conductor
mm^2	mm	mm	mm	mm	mm	kg/m	kg/m	Ω/km	Ω/km
25	6.0	2.5	0.12	1.5	17.6	0.34	0.49	1.2000	0.7270
35	7.0	2.5	0.12	1.5	18.5	0.39	0.60	0.8680	0.5240
50	8.3	2.5	0.12	1.6	20.0	0.46	0.74	0.6410	0.3870
70	9.7	2.5	0.12	1.6	21.5	0.55	0.96	0.4430	0.2680
95	11.3	2.5	0.12	1.7	23.3	0.66	1.23	0.3200	0.1930
120	13	2.5	0.12	1.7	24.8	0.77	1.48	0.2530	0.1530
150	14.6	2.5	0.12	1.8	26.4	0.87	1.77	0.2060	0.1240
185	15.9	2.5	0.12	1.8	28.1	1.01	2.13	0.1640	0.0991
240	18.3	2.6	0.12	1.9	30.9	1.23	2.71	0.1250	0.0754
300	20.4	2.8	0.12	2.0	33.6	1.48	3.32	0.1000	0.0601
400	23.2	3.0	0.12	2.1	37.0	1.81	4.16	0.0778	0.0470
500	26.4	3.2	0.12	2.2	41.1	2.24	5.27	0.0605	0.0366
630	30.1	3.2	0.12	2.3	45.0	2.73	6.62	0.0469	0.0283

2) 6/10(12)kV, 6.35/11(12)kV, Single Core, Al or Cu/XLPE/CTS/PVC Unarmoured Power Cable

Normal Cross Section of Conductor	Normal Diameter of Conductor	Normal Thickness of Insulation	Normal Thickness of Copper Tape	Normal Thickness of Outer Sheath	Approx. OverallDia.	Approx. Net Weight		Max. D.C. Resistance of Conductor at 20℃	
						Al Conductor	Cu Conductor	Al Conductor	Cu Conductor
mm^2	mm	mm	mm	mm	mm	kg/m	kg/m	Ω/km	Ω/km
25	6.0	3.4	0.12	1.5	19.4	0.40	0.55	1.2000	0.7270
35	6.9	3.4	0.12	1.6	20.5	0.45	0.66	0.8680	0.5240
50	8.2	3.4	0.12	1.6	21.8	0.52	0.80	0.6410	0.3870
70	9.7	3.4	0.12	1.7	23.5	0.62	1.03	0.4430	0.2680
95	11.3	3.4	0.12	1.7	25.1	0.73	1.30	0.3200	0.1930
120	12.8	3.4	0.12	1.8	26.8	0.85	1.56	0.2530	0.1530
150	14.2	3.4	0.12	1.8	28.2	0.95	1.85	0.2060	0.1240
185	15.9	3.4	0.12	1.9	30.1	1.10	2.22	0.1640	0.0991
240	18.3	3.4	0.12	2.0	32.7	1.33	2.80	0.1250	0.0754
300	20.4	3.4	0.12	2.0	34.8	1.54	3.39	0.1000	0.0601
400	23.2	3.4	0.12	2.2	38.0	1.87	4.22	0.0778	0.0470
500	26.4	3.4	0.12	2.2	41.5	2.26	5.29	0.0605	0.0366
630	30.1	3.4	0.12	2.4	45.6	2.78	6.67	0.0469	0.0283

3) 8.7/10(15)kV, Single Core, Al or Cu/XLPE/CTS/PVC Unarmoured Power Cable

Normal Cross Section of Conductor	Normal Diameter of Conductor	Normal Thickness of Insulation	Normal Thickness of Copper Tape	Normal Thickness of Outer Sheath	Approx. OverallDia.	Approx. Net Weight		Max. D.C. Resistance of Conductor at 20℃	
						Al Conductor	Cu Conductor	Al Conductor	Cu Conductor
mm^2	mm	mm	mm	mm	mm	kg/m	kg/m	Ω/km	Ω/km
25	6.0	4.5	0.12	1.6	21.8	0.48	0.63	1.2000	0.7270
35	6.9	4.5	0.12	1.7	22.9	0.54	0.75	0.8680	0.5240
50	8.2	4.5	0.12	1.7	24.2	0.61	0.89	0.6410	0.3870
70	9.7	4.5	0.12	1.8	25.9	0.72	1.13	0.4430	0.2680
95	11.3	4.5	0.12	1.8	27.5	0.84	1.40	0.3200	0.1930
120	12.8	4.5	0.12	1.9	29.2	0.96	1.67	0.2530	0.1530
150	14.2	4.5	0.12	1.9	30.6	1.06	1.96	0.2060	0.1240
185	15.9	4.5	0.12	2.0	32.5	1.22	2.34	0.1640	0.0991
240	18.3	4.5	0.12	2.1	35.1	1.46	2.93	0.1250	0.0754
300	20.4	4.5	0.12	2.1	37.2	1.68	3.52	0.1000	0.0601
400	23.2	4.5	0.12	2.2	40.2	2.00	4.35	0.0778	0.0470
500	26.4	4.5	0.12	2.3	43.9	2.43	5.45	0.0605	0.0366
630	30.1	4.5	0.12	2.4	47.8	2.93	6.83	0.0469	0.0283

4) 12/20(24)kV, 12.7/22(24)kV, Single Core, Al or Cu/XLPE/CTS/PVC Unarmoured Power Cable

Normal Cross Section of Conductor	Normal Diameter of Conductor	Normal Thickness of Insulation	Normal Thickness of Copper Tape	Normal Thickness of Outer Sheath	Approx. OverallDia.	Approx. Net Weight		Max. D.C. Resistance of Conductor at 20℃	
						Al Conductor	Cu Conductor	Al Conductor	Cu Conductor
mm^2	mm	mm	mm	mm	mm	kg/m	kg/m	Ω/km	Ω/km
25									
35	6.9	5.5	0.12	1.7	24.9	0.62	0.83	0.8680	0.5240
50	8.2	5.5	0.12	1.8	26.4	0.70	0.98	0.6410	0.3870
70	9.7	5.5	0.12	1.8	27.9	0.80	1.21	0.4430	0.2680
95	11.3	5.5	0.12	1.9	29.7	0.94	1.50	0.3200	0.1930
120	12.8	5.5	0.12	1.9	31.2	1.05	1.77	0.2530	0.1530
150	14.2	5.5	0.12	2.0	32.8	1.17	2.07	0.2060	0.1240
185	15.9	5.5	0.12	2.0	34.5	1.33	2.45	0.1640	0.0991
240	18.3	5.5	0.12	2.1	37.1	1.57	3.04	0.1250	0.0754
300	20.4	5.5	0.12	2.2	39.4	1.81	3.66	0.1000	0.0601
400	23.2	5.5	0.12	2.3	42.4	2.14	4.49	0.0778	0.0470
500	26.4	5.5	0.12	2.4	46.1	2.58	5.61	0.0605	0.0366
630	30.1	5.5	0.12	2.4	49.8	3.10	6.99	0.0469	0.0283

5) 18/30(36)kV, 19/33(36)kV, Single Core, Al or Cu/XLPE/CTS/PVC Unarmoured Power Cable

Normal Cross Section of Conductor	Normal Diameter of Conductor	Normal Thickness of Insulation	Normal Thickness of Copper Tape	Normal Thickness of Outer Sheath	Approx. OverallDia.	Approx. Net Weight		Max. D.C. Resistance of Conductor at 20℃	
						Al Conductor	Cu Conductor	Al Conductor	Cu Conductor
mm^2	mm	mm	mm	mm	mm	kg/m	kg/m	Ω/km	Ω/km
25									
35									
50	8.2	8.0	0.12	2.0	31.8	0.95	1.23	0.6410	0.3870
70	9.7	8.0	0.12	2.0	33.3	1.07	1.47	0.4430	0.2680
95	11.3	8.0	0.12	2.1	35.1	1.21	1.78	0.3200	0.1930
120	12.8	8.0	0.12	2.1	36.6	1.34	2.05	0.2530	0.1530
150	14.2	8.0	0.12	2.2	38.2	1.47	2.37	0.2060	0.1240
185	15.9	8.0	0.12	2.2	39.9	1.64	2.76	0.1640	0.0991
240	18.3	8.0	0.12	2.3	42.5	1.90	3.37	0.1250	0.0754
300	20.4	8.0	0.12	2.4	44.8	2.16	4.01	0.1000	0.0601
400	23.2	8.0	0.12	2.4	47.6	2.52	4.87	0.0778	0.0470
500	26.4	8.0	0.12	2.5	51.3	2.98	6.01	0.0605	0.0366
630	30.1	8.0	0.12	2.6	55.2	3.54	7.43	0.0469	0.0283

6) 3.6/6(7.2)kV, 3.6/6.6(7.2)kV, Three Cores, Al or Cu/XLPE/CTS/PVC Unarmoured Power Cable

Normal Cross Section of Conductor	Normal Diameter of Conductor	Normal Thickness of Insulation	Normal Thickness of Copper Tape	Normal Thickness of Outer Sheath	Approx. OverallDia.	Approx. Net Weight		Max. D.C. Resistance of Conductor at 20℃	
						Al Conductor	Cu Conductor	Al Conductor	Cu Conductor
mm^2	mm	mm	mm	mm	mm	kg/m	kg/m	Ω/km	Ω/km
25	6.0	2.5	0.1	2.0	34.6	1.13	1.58	1.2000	0.7270
35	6.9	2.5	0.1	2.1	36.8	1.29	1.92	0.8680	0.5240
50	8.2	2.5	0.1	2.2	39.8	1.51	2.36	0.6410	0.3870
70	9.7	2.5	0.1	2.3	43.2	1.81	3.04	0.4430	0.2680
95	11.3	2.5	0.1	2.4	46.9	2.17	3.87	0.3200	0.1930
120	12.8	2.5	0.1	2.4	50.1	2.53	4.69	0.2530	0.1530
150	14.2	2.5	0.1	2.5	53.3	2.90	5.60	0.2060	0.1240
185	15.9	2.5	0.1	2.6	57.2	3.40	6.77	0.1640	0.0991
240	18.3	2.6	0.1	2.8	63.2	4.12	8.55	0.1250	0.0754
300	20.4	2.8	0.1	3.0	69.0	4.89	10.46	0.1000	0.0601
400	23.2	3.0	0.1	3.4	76.7	6.10	13.18	0.0778	0.0470
500	26.4	3.2	0.1	3.6	85.7	8.10	16.55	0.0605	0.0366

7) 6/10(12)kV, 6.35/11(12)kV, Three Cores, Al or Cu/XLPE/CTS/PVC Unarmoured Power Cable

Normal Cross Section of Conductor	Normal Diameter of Conductor	Normal Thickness of Insulation	Normal Thickness of Copper Tape	Normal Thickness of Outer Sheath	Approx. OverallDia.	Approx. Net Weight		Max. D.C. Resistance of Conductor at 20℃	
						Al Conductor	Cu Conductor	Al Conductor	Cu Conductor
mm^2	mm	mm	mm	mm	mm	kg/m	kg/m	Ω/km	Ω/km
25	6.0	3.4	0.1	2.1	38.7	1.30	1.75	1.2000	0.7270
35	6.9	3.4	0.1	2.2	40.9	1.47	2.22	0.8680	0.5240
50	8.2	3.4	0.1	2.3	43.9	1.70	2.50	0.6410	0.3870
70	9.7	3.4	0.1	2.4	47.3	2.02	3.25	0.4430	0.2680
95	11.3	3.4	0.1	2.5	51.0	2.42	4.12	0.3200	0.1930
120	12.8	3.4	0.1	2.6	54.4	2.79	4.95	0.2530	0.1530
150	14.2	3.4	0.1	2.7	57.6	3.17	5.87	0.2060	0.1240
185	15.9	3.4	0.1	2.8	61.5	3.69	7.06	0.1640	0.0991
240	18.3	3.4	0.1	2.9	66.9	4.38	8.82	0.1250	0.0754
300	20.4	3.4	0.1	3.1	71.8	5.11	10.68	0.1000	0.0601
400	23.2	3.4	0.1	3.3	78.3	6.24	13.32	0.0778	0.0470
500	26.4	3.4	0.1	3.5	86.4	7.63	16.50	0.0605	0.0366

8) 8.7/10(15)kV, Three Cores, Al or Cu/XLPE/CTS/PVC Unarmoured Power Cable

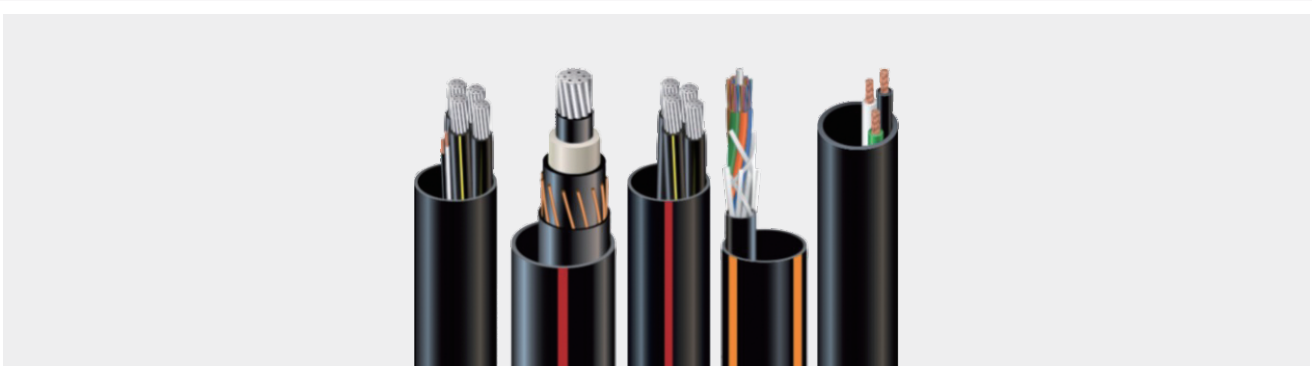
Normal Cross Section of Conductor	Normal Diameter of Conductor	Normal Thickness of Insulation	Normal Thickness of Copper Tape	Normal Thickness of Outer Sheath	Approx. OverallDia.	Approx. Net Weight		Max. D.C. Resistance of Conductor at 20℃	
						Al Conductor	Cu Conductor	Al Conductor	Cu Conductor
mm^2	mm	mm	mm	mm	mm	kg/m	kg/m	Ω/km	Ω/km
25	6.0	4.5	0.1	2.3	43.9	1.57	2.02	0.9270	0.7270
35	6.9	4.5	0.1	2.4	46.0	1.75	2.38	0.6680	0.5240
50	8.2	4.5	0.1	2.4	48.8	2.00	2.85	0.4936	0.3870
70	9.7	4.5	0.1	2.5	52.3	2.34	3.57	0.3420	0.2680
95	11.3	4.5	0.1	2.6	55.9	2.75	4.45	0.2464	0.1930
120	12.8	4.5	0.1	2.7	59.4	3.16	5.32	0.1955	0.1530
150	14.2	4.5	0.1	2.8	62.6	3.57	6.27	0.1587	0.1240
185	15.9	4.5	0.1	2.9	66.4	4.07	7.45	0.1271	0.0991
240	18.3	4.5	0.1	3.1	72.0	4.82	9.25	0.0976	0.0754
300	20.4	4.5	0.1	3.3	77.0	5.71	11.28	0.0778	0.0601
400	23.2	4.5	0.1	3.4	83.2	6.78	13.86	0.0615	0.0470
500	26.4	4.5	0.1	3.5	91.1	8.20	17.32	0.0487	0.0366

9) 12/20(24)kV, 12.7/22(24)kV, Three Cores, Al or Cu/XLPE/CTS/PVC Unarmoured Power Cable

Normal Cross Section of Conductor	Normal Diameter of Conductor	Normal Thickness of Insulation	Normal Thickness of Copper Tape	Normal Thickness of Outer Sheath	Approx. OverallDia.	Approx. Net Weight		Max. D.C. Resistance of Conductor at 20℃	
						Al Conductor	Cu Conductor	Al Conductor	Cu Conductor
mm^2	mm	mm	mm^2	mm	mm	kg/m	kg/m	Ω/km	Ω/km
25	–								
35	6.9	5.5	0.1	2.4	50.3	2.00	2.63	0.8680	0.6680
50	8.2	5.5	0.1	2.5	53.3	2.26	3.11	0.6410	0.4936
70	9.7	5.5	0.1	2.6	56.8	2.62	3.85	0.4430	0.3420
95	11.3	5.5	0.1	2.8	60.6	3.07	4.77	0.3200	0.2464
120	12.8	5.5	0.1	2.9	64.1	3.49	5.65	0.2530	0.1955
150	14.2	5.5	0.1	3.0	67.3	3.91	6.61	0.2060	0.1587
185	15.9	5.5	0.1	3.1	71.2	4.44	7.81	0.1640	0.1271
240	18.3	5.5	0.1	3.3	76.8	5.21	9.64	0.1250	0.0976
300	20.4	5.5	0.1	3.3	81.3	6.10	11.66	0.1000	0.0778
400	23.2	5.5	0.1	3.5	87.7	7.20	14.28	0.0778	0.0615
500	26.4	5.5	0.1	3.8	96.0	9.15	17.80	0.0605	0.0487

10) 18/30(36)kV,19/33(36)kV,Three Cores, Al or Cu/XLPE/CTS/PVC Unarmoured Power Cable

Normal Cross Section of Conductor	Normal Diameter of Conductor	Normal Thickness of Insulation	Normal Thickness of Copper Tape	Normal Thickness of Outer Sheath	Approx. OverallDia.	Approx. Net Weight		Max. D.C. Resistance of Conductor at 20℃	
						Al Conductor	Cu Conductor	Al Conductor	Cu Conductor
mm^2	mm	mm	mm	mm	mm	kg/m	kg/m	Ω/km	Ω/km
25									
35									
50	8.2	8.0	0.1	2.9	64.9	3.02	3.87	0.6410	0.4936
70	9.7	8.0	0.1	3.0	68.4	3.42	4.65	0.4430	0.3420
95	11.3	8.0	0.1	3.1	72.0	3.89	5.59	0.3200	0.2464
120	12.8	8.0	0.1	3.3	75.7	4.39	6.54	0.2530	0.1955
150	14.2	8.0	0.1	3.3	78.7	4.85	7.55	0.2060	0.1587
185	15.9	8.0	0.1	3.4	82.6	5.42	8.79	0.1640	0.1271
240	18.3	8.0	0.1	3.5	88.0	6.22	10.66	0.1250	0.0976
300	20.4	8.0	0.1	3.7	92.9	7.20	12.77	0.1000	0.0778
400	23.2	8.0	0.1	3.9	99.3	8.38	15.46	0.0778	0.0615
500	26.4	8.0	0.1	4.2	107.6	10.15	18.85	0.0605	0.0487



Concentric Neutral Underground Distribution 15-46 kV

Ⅰ Brief Introduction

DESCRIPTION

Cross-linked semi-conducting conductor shield, insulation and semi-conducting insulationshield are extruded over a solid or stranded aluminum or copper conductor and cured in asingle operation. Uncoated copper neutral wires(helically applied) and extruded-to-fill blackjacket are applied over the cable core.

CONSTRUCTION

- Conductor
  Class B concentric lay stranded compact annealed uncoated copper or compact 3/4 to fullhard 1350 aluminum (all sizes). The stranded conductors are longitudinally water blocked (STRANDFILL) and tested in accordance with ICEA T-31-610.

- Conductor Shield
  Extruded semi-conducting thermosetting polymeric stress control layer.

- Insulation
  Extruded, unfilled Tree Retardant Cross-linked Polyethylene (TRXLPE), or EPR Rubber.
  100% INSULATION LEVEL OR 133% INSULATION LEVEL

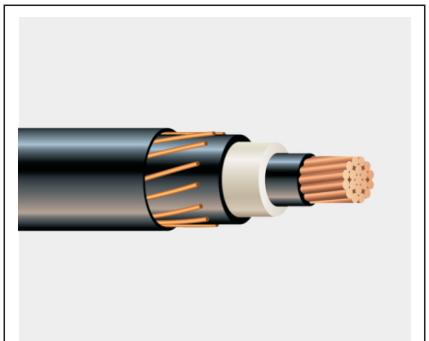
- Standard
  ANSI/ICEA S-94-649, AEIC CS8;
  CSA C68.5

- Insulation Shield
  Extruded semi-conducting thermosetting layer,clean and free stripping from insulation.

- Metallic Shield
  Helically applied, annealed, solid bare copper wires sized.

- Jacket
  Black, non-conducting, sunlight-resistantLinear Low-Density Polyethylene (LLDPE) extruded-to-fill spaces between neutral wires.
  Three extruded red stripes are incorporated into the cable jacket to provide vidual identification of a jacketed power cable.

Ⅱ Cable drawing



Concentric Neutral Underground Distribution Cable 15-46 kV

15kV Copper Conductor TRXLPE/EPR Insulation Concentric Neutral LLDPE Jacket

COPPER UNDERGROUND DISTRIBUTION CABLE - 15 kV - TYPE URD - FULL NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Cu Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
4.45 mm (175 mils) NOMINAL TRXLPE INSULATION - 100% INSULATION LEVEL													
2	7	16	14	16.6	18.4	21.3	24.1	1.4	305	317	996	240	175
1	19	20	14	17.4	19.2	22.1	24.9	1.4	385	396	1166	275	200
1/0	19	26	14	18.3	20.1	23.1	25.9	1.4	485	515	1398	315	225
2/0	19	20	12	19.4	21.1	24.9	27.7	1.4	612	628	1688	360	255
3/0	19	26	12	20.5	22.3	26.1	28.9	1.4	771	817	2050	410	295
4/0	19	32	12	21.9	23.6	27.5	30.3	1.4	972	1006	2457	465	330

COPPER UNDERGROUND DISTRIBUTION CABLE - 15 kV - TYPE UD - 1/3 NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Cu Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
4.45 mm (175 mils) NOMINAL TRXLPE INSULATION - 100% INSULATION LEVEL													
2	7	9	16	16.6	18.4	20.7	23.5	1.4	305	112	790	230	200
1	19	11	16	17.4	19.2	21.5	24.3	1.4	385	137	910	265	225
1/0	19	9	14	18.3	20.1	23.1	25.9	1.4	485	178	1096	300	255
2/0	19	11	14	19.4	21.1	24.1	26.9	1.4	612	218	1286	340	290
3/0	19	14	14	20.5	22.3	25.3	28.1	1.4	771	278	1531	385	325
4/0	19	18	14	21.9	23.6	26.6	29.4	1.4	972	357	1839	435	360
250	37	21	14	23.2	25.0	27.9	30.7	1.4	1149	417	2106	475	385
350	37	18	12	25.7	27.4	31.2	34.0	1.4	1609	566	2808	555	440
500	37	26	12	28.7	31.0	34.8	37.6	1.4	2298	818	3842	635	485
750	61	25	10	33.3	35.6	40.4	44.5	2.0	3447	1250	5666	710	540
1000	61	32	10	37.1	39.4	44.3	18.4	2.0	4596	1601	7257	760	585

Concentric Neutral Underground Distribution Cable 15-46 kV

15kV Aluminum Conductor TRXLPE/EPR Insulation Concentric Neutral LLDPE Jacket

ALUMINUM UNDERGROUND DISTRIBUTION CABLE - 15 kV - TYPE URD - FULL NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Al Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
4.45 mm (175 mils) NOMINAL TRXLPE INSULATION - 100% INSULATION LEVEL													
2	1	10	14	16.4	18.1	21.1	23.9	1.4	91	198	665	190	130
2	7	10	14	16.6	18.4	21.3	24.1	1.4	93	198	677	190	130
1	1	13	14	17.1	18.9	21.9	24.7	1.4	115	258	762	215	150
1	19	13	14	17.4	19.2	22.1	24.9	1.4	117	258	774	215	150
1/0	1	16	14	18.1	19.8	22.8	25.6	1.4	145	317	870	240	170
1/0	19	16	14	18.3	20.1	23.1	25.9	1.4	147	317	883	240	170
2/0	19	20	14	19.4	21.1	24.1	26.9	1.4	186	397	1020	275	195
3/0	19	16	12	20.5	22.3	26.1	28.9	1.4	235	503	1233	315	220
4/0	19	20	12	21.9	23.6	27.5	30.3	1.4	296	629	1444	360	250

ALUMINUM UNDERGROUND DISTRIBUTION CABLE - 15kV - TYPE UD - 1/3 NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Al Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
4.45 mm (175 mils) NOMINAL TRXLPE INSULATION - 100% INSULATION LEVEL													
2	1	7	16	16.4	18.1	20.4	23.2	1.4	91	87	543	170	130
2	7	7	16	16.6	18.4	20.7	23.5	1.4	93	87	555	170	130
1	1	8	16	17.1	18.9	21.2	24.0	1.4	115	100	598	195	150
1	19	8	16	17.4	19.2	21.5	24.3	1.4	117	100	609	195	150
1/0	1	9	16	18.1	19.8	22.1	24.9	1.4	145	112	660	225	170
1/0	19	9	16	18.3	20.1	22.4	25.2	1.4	147	112	675	225	170
2/0	19	11	16	19.4	21.1	23.4	26.2	1.4	186	137	763	255	200
3/0	19	9	14	20.5	22.3	25.3	28.1	1.4	235	179	906	290	225
4/0	19	11	14	21.9	23.6	26.6	29.4	1.4	296	218	1039	330	255
250	37	14	14	23.2	25.0	27.9	30.7	1.4	349	278	1181	365	280
350	37	18	14	25.7	27.4	30.4	33.2	1.4	490	357	1459	440	340
500	37	25	14	28.7	31.0	33.9	36.7	1.4	697	496	1906	530	420
750	61	24	12	33.3	35.6	39.4	43.4	2.0	1047	755	2755	640	210
1000	61	31	12	37.1	39.4	43.2	47.3	2.0	1394	976	3530	730	595

Concentric Neutral Underground Distribution Cable 15-46 kV

15kV Copper Conductor TRXLPE/EPR Insulation Concentric Neutral LLDPE Jacket

COPPER UNDERGROUND DISTRIBUTION CABLE - 15 kV - TYPE URD - FULL NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Cu Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
5.59 mm (220 mils) NOMINAL TRXLPE INSULATION - 133% INSULATION LEVEL													
2	7	16	14	18.9	20.7	23.6	26.4	1.4	305	317	1082	240	175
1	19	20	14	19.7	21.5	24.4	27.2	1.4	385	396	1254	275	200
1/0	19	26	14	20.6	22.4	25.3	28.1	1.4	485	516	1489	315	225
2/0	19	20	12	21.6	23.4	37.2	30.0	1.4	612	629	1785	360	255
3/0	19	26	12	22.8	24.6	28.4	31.2	1.4	771	818	2152	410	295
4/0	19	32	12	24.2	25.9	29.7	32.5	1.4	972	1006	2563	465	330

COPPER UNDERGROUND DISTRIBUTION CABLE - 15 kV - TYPE UD - 1/3 NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Cu Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
5.59 mm (220 mils) NOMINAL TRXLPE INSULATION - 133% INSULATION LEVEL													
2	7	9	16	18.9	20.7	23.0	25.8	1.4	305	112	873	230	200
1	19	11	16	19.7	21.5	23.7	26.5	1.4	385	137	996	265	225
1/0	19	9	14	20.6	22.4	25.3	28.1	1.4	485	178	1187	300	255
2/0	19	11	14	21.6	23.4	26.4	29.2	1.4	612	218	1380	340	290
3/0	19	14	14	22.8	24.6	27.6	30.4	1.4	771	278	1629	385	325
4/0	19	18	14	24.2	25.9	28.9	31.7	1.4	972	357	1941	435	360
250	37	21	14	25.5	27.3	30.2	33.0	1.4	1149	417	2213	475	385
350	37	18	12	27.9	30.2	34.0	36.8	1.4	1609	566	2959	555	440
500	37	26	12	31.0	33.3	37.1	39.9	1.4	2298	818	3973	635	485
750	61	25	10	35.6	37.8	42.7	46.8	2.0	3447	1250	5820	710	540
1000	61	32	10	39.4	42.5	47.3	51.4	2.0	4596	1601	7493	760	585

Concentric Neutral Underground Distribution Cable 15-46 kV

15kV Aluminum Conductor TRXLPE/EPR Insulation Concentric Neutral LLDPE Jacket

ALUMINUM UNDERGROUND DISTRIBUTION CABLE - 15 kV - TYPE URD - FULL NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Al Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
5.59 mm (220 mils) NOMINAL TRXLPE INSULATION - 133% INSULATION LEVEL													
2	1	10	14	18.6	20.4	23.4	26.2	1.4	91	198	750	190	130
2	7	10	14	18.9	20.7	23.6	26.4	1.4	93	198	763	190	130
1	1	13	14	19.4	21.2	24.2	26.9	1.4	115	258	850	215	150
1	19	13	14	19.7	21.5	24.4	27.2	1.4	117	258	862	215	150
1/0	1	16	14	20.3	22.1	25.1	27.9	1.4	145	317	960	240	170
1/0	19	16	14	20.6	22.4	25.3	28.1	1.4	147	317	974	240	170
2/0	19	20	14	21.6	23.4	26.4	29.2	1.4	186	397	1114	275	195
3/0	19	16	12	22.8	24.6	28.4	31.2	1.4	235	503	1334	315	220
4/0	19	20	12	24.2	25.9	29.7	32.5	1.4	296	629	1549	360	250

ALUMINUM UNDERGROUND DISTRIBUTION CABLE - 15 kV - TYPE UD - 1/3 NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Al Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
5.59 mm (220 mils) NOMINAL TRXLPE INSULATION - 133% INSULATION LEVEL													
2	1	8	16	18.6	20.4	22.7	25.5	1.4	91	100	637	170	130
2	7	8	16	18.9	20.7	23.0	25.8	1.4	93	100	650	170	130
1	1	9	16	19.4	21.2	23.5	26.3	1.4	115	112	694	195	150
1	19	9	16	19.7	21.5	23.7	26.5	1.4	117	112	706	195	150
1/0	1	9	16	20.3	22.1	24.4	27.2	1.4	145	112	750	225	170
1/0	19	9	16	20.6	22.4	24.7	27.5	1.4	147	112	764	225	170
2/0	19	11	16	21.6	23.4	25.7	28.5	1.4	186	137	855	255	200
3/0	19	9	14	22.8	24.6	27.6	30.4	1.4	235	179	1005	290	225
4/0	19	11	14	24.2	25.9	28.9	31.7	1.4	296	218	1141	330	255
250	37	14	14	25.5	27.3	30.2	33.0	1.4	349	278	1288	365	280
350	37	18	14	27.9	30.2	33.2	36.0	1.4	490	357	1606	440	340
500	37	25	14	31.0	33.3	36.2	39.0	1.4	697	496	2034	530	420
750	61	24	12	35.6	37.8	41.7	45.7	2.0	1047	756	2905	640	210
1000	61	31	12	39.4	42.5	46.3	50.3	2.0	1394	977	3760	730	595

Concentric Neutral Underground Distribution Cable 15-46 kV

25kV Copper Conductor TRXLPE/EPR Insulation Concentric Neutral LLDPE Jacket

COPPER UNDERGROUND DISTRIBUTION CABLE - 25 kV - TYPE URD - FULL NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Cu Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
6.60 mm (260 mils) NOMINAL TRXLPE INSULATION - 100% INSULATION LEVEL													
1	19	20	14	21.7	23.5	26.4	29.2	1.4	385	397	1339	275	200
1/0	19	26	14	22.7	24.4	27.4	30.2	1.4	485	516	1577	315	225
2/0	19	20	12	23.7	25.5	29.3	32.1	1.4	612	630	1879	360	255
3/0	19	26	12	24.9	26.6	30.5	33.2	1.4	771	819	2249	410	295
4/0	19	32	12	26.2	28.0	31.8	34.6	1.4	972	1008	2665	465	330

COPPER UNDERGROUND DISTRIBUTION CABLE - 25 kV - TYPE UD - 1/3 NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Cu Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
6.60 mm (260 mils) NOMINAL TRXLPE INSULATION - 100% INSULATION LEVEL													
1	19	11	16	21.7	23.5	25.8	28.6	1.4	385	137	1079	260	225
1/0	19	9	14	22.7	24.4	27.4	30.2	1.4	485	179	1275	295	255
2/0	19	11	14	23.7	25.5	28.4	31.2	1.4	612	218	1471	335	290
3/0	19	14	14	24.9	26.6	29.6	32.4	1.4	771	278	1723	380	325
4/0	19	18	14	26.2	28.0	30.9	33.7	1.4	972	358	2039	430	360
250	37	21	14	27.5	29.8	32.8	35.6	1.4	1149	417	2347	470	400
350	37	18	12	30.0	32.3	36.1	38.9	1.4	1609	567	3073	555	445
500	37	26	12	33.0	35.3	39.1	43.2	1.4	2298	819	4175	635	495
750	61	25	10	37.6	39.9	44.8	48.8	2.0	3447	1251	5963	715	550
1000	61	32	10	41.5	44.5	49.4	53.4	2.0	4596	1602	7651	765	595

Concentric Neutral Underground Distribution Cable 15-46 kV

25kV Aluminum Conductor TRXLPE/EPR Insulation Concentric Neutral LLDPE Jacket

ALUMINUM UNDERGROUND DISTRIBUTION CABLE - 25 kV - TYPE URD - FULL NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Al Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
6.60 mm (260 mils) NOMINAL TRXLPE INSULATION - 100% INSULATION LEVEL													
1	1	13	14	21.5	23.2	26.2	29.0	1.4	115	258	934	215	150
1	19	13	14	21.7	23.5	26.4	29.2	1.4	117	258	946	215	150
1/0	1	16	14	22.4	24.2	27.1	29.9	1.4	145	318	1047	240	170
1/0	19	16	14	22.7	24.4	27.4	30.2	1.4	147	318	1062	240	170
2/0	19	20	14	23.7	25.5	28.4	31.2	1.4	186	397	1205	275	195
3/0	19	16	12	24.9	26.6	30.5	33.2	1.4	235	504	1431	315	220
4/0	19	20	12	26.2	28.0	31.8	34.6	1.4	296	630	1650	360	250

ALUMINUM UNDERGROUND DISTRIBUTION CABLE - 25 kV - TYPE UD - 1/3 NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Al Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
6.60 mm (220 mils) NOMINAL TRXLPE INSULATION - 100% INSULATION LEVEL													
1	1	9	16	21.5	23.2	25.5	28.3	1.4	115	112	776	195	150
1	19	9	16	21.7	23.5	25.8	28.6	1.4	117	112	789	195	150
1/0	1	9	16	22.4	24.2	26.4	29.2	1.4	145	112	835	220	170
1/0	19	9	16	22.7	24.5	26.7	29.5	1.4	147	112	849	220	170
2/0	19	11	16	23.7	25.5	27.7	30.5	1.4	186	137	943	255	200
3/0	19	14	16	24.9	26.6	28.9	31.7	1.4	235	175	1065	290	225
4/0	19	11	14	26.2	28.0	30.9	33.7	1.4	296	218	1239	330	255
250	37	14	14	27.5	29.8	32.8	35.6	1.4	349	278	1422	360	280
350	37	18	14	30.0	32.3	35.2	38.0	1.4	490	358	1717	435	340
500	37	25	14	33.0	35.3	38.3	41.0	1.4	697	497	2154	525	420
750	61	24	12	37.6	39.9	43.7	47.8	2.0	1047	756	3045	640	510
1000	61	31	12	41.5	44.5	48.3	52.4	2.0	1394	977	3807	730	595

Concentric Neutral Underground Distribution Cable 15-46 kV

28kV Copper Conductor TRXLPE/EPR Insulation Concentric Neutral LLDPE Jacket

COPPER UNDERGROUND DISTRIBUTION CABLE - 28 kV - TYPE URD - FULL NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Cu Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
7.11 mm (280 mils) NOMINAL TRXLPE INSULATION - 100% INSULATION LEVEL													
1	19	20	14	22.7	24.5	27.5	30.3	1.4	385	397	1383	275	200
1/0	19	26	14	23.7	25.5	28.4	21.2	1.4	485	516	1623	315	225
2/0	19	20	12	24.7	26.5	30.3	33.1	1.4	612	630	1927	360	255
3/0	19	26	12	25.9	27.7	31.5	34.3	1.4	771	819	2299	410	295
4/0	19	32	12	27.2	29.5	33.3	36.1	1.4	972	1008	2749	465	330

COPPER UNDERGROUND DISTRIBUTION CABLE - 28 kV - TYPE UD - 1/3 NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Cu Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
7.11mm (280 mils) NOMINAL TRXLPE INSULATION - 100% INSULATION LEVEL													
1	19	11	16	22.7	24.5	26.8	29.6	1.4	385	137	1122	260	225
1/0	19	14	16	23.7	25.5	27.7	30.5	1.4	485	175	1288	295	255
2/0	19	11	14	24.7	26.5	29.4	32.2	1.4	612	218	1518	335	290
3/0	19	14	14	25.9	27.7	30.6	33.4	1.4	771	278	1772	380	325
4/0	19	18	14	27.2	29.5	32.4	35.2	1.4	972	358	2122	430	360
250	37	21	14	28.5	30.8	33.8	36.6	1.4	1149	417	2401	470	400
350	37	18	12	31.0	33.3	37.1	39.9	1.4	1609	567	3131	555	445
500	37	26	12	34.0	36.3	40.1	44.2	2.0	2298	819	4240	635	495
750	61	25	10	38.6	40.9	45.8	49.8	2.0	3447	1251	6037	715	550
1000	61	32	10	42.5	45.5	50.4	54.5	2.0	4596	1602	7731	765	595

Concentric Neutral Underground Distribution Cable 15-46 kV

28kV Aluminum Conductor TRXLPE/EPR Insulation Concentric Neutral LLDPE Jacket

ALUMINUM UNDERGROUND DISTRIBUTION CABLE - 28 kV - TYPE URD - FULL NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Al Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
7.11mm (280 mils) NOMINAL TRXLPE INSULATION - 100% INSULATION LEVEL													
1	1	13	14	22.5	24.3	27.2	30.0	1.4	115	258	978	215	150
1	19	13	14	22.7	24.5	27.5	30.3	1.4	117	258	991	215	150
1/0	1	16	14	23.4	25.2	28.1	30.9	1.4	145	318	1092	240	170
1/0	19	16	14	23.7	25.5	28.4	31.2	1.4	147	318	1108	240	170
2/0	19	20	14	24.7	26.5	29.4	32.2	1.4	186	397	1253	275	195
3/0	19	16	12	25.9	27.7	31.5	34.3	1.4	235	504	1481	315	220
4/0	19	20	12	27.2	29.5	33.3	36.1	1.4	296	630	1735	360	250

ALUMINUM UNDERGROUND DISTRIBUTION CABLE - 28 kV - TYPE UD - 1/3 NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Al Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
7.11mm (280 mils) NOMINAL TRXLPE INSULATION - 100% INSULATION LEVEL													
1	1	10	16	22.5	24.3	26.5	29.3	1.4	115	125	830	195	150
1	19	10	16	22.7	24.5	26.8	29.6	1.4	117	125	843	195	150
1/0	1	10	16	23.4	25.2	27.5	30.3	1.4	145	125	890	220	170
1/0	19	10	16	23.7	25.5	27.7	30.5	1.4	147	125	906	220	170
2/0	19	11	16	24.7	26.5	28.8	31.5	1.4	186	137	990	250	200
3/0	19	14	16	25.9	27.7	29.9	32.7	1.4	235	175	1113	290	225
4/0	19	11	14	27.2	29.5	32.4	35.2	1.4	296	218	1322	330	255
250	37	14	14	28.5	30.8	33.8	36.6	1.4	349	278	1476	365	280
350	37	18	14	31.0	33.3	36.2	39.0	1.4	490	358	1775	435	340
500	37	25	14	34.0	36.3	39.3	43.3	2.0	697	497	2295	525	420
750	61	24	12	39.6	40.9	44.7	48.8	2.0	1047	756	3117	640	510
1000	61	31	12	42.5	45.5	49.3	53.4	2.0	1394	977	3886	730	595

Concentric Neutral Underground Distribution Cable 15-46 kV

35kV Copper Conductor TRXLPE/EPR Insulation Concentric Neutral LLDPE Jacket

COPPER UNDERGROUND DISTRIBUTION CABLE - 35 kV - TYPE URD - FULL NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Cu Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
8.76 mm (345 mils) NOMINAL TRXLPE INSULATION - 100% INSULATION LEVEL													
1/0	19	26	14	27.0	29.3	32.2	35.0	1.4	485	516	1814	315	225
2/0	19	20	12	28.0	30.3	34.1	36.9	1.4	612	630	2129	360	255
3/0	19	26	12	29.2	31.5	35.3	38.1	1.4	771	819	2508	410	295
4/0	19	32	12	30.5	32.8	36.6	39.4	1.4	972	1008	2933	465	330

COPPER UNDERGROUND DISTRIBUTION CABLE - 35 kV - TYPE UD - 1/3 NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap Lldpe Jacket		Cu Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
8.76 mm (345 mils) NOMINAL TRXLPE INSULATION - 100% INSULATION LEVEL													
1/0	19	14	16	27.0	29.3	31.5	34.3	1.4	485	175	1475	295	255
2/0	19	11	14	28.0	30.3	33.2	36.0	1.4	612	219	1714	335	290
3/0	19	14	14	29.2	31.5	34.4	37.2	1.4	771	278	1976	380	325
4/0	19	18	14	30.5	32.8	35.7	38.5	1.4	972	358	2301	430	360
250	37	21	14	31.9	34.1	37.1	39.9	1.4	1149	417	2586	470	400
350	37	18	12	34.3	36.6	40.4	44.5	2.0	1609	567	3414	555	445
500	37	26	12	37.3	39.6	43.4	47.5	2.0	2298	819	4462	635	495
750	61	25	10	41.9	45.0	49.8	53.9	2.0	3447	1251	6359	715	550
1000	61	32	10	45.8	48.8	53.7	57.8	2.0	4596	1602	8004	765	595

Concentric Neutral Underground Distribution Cable 15-46 kV

35kV Aluminum Conductor TRXLPE/EPR Insulation Concentric Neutral LLDPE Jacket

ALUMINUM UNDERGROUND DISTRIBUTION CABLE - 35 kV - TYPE URD - FULL NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap LIdpe Jacket		Al Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
8.76 mm (345 mils) NOMINAL TRXLPE INSULATION - 100% INSULATION LEVEL													
1/0	1	16	14	26.7	29.0	31.9	34.7	1.4	145	318	1281	240	170
1/0	19	16	14	27.0	29.3	32.2	35.0	1.4	147	318	1298	240	170
2/0	19	20	14	28.0	30.3	33.2	36.0	1.4	186	397	1449	275	195
3/0	19	16	12	29.2	31.5	35.3	38.1	1.4	235	504	1689	315	220
4/0	19	20	12	30.5	32.8	36.6	39.4	1.4	296	630	1918	360	250

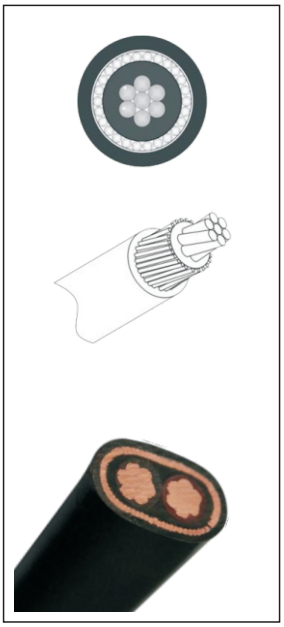
ALUMINUM UNDERGROUND DISTRIBUTION CABLE - 35 kV - TYPE UD - 1/3 NEUTRAL													
Compact Conductor		Copper Neutral		Diameter(mm)				Nom. Jacket Thkn. (mm)	Approx.weight(kg/km)			Ampacity	
Size (AWG Or Kcmil)	No.of Wires	No.of Wires	Wire Size (AWG)	Ins.	Ins. Shield	Neut. Wires	Encap LIdpe Jacket		Al Cond.	Cu Neut. Wires	Total	Direct Buried	In Duct
8.76 mm (345 mils) NOMINAL TRXLPE INSULATION - 100% INSULATION LEVEL													
1/0	1	11	16	26.7	29.0	31.3	34.1	1.4	145	137	1087	220	170
1/0	19	11	16	27.0	29.3	31.5	34.3	1.4	147	137	1104	220	170
2/0	19	12	16	28.0	30.3	32.6	35.4	1.4	186	150	1194	250	200
3/0	19	14	16	29.2	31.5	33.8	36.6	1.4	235	175	1312	290	225
4/0	19	17	14	30.5	32.8	35.1	37.9	1.4	296	212	1459	330	255
250	37	21	14	31.9	34.1	36.4	39.2	1.4	349	262	1610	360	280
350	37	18	14	34.3	36.6	39.5	43.6	2.0	490	358	2052	435	340
500	37	25	14	37.3	39.6	42.6	46.6	2.0	697	497	2513	525	420
750	61	24	12	41.9	45.0	48.8	52.8	2.0	1047	756	3432	640	510
1000	61	31	12	45.8	48.8	52.6	56.7	2.0	1394	977	4154	730	595

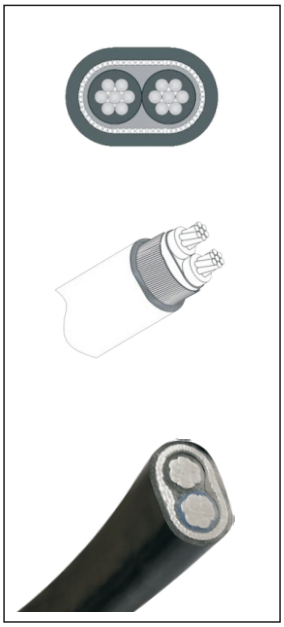
Concentric Cable

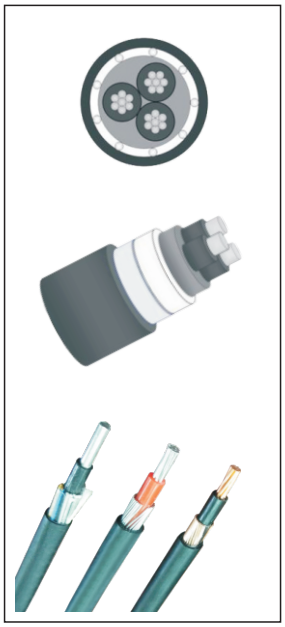
- **Standard**

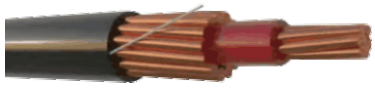
  ASTM IEC SANS1507

  Design & manufacture special power cable according to customer's special request.









Brief Specification

ASTM 600/1000V

Core	AWG	Structure Size (mm)							Copper cable (kg/km)
		Conductor		Insulation	Concentric conductor		Outer sheath		
		Single wire		XLPE	Single wire		UV-PVC		
		No.	Dia.	Thick	No.	Dia.	Thick	Dia.	
1	16	7	0.49	1.14	39	0.321	1.14	6.82	81.46
1	10	7	0.98	1.14	34	0.511	1.14	8.67	172.04
1	8	7	1.23	1.14	25	0.643	1.14	9.68	221.58
1	6	7	1.55	1.14	25	0.813	1.14	10.98	160.50
1	4	7	1.96	1.14	27	1.020	1.14	12.62	509.26

IEC 60502-1 IEC 60228 600/1000V

Size (mm^2)	Structure Size (mm)								Copper cable (kg/km)
	Concuctor			Insulation	Concentric conductor		Outer sheath		
	Single wire		Dia.	PVC	Single wire		UV-PVC		
	No.	Dia.		Thick	No.	Dia.	Thick	Dia.	
10	7	1.35	4.05	1.55	20	0.85	1.4	11.79	301.55
16	7	1.7	5.1	1.55	32	0.85	1.4	12.84	431.7
25	7	2.14	6.42	1.6	29	1.13	1.5	15.02	647.46
Aluminium Cable									
16	7	1.7	5.1	1.55	26	1.13	1.4	13.42	244.16
25	7	2.14	6.42	1.6	29	1.13	1.5	15.02	307.3
35	19	1.53	7.65	1.65	27	1.35	1.6	16.99	390.15

Rubber Sheathed Cable

Application

These though rubber sheathed cables confirm to the IEC standard and are ideal for use in both outdoor and wet condition. The cables are ideal for lightweight hand and workshop tools while the other groups are suitable for increasing higher levels of stress and heavy duty equipment.

Standard

- IEC 245-53
- IEC 245-66
- Design & manufacture special power cable according to customer's special request.

Construction

Annealed flexible copper wire, rubber insulation, twisted cores together cover paper or plastic plate, rubber outer sheath.

Operation Feature

Rating Voltage U_0/U:300/500V,450/750V.

Max.permissible operating temperature of cable conductor:60℃.

Ambient temperature of installation :YC installation:

YC type≥-40℃ YCW type≥-15℃

The bending radius of cable shall not be 5 times less than cable O.D.

"W" derivative cable has capacities of weather-resistance and oil-resistance and be suitable for the occasions of outdoors or oil contact.

Name	Rated Voltage	No. of Core	Nominal Section Area	Application
-	V	-	mm^2	-
Light-type Rubber Sheathed Flexible Cable	300/500	2,3	0.3-0.5 2,3,4,5	For portable electrical instruments, equipments and tools
Medium-type Rubber Sheathed Flexible Cable	300/500	2,3,4,5	0.75-6	For portable electrical instruments, equipments and tools; affording larger external forces
		3+1	1.5-6	
Heavy-type Rubber Sheathed Cable	450/750	1	1.5-400	For portable electrical instruments, equipments, affording larger external force, weather-resistance and oil-resistance

Welding Cable

Application

This product is suitable for the welding machine of which voltage to the ground is not more than DC 200V and pulsating current value is 400V.

Technical Data

Nominal Sectional Area	No. and Diameter of wire	Thickness of Section Sheath			Max. Conductor Resistance at 20℃	Reference Weight	
			Min.	Max.		YH	YHF
mm^2	mm	mm	mm	mm	≤Ω/km	kg/km	kg/km
10	322/0.20	1.8	7.5	9.7	1.91	146	153.51
16	513/0.20	2.0	9.2	11.5	1.16	218.9	230.44
25	798/0.20	2.0	10.5	13.0	0.758	316.6	331.15
35	1121/0.20	2.0	11.5	14.5	0.536	426	439.87
50	1596/0.20	2.2	13.5	17.0	0.379	592.47	610.55
70	2214/0.20	2.4	15.0	19.5	0.268	790	817.52
95	2997/0.20	2.6	17.0	22.0	0.198	1066.17	1102.97
120	1702/0.30	2.8	19.0	24.0	0.161	1348.25	1392.55
150	2135/0.30	3.0	21.0	27.0	0.129	1678.5	1698.72
185	1443/0.40	3.2	22.0	29.0	0.106	1983.8	2020.74

Control Cable

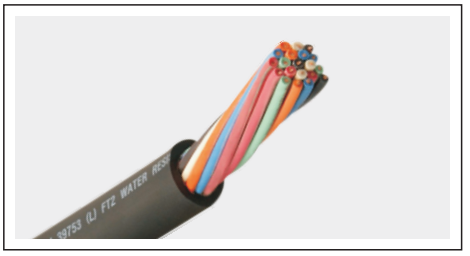
APPLICATION

The products are suitable for the wiring of electric controlling equipments and instrument, monitoring and controlling return circuit, electrical protection and measurement in power distribution unit under the circumstance that the rated voltage is up to 450/750V AC.

STANDARD

ASTM B230, B231, B400

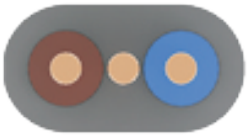
Design & manufacture special cable according to customer's special request.



SPECIFICATION

Name	Section Area(mm^2)	No.of Core	Application Site
Copper Conductor, PVC Insulated and Sheathed Control Cable	0.75、1.0、1.5、2.5	1-16	Permanent installation indoors, in cable ditches or pipes
	4、6	2-14	
	10	2-10	
Copper Conductor, PVC Insulated and Sheathed, Braiding Shielded Control Cable	0.75、1.0、1.5、2.5	2-61	Permanent installation indoors, in cable ditches or pipes where shielding is required
	4、6	2-14	
	10	2-10	
Copper Conductor, PVC Insulated and Sheathed, Copper-tape Screened Control Cable	0.75、1.0、1.5、2.5	4-10	Permanent installation indoors, in cable ditches or pipes where shielding is required
	4、6	7-61	
	10	4-10	
Copper Conductor, PVC Insulated and Sheathed, Steel tape Armoured Control Cable	0.75、1.0、1.5、2.5	7-16	Permanent installation indoors, in cable ditches, Be able to withstand stronger external mechanical force
	4、6	4-14	
	10	4-14	
Copper Conductor, PVC Insulated and Sheathed, Flexible Control Cable	0.5-2.5	4-61	Installation indoors where flexibility and movability are required
Copper Conductor, XLPE Insulated and PVC Sheathed Control Cable	0.5、0.75、1.0	4-61	Installation indoors where flexibility shielding and movability are required
	1.5、2.5	4-48	
Copper Conductor, PVC Insulated and Sheathed , Braiding Shielded Flexible Control Cable	0.75、1.0、1.5、2.5	2-16	Permanent installation indoors, in cable ditches or pipes
	4、6	2-14	
	10	2-10	
Copper Conductor, XLPE Insulated, Braiding Shielded, PVC Sheathed Control Cable	0.75、1.0、1.5、2.5	2-61	Permanent installation indoors, in cable ditches or pipes where shielding is required
	4、6	2-14	
	10	2-10	
Copper Conductor, XLPE Insulated, Stee-tape Armoured, PVC Sheathed Control Cable	0.75、1.0、1.5、2.5	7-61	Permanent installation indoors, in cable ditches, pipes or underground. Be able to withstand stronger external mechanical force
	4、6	4-14	
	10	4-10	
Copper Conductor, XLPE Insulated, Copper tape Screened, PVC Sheathed Control Cable	0.75、1.0、1.5、2.5	7-61	Permanent installation indoors, in cable ditches or pipes where shielding is required
	4、6	4-14	
	10	4-10	
Copper Conductor, XLPE Insulated, PVC Sheathed Flexible Control Cable	0.5-2.5	4-61	Installation indoors where flexibility and movability are required
Copper Conductor, XLPE Insulated, Braiding Shielded, PVC Sheathed Flexible Control Cable	0.5、0.75、1.0	4-61	Installation indoors where flexibility shielding and movability are required
	1.5、2.5	4-48	

BS 6004 624-Y Twin and Earth PVC Cable



APPLICATION

Domestic wiring cable. Can be installed in fixed installations indry or damp premises clipped to surface, on trays or in free air where the risk of mechanical damage would not be an issue. Suitable for laying in conduit or trunking where mechanical

CONSTRUCTION

- Conductor
  Copper conductor according to BS EN 60228
  1mm² to 2.5mm²: Class 1 solid conductor
  4mm² to 16mm²: Class 2 stranded conductor

- Circuit Protection Conductor (Earth)
  1mm² to 2.5mm²: Class 1 solid copper conductor
  4mm² to 16mm²: Class 2 stranded copper conductor

- Insulation
  PVC (Polyvinyl Chloride) Type TI1 according to BS EN 50363

- Sheath
  PVC (Polyvinyl Chloride) Type 6 according to BS 7655

CHARACTERISTICS

- Voltage Rating (Uo/U)
  300/500V

- Temperature Rating
  -5°C to +70°C
  Short Circuit : +160°C

- Minimum Bending Radius
  Fixed: 6 x overall diameter

- Core Identification
  Brown Blue
  Sheath Colour
  Grey

SPECIFICATION

No.of Cores	Nominal Crosssecti Onalarea mm²	Conductor Class	Cross sectional Area of Circuit Protective Conductor mm²	Nominal Thickness of Insulation mm	Nominal Thickness of Sheath mm	Nominal Overall Dimenxions mm	Nominal Weight kg/km
2	1	1	1	0.6	0.9	4.35 x7.95	68
2	1.5	1	1	0.7	0.9	4.85 x8.9	87
2	2.5	1	1.5	0.8	1	5.65 x10.65	120
2	4	2	1.5	0.8	1	6.3 x11.95	172
2	6	2	2.5	0.8	1.1	7.1 x 13.7	235
2	10	2	4*	1	1.2	8.7 x17.25	373
2	16	2	6*	1	1.3	9.85 x20	530
3	1	1	1	0,6	0.9	4.35 x9.8	91
3	1.5	1	1	0.7	0.9	4.85 x11.2	115

318-A / BS 6004 Arctic Grade Cable

APPLICATION

Arctic grade PVC cords manufactured to BS 6004 are designed to withstand severe external temperatures and will remain flexible at temperatures down to -40°C. Making them particularly suitable for outdoor applications and for use where flexibility is required at sub zero temperatures. At normal temperatures the cable is very flexible, offering some of the characteristics usually found in elastomeric cables.

CONSTRUCTION

- Conductor
  Class 5 flexible copper conductor according to BS EN 60228
- Insulation
  Arctic grade PVC (Polyvinyl Chloride) Type TI4 according to BS EN 50363
- Sheath
  Arctic grade PVC (Polyvinyl Chloride) Type 10 according to BS 7655

CHARACTERISTICS

- Voltage Rating (Uo/U)
  300/500V
- Temperature Rating
  Fixed: -40°C to +60°C
- Minimum Bending Radius
  Fixed: 6 x overall diameter
- Core Identification
  2 core: Blue Brown
  3 core: Blue Brown Green/Yellow
- Sheath Colour
  Blue Yellow

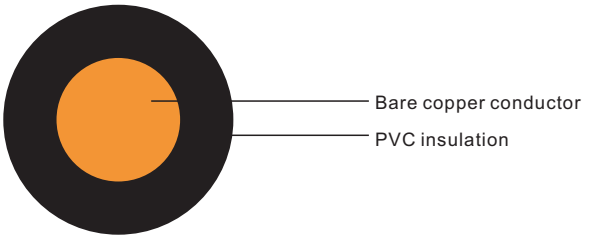
SPECIFICATION

No.of Cores	Nominal Cross Sectional Area mm²	Nominal Thickness of Insulation mm	Nominal Thickness of Sheath mm	Nominal Overall Diameter mm	Nominal weight kg/km
2	0.75	0.6	0.8	6.2	55
2	1	0.6	0.8	6.4	61
2	1.5	0.7	0.8	7.4	83
2	2.5	0.8	1	9.2	130
2	4	0.8	1.1	10.4	176
2	6	0.8	1.2	11.3	299
3	1	0.6	0.8	6.8	73
3	1.5	0.7	0.9	8.1	105
3	2.5	0.8	1.1	10	163
3	4	0.8	1.2	11.3	224
3	6.0	0.8	1.2	12.7	299

H05V-U with DIN VDE Standard

APPLICATION

PVC Insulated Wires are used for electrical transmission for building, construction and lighting, which are fit for A.C. Rated voltage 300/500V.



SPECIFICATION

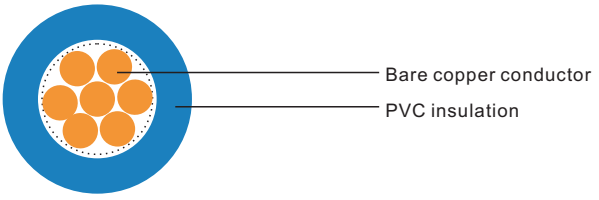
300/500V,Copper Conductor PVC Insulated Wire					
Nominal Cross Section	Conductor Construction		Insulation Thickness	Overall Diameter	Approx. Net Weight
mm^2	No.	Diameter	mm	mm	kg/km
1 X 0.5	1	0.8	0.6	2.00	8.16
1 X 0.75	1	0.97	0.6	2.17	10.71
1 X 1.0	1	1.13	0.6	2.33	13.48

300/500V, Copper Conductor Heat Resistant PVC Insulated Connecting Wire at 90˚C					
Nominal Cross Section	Conductor Construction		Insulation Thickness	Overall Diameter	Approx. Net Weight
mm^2	No.	Diameter	mm	mm	kg/km
1 X 0.5	1	0.8	0.6	2.00	8.16
1 X 0.75	1	0.97	0.6	2.17	10.71
1 X 1.0	1	1.13	0.6	2.33	13.48
1 X 1.5	1	1.38	0.7	2.78	19.70
1 X 2.5	1	1.78	0.8	3.38	31.20

H05V-R with DIN VDE Standard

APPLICATION

PVC Insulated Wires are used for electrical transmission for building, construction and lighting, which are fit for A.C. Rated voltage 300/500V.



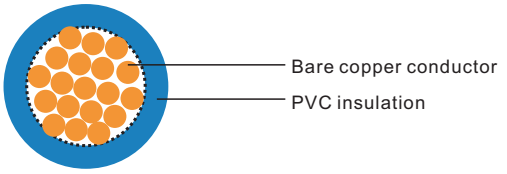
SPECIFICATION

300/500V,Copper Conductor PVC Insulated Wire					
Nominal Cross Section	Conductor Construction		Insulation Thickness	Overall Diameter	Approx. Net Weight
mm^2	No.	mm	mm	mm	kg/km
1 X 0.75	7	0.37	0.6	2.31	11.3
1 X 1.0	7	0.43	0.6	2.49	14.2

H05V-K with DIN VDE Standard

APPLICATION

PVC Insulated Wires are used for electrical transmission for building, construction and lighting, which are fit for A.C. Rated voltage 300/500V.



SPECIFICATION

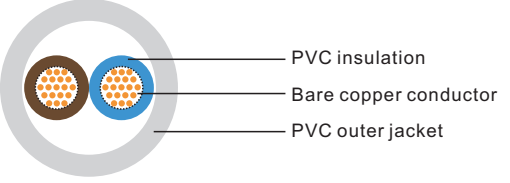
300/500V,Copper Conductor PVC Insulated Flexible Connecting Wire					
Nominal Cross Section	Conductor Construction		Insulation Thickness	Overall Diameter	Approx. Net Weight
mm^2	No.	Diameter	mm	mm	kg/km
1 X 0.5	28	0.15	0.6	2.16	8.65
1 X 0.75	40	0.15	0.6	2.40	11.22
1 X 1.0	32	0.20	0.6	2.54	14.32

300/500V, Copper Conductor Heat Resistant PVC Insulated Connecting Wire at 90℃					
Nominal Cross Section	Conductor Construction		Insulation Thickness	Overall Diameter	Approx. Net Weight
mm^2	No.	Diameter	mm	mm	kg/km
1 X 0.5	28	0.15	0.6	2.16	8.65
1 X 0.75	40	0.15	0.6	2.40	11.22
1 X 1.0	32	0.20	0.6	2.54	14.32
1 X 1.5	30	0.25	0.7	3.00	20.58
1 X 2.5	49	0.25	0.8	3.70	32.24

H03VV-F/H03VVH2-F with DIN VDE Standard

APPLICATION

PVC Insulated Wires are used for electrical transmission for building, construction and lighting, which are fit for A.C. Rated voltage 300/500V.



SPECIFICATION

300/500V,Copper Conductor PVC Insulated PVC Sheathed Round Wire						
Nominal Cross Section	Conductor Construction		Insulation Thickness	Sheath Thickness	Overall Diameter	Approx. Net Weight
mm^2	No.	Diameter	mm	mm	mm	kg/km
1 X0.75	1	0.97	0.6	0.8	3.77	21.2
1 X1.0	1	1.13	0.6	0.8	3.93	24.5
1 X 1.5	1	1.38	0.7	0.8	4.38	23.0
1 X 1.5	7	0.52	0.7	0.8	4.56	24.3
1 X2.5	1	1.78	0.8	0.8	4.98	30.5
1 X 2.5	7	0.67	0.8	0.8	5.21	32.2
1 X4.0	1	2.25	0.8	0.9	5.65	40.3
1 X4.0	7	0.85	0.8	0.9	5.95	42.7
1 X6.0	1	2.76	0.8	0.9	6.16	49.5
1 X6.0	7	1.04	0.8	0.9	6.52	52.4
1 X10	7	1.35	1.0	0.9	7.85	77.3

300/500V,Copper Conductor PVC Insulated PVC Sheathed Flat Wire					
Nominal Cross Section	Conductor Construction	Insulation Thickness	Sheath Thickness	Overall Diameter	Approx. Net Weight
mm^2	No.	mm	mm	mm	kg/km
2 X 0.75	1/0.97	0.6	0.9	3.97x6.14	39.0
2 X 1.0	1/1.13	0.6	0.9	4.13x6.46	45.6
2 X1.5	1/1.37	0.7	0.9	4.57x7.34	60.5
2 X2.5	1/1.76	0.8	1.0	5.36x8.72	89.9
2 X4	1/2.24	0.8	1.0	5.84x9.68	123.5
2 X4	7/0.85	0.8	1.0	6.15x10.30	130.6
2 X6	1/2.74	0.8	1.1	6.54x10.88	169.4
2 X6	7/1.04	0.8	1.1	6.92x11.64	179.2
2 X10	7/1.35	1.0	1.2	9.45x14.50	286.5
2 X16	7/1.70	1.0	1.2	9.50x16.60	412.3
3 X0.75	1/0.97	0.6	0.9	3.97x8.31	55.2
3 X1.0	1/1.13	0.6	0.9	4.13x8.79	65.0
3 X1.5	1/1.38	0.7	0.9	4.58x10.14	87.7
3 X2.5	1/1.76	0.8	1.0	5.36x12.08	129.9
3 X4	1/2.24	0.8	1.1	6.04x13.72	184.7
3 X 4	7/0.85	0.8	1.1	6.35x14.65	195.4
3 X6	1/2.74	0.8	1.1	6.54x15.22	247.7
3 X 6	7/1.04	0.8	1.1	6.92x16.36	262.0
3 X10	7/1.35	1.0	1.2	8.45x20.55	420.8

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