

# **LOW VOLTAGE CABLES**





## ■ Introduction:

ZMS Cable Company's head office and warehouse are situated in the capital of Henan province, just off the Motorway, at Fuming Rd in Zhengzhou.

ZMS Cable is the earliest private enterprise in Henan(China) cable business. Our cables are manufactured using the most up-to-date technology. Modern production facilities are backed by a highly qualified work force and experienced engineers, who ensure that only cable of the highest quality leaves our factories.

- **Our customers will receive superior value**
- **Our shareholders will receive ever exceeding returns on their investments**
- **Our business partners will share our success**
- **Our employees will prosper**

Our product range includes general building wires, data and telecommunications cables, industrial rubber cables, overhead conductors together with power cables up to, and including, 35KV.

We constantly get updates and feedbacks on their stated / implied needs and problems. Based on this information we have devised new modalities to provide better service to our valued customers. Thus we not only provide Quality Products but also offer a host of related services before and after the sale.

Cables are manufactured strictly in accordance with the appropriate GB (China) Standard Specifications and to IEC, CE and UL standards and are approved by the relevant Classifications Institutions. Full traceability is maintained by strict adherence to quality policies compliant with ISO9001/2, whilst environmental policies will be maintained by compliance with ISO14001 in no time.

## ■ **Products:**

Medium Voltage Power Cables up to 19/33(36) KV

Low Voltage Power Cables up to 600/1000V

Control Cables 600/1000V

Bare Conductors for Overhead Lines

Earthing Conductors

PVC or XLPE Insulated Conductors

Domestic Applications / Internal Wiring

LSFH Cables & Wires

Enamelled Wires

Telephone, communication & Instrumentation Cables

## ■ **Quality:**

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\* **ZMS--- TRANS MORE** \*



Quality has always been our top priority and to meet customer's expectation has been our prime objective; the very basis on which we earned the confidence of our clientele. It is this concern and commitment rather than just sell of product, has given us a distinct image and competitive advantage.

**ISO 9001:2008 CERTIFIED BY RWTUV GERMANY**

**ISO 9001:2008 CERTIFIED BY SGS**

**ISO 14001:2009**

**BASIC RANGE OF CERTIFICATES**

We at ZMS Cables always aim for the best. While most of the Cable manufacturers in China, we stand out with ISO 9001 which recognizes our ability for Design & Development as well.

As a philosophy our commitment to Customers does not end with a sale. We also offer a host of related services before and after the sale. These include,

- Application engineering service for selection of appropriate product best suited to the end use.
- An extensive range of cables single core wires flexible cords bare & insulated conductors manufactured to stringent Quality standards going beyond international specifications.
- Design and Development of products tailored to meet specific requirements of the application.
- To help the customers understand the product intricacies and its performance levels.

**NOTE 1:**

THE TABULATIONS ON SUBSEQUENT PAGES FURNISH OVERALL DIMENSIONS, NET & GROSS WEIGHTS AND DRUM DIMENSIONS. PLEASE NOTE THAT THESE ARE "APPROXIMATE" VALUES. THEY HAVE BEEN FURNISHED FOR GENERAL GUIDELINES AND INTENDED TO BE USED FOR THUMB RULE ESTIMATIONS | FREIGHT CALCULATIONS .

**NOTE 2:**

THE FOLLOWING LIST TABULATES ONLY THE "STANDARD" PRODUCTS. FOR ANY PRODUCT NOT LISTED BELOW, PLEASE DO NOT HESITATE TO CONTACT OUR SALES & MARKETING DIVISION. WE SHALL BE TOO PLEASED TO MEET YOUR SPECIFIC REQUIREMENTS.

**PRODUCTION**

**STANDARD**

**LOW VOLTAGE POWER CABLES 600/1000 V**

- |  |                               |
|--|-------------------------------|
| • PVC insulated PVC sheathed armoured/unarmoured cables          | BS 6346 / IEC 60502           |
| • XLPE insulated PVC sheathed armoured/unarmoured cables         | BS 5467 / IEC 60502           |
| • PVC or XLPE Insulated PVC Sheathed Armoured/Unarmoured Cables. | BS 6346   BS 5467 / IEC 60502 |

**CONTROL CABLES 600/1000 V**

- |  |                               |
|--|-------------------------------|
| • PVC or XLPE insulated PVC sheathed armoured/unarmoured<br>Cables up to 61 cores. | BS 6346   BS 5467   IEC 60502 |
|--|-------------------------------|



■ **600 / 1000 V - SINGLE CORE COPPER CONDUCTOR PVC INSULATED PVC SHEATHED CABLES**

**(CU / PVC / PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size /Coil	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Yard/ Metre±10%		KG
1.5*	12.1	0.8	1.4	6.4	58	100Y	COIL	5.3
1.5	12.1	0.8	1.4	6.6	62	100Y	COIL	5.7
2.5*	7.41	0.8	1.4	6.8	71	100Y	COIL	6.5
2.5	7.41	0.8	1.4	7.0	75	100Y	COIL	6.9
4	4.61	1.0	1.4	7.9	100	100Y	COIL	9.1
6	3.08	1.0	1.4	8.5	125	100Y	COIL	11.4
10	1.83	1.0	1.4	9.2	170	100Y	COIL	15.5
16	1.15	1.0	1.4	10.3	235	100Y	COIL	21.0
25	0.727	1.2	1.4	12.0	345	1000M	D-10	405
35	0.524	1.2	1.4	13.1	445	1000M	D-10	505
50	0.387	1.4	1.4	14.6	585	500M	D-8	340
70	0.268	1.4	1.4	16.2	795	500M	D-9	460
95	0.193	1.6	1.5	18.7	1090	500M	D-10	610
120	0.153	1.6	1.5	20.2	1330	500M	D-10	730
150	0.124	1.8	1.6	22.2	1650	500M	D-11	930
185	0.0991	2.0	1.7	24.4	2020	500M	D-12	1120
240	0.0754	2.2	1.8	27.5	2600	500M	D-12	1410
300	0.0601	2.4	1.9	30.1	3230	500M	D-14	1770
400	0.0470	2.6	2.0	33.6	4140	500M	D-16	2280
500	0.0366	2.8	2.1	37.4	5200	500M	D-18	1790
630	0.0283	2.8	2.2	43.2	6660	250M	D-14	1820
800	0.0221	2.8	2.3	47.4	8340	250M	D-16	2340
1000	0.0176	3.0	2.5	53.6	10600	250M	D-18	2890

\* Circular solid conductors (Class 1).

All other conductors circular stranded or circular stranded compacted (Class 2).

All the cables are insulated with either PVC Type 5 Heat Resisting 85oC compound and sheathed with PVC Type 9 / ST2 compound OR PVC Type A/TI1 compound and sheathed with PVC Type ST1/TM1 compound.

All Cables conform to IEC 60502 - 1 & generally to BS 6346. Colour of insulation and sheath Black.



■ **600 / 1000 V - SINGLE CORE COPPER CONDUCTOR PVC INSULATED ALUMINIUM WIRE ARMoured PVC SHEATHED CABLES**

**(CU / PVC / PVC / AWA / PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Extruded Bedding	Armour Wire Diameter	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Yard/ Metre ± 10 %		KG
50*	0.387	1.4	0.8	1.6	1.5	19.6	820	500	D-10	470
70*	0.268	1.4	0.8	1.6	1.6	21.4	1060	500	D-10	590
95*	0.193	1.6	0.8	1.6	1.6	23.7	1380	500	D-11	790
120	0.153	1.6	1.0	1.6	1.7	25.8	1680	500	D-12	950
150	0.124	1.8	1.0	1.6	1.7	27.6	2020	500	D-12	1120
185	0.0991	2.0	1.0	1.6	1.8	29.8	2420	500	D-12	1320
240	0.0754	2.2	1.0	1.6	1.9	32.9	3035	500	D-16	1740
300	0.0601	2.4	1.0	1.6	1.9	35.3	3700	500	D-16	2060
400	0.0470	2.6	1.2	2.0	2.1	40.2	4810	500	D-18	2650
500	0.0366	2.8	1.2	2.0	2.1	43.6	5900	500	D-18	3190
630	0.0283	2.8	1.2	2.0	2.2	49.4	7460	250	D-16	2080
800	0.0221	2.8	1.4	2.5	2.4	55.2	9450	250	D-18	2600
1000	0.0176	3.0	1.4	2.5	2.5	61.2	11820	250	D-18	3200

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ ST2 compound OR PVC Type A/TII compound and sheathed with PVC Type ST1/TM1 compound.

Colour of insulation and sheath black

\*cables generally to BS 6346.

\*wire diameter are larger than those specified in BS 6346.

All other Cables Conform to BS 6346.



■ **600 / 1000 V - SINGLE CORE COPPER CONDUCTOR PVC INSULATED ALUMINIUM WIRE ARMoured PVC SHEATHED CABLES**

**(CU / PVC / PVC / AWA / PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Extruded Bedding	Armour Wire Diameter	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Yard/ Metre ± 10 %		KG
50	0.387	1.4	1.0	1.25	1.8	19.9	820	500	D-10	470
70	0.268	1.4	1.0	1.25	1.8	21.5	1060	500	D-10	590
95	0.193	1.6	1.0	1.25	1.8	23.8	1380	500	D-11	790
120	0.153	1.6	1.0	1.6	1.8	26	1680	500	D-12	955
150	0.124	1.8	1.0	1.6	1.8	27.8	2030	500	D-12	1125
185	0.0991	2.0	1.0	1.6	1.8	29.8	2420	500	D-12	1320
240	0.0754	2.2	1.0	1.6	1.9	32.9	3050	500	D-16	1740
300	0.0601	2.4	1.0	2.0	2.0	36.3	3800	500	D-16	2110
400	0.0470	2.6	1.2	2.0	2.1	40.2	4810	500	D-18	2650
500	0.0366	2.8	1.2	2.0	2.2	43.8	5920	500	D-18	3200
630	0.0283	2.8	1.2	2.0	2.4	49.8	7420	250	D-16	2065
800	0.0221	2.8	1.4	2.5	2.5	55.4	9500	250	D-18	2610
1000	0.0176	3.0	1.4	2.5	2.6	61.6	11880	250	D-18	3215

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ ST2 compound OR PVC Type A/Til compound and sheathed with PVC Type ST1/TM1 compound.

Colour of insulation and sheath black.

All Cables conform to IEC 60502- 1.



■ **600 /1000 V -SINGLE CORE ALUMINIUM  
CONDUCTOR PVC INSULATED ALUMINIUM  
WIRE ARMoured PVC SHEATHED CABLES**

**(AL / PVC / PVC / AWA / PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Extruded Bedding	Armour Wire Diameter	Thickness of Outer Sheath	Approx.Overall Diameter	Approx.Cable Weight	Standard Packing Length	Drum Size	Approx.Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Yard/ Metre ± 10 %		KG
50	0.641	1.4	1.0	1.6	1.8	20.6	580	500	D-10	350
70	0.443	1.4	1.0	1.6	1.8	22.4	700	500	D-11	450
95	0.320	1.6	1.0	1.6	1.8	24.6	845	500	D-12	535
120	0.253	1.6	1.0	1.6	1.8	26.0	955	500	D-12	590
150	0.206	1.8	1.0	1.6	1.8	27.8	1100	500	D-12	660
185	0.164	2.0	1.0	1.6	1.8	29.9	1280	500	D-12	750
240	0.125	2.2	1.0	1.6	1.9	33.0	1560	500	D-16	990
300	0.100	2.4	1.2	2.0	2.0	36.7	1970	500	D-18	1230
400	0.0778	2.6	1.2	2.0	2.1	40.4	2370	500	D-18	1430
500	0.0605	2.8	1.2	2.0	2.2	43.9	2830	500	D-18	1660
630	0.0469	2.8	1.2	2.0	2.4	50.4	3570	250	D-18	1130
800	0.0367	2.8	1.4	2.5	2.5	56.3	4480	250	D-18	1360
1000	0.0291	3.0	1.4	2.5	2.7	61.6	5410	250	D-18	1590

All conductors circular stranded or circular stranded compacted(class 2).

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/T11 compound and sheathed with PVC Type ST1/TM1 compound.

Colour of insulation and sheath black.

Cables conform to IEC 60502-1 and generally to BS 6346.

\*Wire diameter are larger than those specified in BS 6346.



■ **600/1000V COPPER CONDUCTOR PVC INSULATION COPPER CONCENTRIC CONDUCTOR PVC SHEATHED CABLE**



**(CU/PVC/CWS/PVC)**

No. x cross-sec	mm	kg/km	kg/km
1x10 re/10	11	216	310
1x16 re/16	12	336	440
1x25 rm/25	16	523	680
2x1,5 re/1,5	13	52	210
2x2,5 re/2,5	14	80	260
2x4 re/4	16	123	350
2x6 re/6	18	182	440
3x1,5 re/1,5	14	66	220
3x2,5 re/2,5	15	104	290
3x4 re/4	16	161	400
3x6 re/6	18	240	500
4x1,5 re/1,5	14	81	260
4x2,5 re/2,5	15	128	340
4x4 re/4	17	200	470
4x6 re/6	19	297	590
4x10 re/10	21	504	900
5x1,5 re/1,5	15	95	320
5x2,5 re/2,5	16	152	390
5x4 re/4	19	238	560
5x6 re/6	20	355	690
7x1,5 re/1,5	15	124	340
7x1,5 re/2,5	16	133	350
8x1,5 re/2,5	17	147	460
10x1,5 re/2,5	19	176	420
12x1,5 re/2,5	20	205	480
14x1,5 re/2,5	21	234	530
16x1,5 re/4	22	276	610
19x1,5 re/4	23	320	700
21x1,5 re/6	24	369	870
24x1,5 re/6	26	413	950
30x1,5 re/6	27	499	1250





7x2,5 re/2,5	7	200	450
8x2,5 re/2,5	18	225	570
10x2,5 re/4	21	286	610
12x2,5 re/4	22	334	670
14x2,5 re/6	23	403	750
16x2,5 re/6	24	451	900
19x2,5 re/6	25	523	950
21x2,5 re/6	26	571	1080
24x2,5 re/10	28	696	1420
30x2,5 re/10	30	840	1600
40x2,5 re/10	33	1080	2000
52x2,5 re/10	38	1368	2500
7x4 re/4	20	315	600

### Application

Power cable suitable for construction of underground supply and distribution grids and installations of industrial and public projects, for street lighting, for transmission and distribution of electric power at nominal voltage U0/U 0,6/1 kV.

The concentric conductor is used as a screen and could be used as neutral (N), earthing (PE), and both as neutral and earthing (PEN) conductor, but not as an external conductor.

### Construction

- Solid or stranded Cu wires cl. 1 or cl. 2
- Description of the wire's shape  
re - round solid  
rm - round multi-core  
sm - sector multi-core
- Insulation: PVC compound
- Inner sheath: filling compound
- Concentric conductor of Cu wires and helically applied Cu tape
- Wrapping: polymer tape
- Outer sheath: PVC compound
- Outer sheath colour: black



■ **600 / 1000 V - TWO CORE COPPER  
CONDUCTOR PVC INSULATED PVC  
SHEATHED CABLES**

**(CU / PVC / PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Outer Sheath	Approx.Overall Diameter	Approx.Cable Weight	Standard Packing Length	Drum Size	Approx.Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Metre± 10%		KG
1.5*	12.1	0.7	1.8	10.6	150	1000	D-8	200
1.5	12.1	0.7	1.8	11.0	160	1000	D-8	210
2.5*	7.41	0.8	1.8	11.8	190	1000	D-8	240
2.5	7.41	0.8	1.8	12.2	200	1000	D-9	260
4	4.61	1.0	1.8	13.2	255	1000	D-10	315
6	3.08	1.0	1.8	14.4	320	1000	D-10	380
10	1.83	1.0	1.8	16.6	460	1000	D-11	560
16	1.15	1.0	1.8	18.8	620	1000	D-12	730
25**	0.727	1.2	1.8	22.2	910	500	D-11	555
35**	0.524	1.2	1.8	24.4	1160	500	D-12	690
50**	0.387	1.4	1.8	27.9	1340	500	D-12	780
70**	0.268	1.4	1.9	31.3	1810	500	D-14	1060
95**	0.193	1.6	2.0	36.1	2450	500	D-18	1470
120**	0.153	1.6	2.1	39.3	2990	500	D-18	1740
150**	0.124	1.8	2.2	43.1	3680	500	D-18	2080
185**	0.0991	2.0	2.4	47.5	4500	500	D-19	2570
240**	0.0754	2.2	2.5	53.5	5770	500	D-18	1650
300**	0.0601	2.4	2.7	58.7	7150	500	D-18	2030
400**	0.0470	2.6	2.9	65.7	9140	500	D-18	2530

\*Circular solid conductors(class 1)

All conductors circular or circular stranded compacted(class 2).

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC

Type 9/ST2 compound OR PVC Type A/TI1 compound and sheathed with PVC Type ST1/TM1 compound.

All other cables conform generally to BS 6346.

\*Cables with sector shaped conductors, having lesser overall dimensions , weight and cost are available on request.



■ **600 /1000 V - TWO CORE COPPER  
CONDUCTOR PVC INSULATED PVC  
SHEATHED CABLES**

**(CU/ PVC /PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Outer Sheath	Approx.Overall Diameter	Approx.Cable Weight	Standard Packing Length	Drum Size	Approx.Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Metre± 10%		KG
1.5*	12.1	0.8	1.8	11.0	160	1000	D-8	210
1.5	12.1	0.8	1.8	11.4	170	1000	D-8	220
2.5*	7.41	0.8	1.8	11.8	190	1000	D-8	240
2.5	7.41	0.8	1.8	12.2	200	1000	D-9	260
4	4.61	1.0	1.8	14.0	280	1000	D-10	340
6	3.08	1.0	1.8	15.2	345	1000	D-10	405
10	1.83	1.0	1.8	17.2	470	1000	D-11	570
16	1.15	1.0	1.8	19.2	630	1000	D-12	740
25**	0.727	1.2	1.8	22.7	930	500	D-11	565
35**	0.524	1.2	1.8	24.9	1190	500	D-12	705
50**	0.387	1.4	1.8	27.9	1340	500	D-12	780
70**	0.268	1.4	1.9	31.3	1810	500	D-14	1060
95**	0.193	1.6	2.0	36.1	2450	500	D-18	1470
120**	0.153	1.6	2.1	39.3	2990	500	D-18	1740
150**	0.124	1.8	2.2	43.1	3680	500	D-18	2080
185**	0.0991	2.0	2.4	47.5	4500	500	D-19	2570
240**	0.0754	2.2	2.6	53.7	5770	250	D-18	1650
300**	0.0601	2.4	2.7	58.7	7150	250	D-18	2030
400**	0.0470	2.6	3.0	65.9	9140	250	D-18	2530
500**	0.0366	2.8	3.2	73.1	11370	250	D-21	3260

\*Circular solid conductors (Class 1).

All conductors circular stranded or circular stranded compacted (Class 2).

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/T11 compound and sheathed with PVC Type ST1/TM1 compound.

\*\*Cables with sector shaped conductors, having lesser overall dimensions, weight and cost are available on request.



■ **600 /1000 V - TWO CORE COPPER  
CONDUCTOR PVC INSULATED STEEL WIRE  
ARMOURED PVC SHEATHED CABLES**

**(CU / PVC / PVC / SWA / PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Extruded Bedding	Armour Wire Diameter	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Metre ± 10 %		KG
1.5*	12.1	0.7	0.8	0.9	1.3	12.6	305	1000	D-9	365
1.5	12.1	0.7	0.8	0.9	1.4	13.2	310	1000	D-9	370
2.5*	7.41	0.8	0.8	0.9	1.4	14.0	370	1000	D-10	430
2.5	7.41	0.8	0.8	0.9	1.4	14.4	390	1000	D-10	450
4	4.61	0.8	0.8	0.9	1.4	15.4	460	1000	D-11	560
6	3.08	0.8	0.8	0.9	1.5	16.8	550	1000	D-11	650
10	1.83	1.0	0.8	1.25	1.6	19.9	835	1000	D-12	945
16	1.15	1.0	0.8	1.25	1.6	22.1	1050	1000	D-14	1200
25**	0.727	1.2	1.0	1.6	1.7	26.8	1610	500	D-12	915
35**	0.524	1.2	1.0	1.6	1.8	29.2	1950	500	D-12	1090
50**	0.387	1.4	1.0	1.6	1.9	32.7	2230	500	D-16	1330
70**	0.268	1.4	1.0	1.6	1.9	35.9	2790	500	D-18	1640
95**	0.193	1.6	1.2	2.0	2.1	42.1	3710	500	D-18	2200
120**	0.153	1.6	1.2	2.0	2.2	45.3	4580	500	D-18	2610
150**	0.124	1.8	1.2	2.0	2.3	49.1	5410	500	D-19	3300
185**	0.0991	2.0	1.4	2.5	2.4	54.4	6890	250	D-18	1960
240**	0.0754	2.2	1.4	2.5	2.5	60.7	8430	250	D-18	2350
300**	0.0601	2.4	1.6	2.5	2.7	66.3	10140	250	D-18	2780
400**	0.0470	2.6	1.6	3.15	2.9	73.3	12500	250	D-19	3450

\*Circular solid conductors (Class 1).

All other conductors Circular stranded or circular stranded compacted (Class 2).

All the cables are Insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC

Type 9/ ST2 compound OR PVC Type A/TII compound and sheathed with PVC Type ST1/TM1 compound.

Cables conform to BS 6346.

\*\* cables with sector shaped conductors having lesser overall dimensions, weight and cost are available on request.



■ **600 /1000 V - TWO CORE COPPER CONDUCTOR  
PVC INSULATED STEEL WIRE ARMoured PVC  
SHEATHED CABLES**

**(CU / PVC / PVC / SWA / PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Extruded Bedding	Armour Wire Diameter	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Metre ± 10 %		KG
1.5*	12.1	0.8	1.0	0.9	1.8	14.4	370	1000	D-10	430
1.5	12.1	0.8	1.0	0.9	1.8	14.8	380	1000	D-10	440
2.5*	7.41	0.8	1.0	0.9	1.8	15.2	420	1000	D-10	480
2.5	7.41	0.8	1.0	0.9	1.8	15.6	435	1000	D-10	495
4	4.61	1.0	1.0	0.9	1.8	17.4	540	1000	D-11	640
6	3.08	1.0	1.0	1.25	1.8	19.3	730	1000	D-12	840
10	1.83	1.0	1.0	1.25	1.8	21.3	900	1000	D-14	1050
16	1.15	1.0	1.0	1.25	1.8	23.3	1120	1000	D-14	1270
25**	0.727	1.2	1.0	1.6	1.8	27.5	1660	500	D-12	940
35**	0.524	1.2	1.0	1.6	1.8	29.7	1970	500	D-14	1135
50**	0.387	1.4	1.0	1.6	1.9	32.7	2230	500	D-16	1330
70**	0.268	1.4	1.0	2.0	2.0	36.9	3000	500	D-18	1740
95**	0.193	1.6	1.2	2.0	2.2	42.3	3890	500	D-18	2200
120**	0.153	1.6	1.2	2.0	2.3	45.5	4580	500	D-18	2530
150**	0.124	1.8	1.2	2.5	2.4	50.3	5780	500	D-19	3210
185**	0.0991	2.0	1.4	2.5	2.6	55.1	6890	250	D-18	1960
240**	0.0754	2.2	1.4	2.5	2.8	61.3	8430	250	D-18	2350
300**	0.0601	2.4	1.6	2.5	2.9	66.7	10140	250	D-19	2850
400**	0.0470	2.6	1.6	2.5	3.2	73.9	12500	250	D-21	3540
500**	0.0366	2.8	1.8	3.15	3.4	82.8	16120	250	D-22	4500

\* Circular solid conductors (Class 1).

All other conductors circular stranded or circular stranded compacted (Class 2)

All the cables are Insulated with either PVC Type 5 Heat Resisting 85°C compound and sheath Type 9/ ST2 compound OR PVC Type A/TI1 compound and sheathed with PVC Type ST1/TM1 compound.

All Cables conform to IEC 60502- 1.

\*\*Cables with sector shaped conductors, having lesser overall dimensions, weight and cost are available on request.



■ **600 /1000 V - TWO CORE ALUMINUM CONDUCTOR PVC INSULATED STEEL WIRE ARMoured PVC SHEATHED CABIES**

**(AL/ PVC/ PVC/ SWA/ PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Bedding	Armour Wire Diameter	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Metre ± 10 %		KG
16	1.91	1.0	1.0	1.25	1.8	22.9	915	1000	D-14	1070
25	1.20	1.2	1.0	1.6	1.8	27.0	1330	500	D-12	7750
35	0.868	1.2	1.0	1.6	1.8	29.2	1540	500	D-12	880
50	0.641	1.4	1.0	1.6	1.9	32.9	1680	500	D-16	1050
70	0.443	1.4	1.2	2.0	2.0	37.7	2300	500	D-18	1390
95	0.320	1.6	1.2	2.0	2.2	42.5	2790	500	D-18	1640
120	0.253	1.6	1.2	2.0	2.3	45.5	3150	500	D-19	1900
150	0.206	1.8	1.4	2.5	2.4	50.7	4060	500	D-19	2350
185	0.164	2.0	1.4	2.5	2.6	55.2	4710	250	D-18	1420
240	0.125	2.2	1.6	2.5	2.8	61.9	5700	250	D-18	1670
300	0.100	2.4	1.6	2.5	2.9	66.8	6530	250	D-19	1870
400	0.0778	2.6	1.6	2.5	3.2	74.3	7830	250	D-21	2380
500	0.0605	2.8	1.8	3.15	3.4	83.0	10170	200	D-22	2500

All conductors circular stranded or circular stranded compacted (Class 2).

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/T11 compound and sheathed with PVC Type ST1/TM1 compound.

Cables conform to IEC 60502-1 and generally to BS 6346.



■ **600 /1000 V - THREE CORE COPPER  
CONDUCTOR PVC INSULATED PVC  
SHEATHED CABLES**

**(CU/ PVC /PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Outer Sheath	Approx.Overall Diameter	Approx.Cable Weight	Standard Packing Length	Drum Size	Approx.Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Metre± 10%		KG
1.5*	12.1	0.7	1.8	11.1	170	1000	D-8	220
1.5	12.1	0.7	1.8	11.5	180	1000	D-9	240
2.5*	7.41	0.8	1.8	11.9	225	1000	D-9	285
2.5	7.41	0.8	1.8	12.4	235	1000	D-9	295
4	4.61	0.8	1.8	13.9	300	1000	D-10	360
6	3.08	0.8	1.8	16.2	380	1000	D-11	480
10	1.83	1.0	1.8	17.6	560	1000	D-12	670
16	1.15	1.0	1.8	19.9	775	1000	D-12	885
25	0.727	1.2	1.8	21.2	1050	500	D-10	585
35	0.524	1.2	1.8	23.5	1360	500	D-11	780
50	0.387	1.4	1.8	27.1	1760	500	D-12	990
70	0.268	1.4	2.0	29.7	2390	500	D-12	1310
95	0.193	1.6	2.1	34.5	3240	500	D-16	1830
120	0.153	1.6	2.2	37.7	3990	500	D-18	2240
150	0.124	1.8	2.3	40.4	4900	500	D-18	2690
185	0.0991	2.0	2.5	45.1	6040	500	D-16	1720
240	0.0754	2.2	2.6	51.4	7740	250	D-18	2180
300	0.0601	2.4	2.8	56.1	9660	250	D-18	2660
400	0.0470	2.6	3.1	63.7	12410	250	D-18	3340
500	0.0366	2.8	3.4	69.1	15480	250	D-18	4110

\*Circular solid conductors (Class 1).

Conductors including 16sqmm circular stranded (Class 2).

25sqmm and above shaped stranded conductors(Class 2)

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/TI1 compound and sheathed with PVC Type ST1/TM1 compound.

Cables 10sqmm to 400sqmm conform generally to BS6346.

500sqmm cable conforms to IEC 60502-1.



■ **600 /1000 V - THREE CORE COPPER  
CONDUCTOR PVC INSULATED PVC  
SHEATHED CABLES**

**(CU/ PVC /PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Metre ± 10%		KG
1.5*	12.1	0.8	1.8	11.5	180	1000	D-9	240
1.5	12.1	0.8	1.8	11.9	190	1000	D-9	250
2.5*	7.41	0.8	1.8	12.4	225	1000	D-9	285
2.5	7.41	0.8	1.8	12.8	235	1000	D-9	295
4	4.61	1.0	1.8	14.8	330	1000	D-10	390
6	3.08	1.0	1.8	16.0	410	1000	D-11	510
10	1.83	1.0	1.8	18.2	560	1000	D-12	670
16	1.15	1.0	1.8	20.4	775	1000	D-12	885
25	0.727	1.2	1.8	21.2	1050	500	D-10	585
35	0.524	1.2	1.8	23.5	1360	500	D-11	780
50	0.387	1.4	1.8	27.1	1760	500	D-12	990
70	0.268	1.4	2.0	29.7	2390	500	D-12	1310
95	0.193	1.6	2.1	34.5	3240	500	D-16	1830
120	0.153	1.6	2.2	37.7	3990	500	D-18	2240
150	0.124	1.8	2.3	40.4	4900	500	D-18	2690
185	0.0991	2.0	2.5	45.1	6040	250	D-18	1720
240	0.0754	2.2	2.7	51.6	7820	250	D-18	2195
300	0.0601	2.4	2.9	56.3	9700	250	D-18	2665
400	0.0470	2.6	3.1	63.7	12410	250	D-18	3340
500	0.0366	2.8	3.4	69.1	15480	250	D-18	4110

\*Circular solid conductors (Class 1).

Conductors including 16sqmm circular stranded (Class 2).

25sqmm and above shaped stranded conductors(Class 2)

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC

Type 9/ST2 compound OR PVC Type A/TI1 compound and sheathed with PVC Type ST1/TM1 compound.

Cable conforms to IEC 60502-1.





■ **600 / 1000 V - THREE CORE COPPER CONDUCTOR PVC INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES**  
**(CU/PVC/PVC/SWA/PVC and CU/PVC/SWA/PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Bedding		Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter		Approx. Cable Weight		Standard Packing Length	Drum Size	Approx. Gross Weight	
			Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding	Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding
Sqmm	Ohm/Km	mm	mm		mm	mm	mm		Kg/Km		Metre ± 10 %		KG	
1.5*	12.1	0.7	0.8	-	0.9	1.4	13.3	-	340	-	1000	D-10	400	-
1.5	12.1	0.7	0.8	-	0.9	1.4	13.7	-	355	-	1000	D-10	415	-
2.5*	7.41	0.8	0.8	-	0.9	1.4	14.6	-	415	-	1000	D-10	475	-
2.5	7.41	0.8	0.8	-	0.9	1.4	15.0	-	435	-	1000	D-10	495	-
4	4.61	0.8	0.8	-	0.9	1.4	16.1	-	515	-	1000	D-11	615	-
6	3.08	0.8	0.8	-	1.25	1.5	18.3	-	720	-	1000	D-12	830	-
10	1.83	1.0	0.8	-	1.25	1.6	20.9	-	960	-	1000	D-12	1070	-
16	1.15	1.0	0.8	-	1.25	1.6	23.2	-	1240	-	1000	D-14	1390	-
25	0.727	1.2	1.0	0.8	1.6	1.7	25.6	24.5	1670	1550	500	D-12	945	858
35	0.524	1.2	1.0	0.8	1.6	1.8	28.1	27.0	2050	1920	500	D-12	1140	1070
50	0.387	1.4	1.0	0.8	1.6	1.9	31.9	30.8	2610	2460	500	D-14	1460	1380
70	0.268	1.4	1.2	0.8	2.0	2.0	35.5	34.0	3570	3360	500	D-16	2030	1890
95	0.193	1.6	1.2	0.8	2.0	2.1	40.3	38.8	4590	4360	500	D-18	2540	2420
120	0.153	1.6	1.2	0.8	2.0	2.2	43.5	42.0	5480	5230	500	D-18	2980	2860
150	0.124	1.8	1.4	0.8	2.5	2.4	47.8	45.9	6940	6600	500	D-19	3790	3620
185	0.0991	2.0	1.4	0.8	2.5	2.5	52.3	50.4	8270	7900	250	D-18	2310	2220
240	0.0754	2.2	1.6	0.8	2.5	2.6	59	56.7	10330	9870	250	D-18	2820	2710
300	0.0601	2.4	1.6	0.8	2.5	2.8	63.7	61.4	12480	11950	250	D-18	3360	3230
400	0.0470	2.6	1.6	0.8	2.5	3.0	71.1	68.8	15560	14970	250	D-19	3430	3310
500	0.0366	2.8	1.8	0.8	3.15	3.6	78.8	76.1	19910	19130	200	D-19	4300	4150

\*Circular solid conductors (Class 1).

Conductors including 16sqmm circular stranded (Class 2).

25sqmm and above shaped stranded conductors(Class 2)

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/TI1 compound and sheathed with PVC Type ST1/TM1 compound.

Drum size given above are for cables with extruded bedding.

Cables upto 400sqmm conform to BS6346. 500sqmm cable conforms to IEC 60502-1.



■ **600 / 1000 V - THREE CORE COPPER CONDUCTOR PVC INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES**  
**(CU/PVC/PVC/SWA/PVC and CU/PVC/SWA/PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Bedding		Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter		Approx. Cable Weight		Standard Packing Length	Drum Size	Approx. Gross Weight	
			Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding	Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding
Sqmm	Ohm/Km	mm	mm		mm	mm	mm		Kg/Km		Metre ± 10 %		KG	
1.5*	12.1	0.8	1.0	-	0.9	1.8	14.9	-	400	-	1000	D-10	460	-
1.5	12.1	0.8	1.0	-	0.9	1.8	15.3	-	420	-	1000	D-11	520	-
2.5*	7.41	0.8	1.0	-	0.9	1.8	15.8	-	460	-	1000	D-11	560	-
2.5	7.41	0.8	1.0	-	0.9	1.8	16.2	-	480	-	1000	D-11	580	-
4	4.61	1.0	1.0	-	0.9	1.8	18.9	-	705	-	1000	D-12	815	-
6	3.08	1.0	1.0	-	1.25	1.8	20.1	-	820	-	1000	D-12	930	-
10	1.83	1.0	1.0	-	1.25	1.8	22.3	-	1030	-	1000	D-14	1180	-
16	1.15	1.0	1.0	-	1.25	1.8	24.5	-	1300	-	1000	D-14	1450	-
25	0.727	1.2	1.0	0.8	1.6	1.8	25.8	24.7	1680	1590	500	D-12	950	905
35	0.524	1.2	1.0	0.8	1.6	1.8	28.1	27.0	2050	1950	500	D-12	1140	1085
50	0.387	1.4	1.0	0.8	1.6	2.0	32.1	31.0	2630	2485	500	D-14	1470	1395
70	0.268	1.4	1.2	0.8	2.0	2.1	35.7	34.2	3590	3385	500	D-16	2005	1905
95	0.193	1.6	1.2	0.8	2.0	2.2	40.5	39.0	4610	4380	500	D-18	2545	2430
120	0.153	1.6	1.2	0.8	2.0	2.3	43.7	42.2	5500	5280	500	D-18	2990	2880
150	0.124	1.8	1.4	0.8	2.5	2.5	48.0	46.1	6900	6625	500	D-19	3770	3630
185	0.0991	2.0	1.4	0.8	2.5	2.7	52.7	50.8	8300	7960	250	D-18	2315	2230
240	0.0754	2.2	1.6	0.8	2.5	2.9	59.6	57.3	130380	9985	250	D-18	2835	2735
300	0.0601	2.4	1.6	0.8	2.5	3.1	64.3	62.0	12540	12025	250	D-19	3455	3325
400	0.0470	2.6	1.6	0.8	2.5	3.4	73.2	70.9	16280	15805	200	D-19	3580	3480
500	0.0366	2.8	1.8	0.8	3.15	3.6	78.8	76.1	19910	19065	200	D-19	4300	4135

\*Circular solid conductors (Class 1).

Conductors including 16sqmm circular stranded (Class 2).

25sqmm and above shaped stranded conductors(Class 2)

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/TI1 compound and sheathed with PVC Type ST1/TM1 compound.

Drum size given above are for cables with extruded bedding. Cable conforms to IEC 60502-1.



■ **600 /1000 V - FOUR CORE COPPER CONDUCTOR PVC INSULATED PVC SHIEATHED CABLES**  
**(CU/ PVC /PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Outer Sheath	Approx.Overall Diameter	Approx.Cable Weight	Standard Packing Length	Drum Size	Approx.Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Metre±10%		KG
1.5*	12.1	0.7	1.8	11.9	200	1000	D-9	260
1.5	12.1	0.7	1.8	12.3	210	1000	D-9	270
2.5*	7.41	0.8	1.8	13.3	265	1000	D-10	325
2.5	7.41	0.8	1.8	13.8	280	1000	D-10	340
4	4.61	0.8	1.8	15.0	360	1000	D-10	420
6	3.08	0.8	1.8	16.5	465	1000	D-11	565
10	1.83	1.0	1.8	19.1	690	1000	D-12	800
16	1.15	1.0	1.8	21.8	970	500	D-10	545
25	0.727	1.2	1.8	23.3	1290	500	D-11	745
35	0.524	1.2	1.8	26.7	1700	500	D-12	960
50	0.387	1.4	1.9	30.3	2310	500	D-14	1310
70	0.268	1.4	2.0	33.4	3130	500	D-16	1780
95	0.193	1.6	2.2	38.8	4260	500	D-18	2370
120	0.153	1.6	2.3	41.7	5240	500	D-18	2860
150	0.124	1.8	2.5	46.3	6490	500	D-19	3570
185	0.0991	2.0	2.6	51.0	7980	250	D-18	2240
240	0.0754	2.2	2.8	56.6	10230	250	D-18	2800
300	0.0601	2.4	3.1	62.8	12810	250	D-18	3440
400	0.0470	2.6	3.3	69.8	16390	200	D-19	3600
500	0.0366	2.8	3.6	78.9	20500	200	D-19	4420

\*Circular solid conductors (Class 1).

Conductors including 16sqmm circular stranded (Class 2).

25sqmm and above shaped stranded conductors(Class 2)

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/TI1 compound and sheathed with PVC Type ST1/TM1 compound.

Cables 10sqmm to 400sqmm conform generally to BS6346.

500sqmm cable conforms to IEC 60502-1.



■ **600 /1000 V - FOUR CORE COPPER  
CONDUCTOR PVC INSULATED PVC  
SHEATHED CABLES**  
**(CU/ PVC /PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Metre ± 10%		KG
1.5*	12.1	0.8	1.8	12.3	210	1000	D-9	270
1.5	12.1	0.8	1.8	12.8	225	1000	D-9	285
2.5*	7.41	0.8	1.8	13.3	265	1000	D-10	325
2.5	7.41	0.8	1.8	13.8	280	1000	D-10	340
4	4.61	1.0	1.8	16.0	390	1000	D-11	490
6	3.08	1.0	1.8	17.4	495	1000	D-12	605
10	1.83	1.0	1.8	19.8	705	1000	D-12	815
16	1.15	1.0	1.8	22.3	980	500	D-10	555
25	0.727	1.2	1.8	23.3	1290	500	D-11	745
35	0.524	1.2	1.8	26.7	1700	500	D-12	960
50	0.387	1.4	1.9	30.3	2310	500	D-14	1310
70	0.268	1.4	2.1	33.6	3150	500	D-16	1790
95	0.193	1.6	2.2	38.8	4260	500	D-18	2370
120	0.153	1.6	2.4	41.9	5270	500	D-18	2870
150	0.124	1.8	2.5	46.3	6490	500	D-19	3570
185	0.0991	2.0	2.7	51.2	8000	250	D-18	2240
240	0.0754	2.2	2.9	56.8	10250	250	D-18	2800
300	0.0601	2.4	3.1	62.6	12810	250	D-18	3440
400	0.0470	2.6	3.4	70.0	16420	200	D-19	3610
500	0.0366	2.8	3.6	78.9	20500	200	D-19	4420

\*Circular solid conductors (Class 1).

Conductors including 16sqmm circular stranded (Class 2).

25sqmm and above shaped stranded conductors(Class 2)

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/TI1 compound and sheathed with PVC Type ST1/TM1 compound.

Cable conforms to IEC 60502-1.



■ **600 / 1000 V - FOUR CORE COPPER CONDUCTOR  
PVC INSULATED STEEL WIRE ARMOURED PVC  
SHEATHED CABLES**

**(CU/PVC/PVC/SWA/PVC and CU/PVC/SWA/PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Bedding		Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter		Approx. Cable Weight		Standard Packing Length	Drum Size	Approx. Gross Weight	
			Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding	Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding
Sqmm	Ohm/Km	mm	mm		mm	mm	mm		Kg/Km		Metre ± 10 %		KG	
1.5*	12.1	0.7	0.8	-	0.9	1.4	14.1	-	385	-	1000	D-10	445	-
1.5	12.1	0.7	0.8	-	0.9	1.4	14.5	-	400	-	1000	D-10	460	-
2.5*	7.41	0.8	0.8	-	0.9	1.4	15.5	-	470	-	1000	D-11	570	-
2.5	7.41	0.8	0.8	-	0.9	1.4	16.0	-	495	-	1000	D-11	595	-
4	4.61	0.8	0.8	-	1.25	1.5	18.1	-	700	-	1000	D-12	810	-
6	3.08	0.8	0.8	-	1.25	1.5	19.6	-	8300	-	1000	D-12	940	-
10	1.83	1.0	0.8	-	1.25	1.6	22.4	-	1130	-	1000	D-14	1280	-
16	1.15	1.0	1.0	-	1.6	1.7	26.4	-	1650	-	500	D-12	935	-
25	0.727	1.2	1.0	0.8	1.6	1.8	27.9	26.8	2040	1890	500	D-12	1130	1060
35	0.524	1.2	1.0	0.8	1.6	1.9	31.5	30.4	2550	2400	500	D-14	1430	1350
50	0.387	1.4	1.2	0.8	2.0	2.0	36.3	34.8	3510	3300	500	D-16	1970	1860
70	0.268	1.4	1.2	0.8	2.0	2.1	39.4	37.9	4450	4220	500	D-18	2470	2350
95	0.193	1.6	1.2	0.8	2.0	2.2	44.6	43.1	5770	5510	500	D-18	3130	3000
120	0.153	1.6	1.4	0.8	2.5	2.4	49.1	47.2	7350	6970	500	D-19	4000	3810
150	0.124	1.8	1.4	0.8	2.5	2.5	53.5	51.6	8760	8390	250	D-18	2430	2340
185	0.0991	2.0	1.4	0.8	2.5	2.6	58.6	56.3	10530	10040	250	D-18	2870	2750
240	0.0754	2.2	1.6	0.8	2.5	2.8	64.2	61.9	13050	12520	250	D-18	3500	3370
300	0.0601	2.4	1.6	0.8	2.5	3.0	70.0	67.7	15880	15300	250	D-19	4290	4150
400	0.0470	2.6	1.8	0.8	3.15	3.3	79.1	76.4	20710	20000	200	D-19	4460	4320
500	0.0366	2.8	1.8	0.8	3.15	3.9	88.8	86.1	25400	24720	200	D-23	5580	5440

\*Circular solid conductors (Class 1).

Conductors including 16sqmm circular stranded (Class 2).

25sqmm and above shaped stranded conductors(Class 2)

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC

Type 9/ST2 compound OR PVC Type A/TI1 compound and sheathed with PVC Type ST1/TM1 compound.

Drum size given above are for cables with extruded bedding.

Cables upto 400sqmm conform to BS6346. 500sqmm cable conforms to IEC 60502-1.

[www.zmscable.com](http://www.zmscable.com)

Add: (Changzhuang Village) Fumin Road, Zhongyuan District, Zhengzhou City, Henan P.R.C., China / Code: 450042

Tel.: 0086-371-67829367 / Fax: 0086-371-67828777

\* ZMS--- TRANS MORE \*



■ **600 / 1000 V - FOUR CORE COPPER CONDUCTOR PVC INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES**  
**(CU/PVC/PVC/SWA/PVCand CU/PVC/SWA/PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Bedding		Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter		Approx. Cable Weight		Standard Packing Length	Drum Size	Approx. Gross Weight	
			Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding	Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding
Sqmm	Ohm/Km	mm	mm		mm	mm	mm		Kg/Km		Metre ± 10 %		KG	
1.5*	12.1	0.8	1.0	-	0.9	1.8	15.7	-	445	-	1000	D-11	545	-
1.5	12.1	0.8	1.0	-	0.9	1.8	16.2	-	470	-	1000	D-11	570	-
2.5*	7.41	0.8	1.0	-	0.9	1.8	16.7	-	510	-	1000	D-11	610	-
2.5	7.41	0.8	1.0	-	0.9	1.8	17.2	-	540	-	1000	D-12	650	-
4	4.61	1.0	1.0	-	1.25	1.8	20.1	-	800	-	1000	D-12	910	-
6	3.08	1.0	1.0	-	1.25	1.8	21.5	-	940	-	1000	D-14	1090	-
10	1.83	1.0	1.0	-	1.25	1.8	23.9	-	1200	-	1000	D-14	1350	-
16	1.15	1.0	1.0	-	1.6	1.8	27.1	-	1680	-	1000	D-14	990	-
25	0.727	1.2	1.0	0.8	1.6	1.8	27.9	26.8	2040	1925	500	D-12	1130	1075
35	0.524	1.2	1.0	0.8	1.6	1.9	31.5	30.4	2550	2440	500	D-14	1430	1370
50	0.387	1.4	1.0	0.8	2.0	2.1	36.5	35.0	3530	3330	500	D-16	1980	1875
70	0.268	1.4	1.2	0.8	2.0	2.2	39.6	38.1	4450	4250	500	D-18	2470	2365
95	0.193	1.6	1.2	0.8	2.5	2.4	46.0	44.5	6100	5900	500	D-18	3290	3190
120	0.153	1.6	1.4	0.8	2.5	2.5	49.3	47.4	7370	7030	500	D-19	4010	3835
150	0.124	1.8	1.4	0.8	2.5	2.7	53.5	51.9	8760	8380	250	D-18	2430	2335
185	0.0991	2.0	1.6	0.8	2.5	2.9	59.2	56.9	10600	10120	250	D-18	2890	2770
240	0.0754	2.2	1.6	0.8	2.5	3.1	64.8	62.5	13100	12645	250	D-18	3520	3400
300	0.0601	2.4	1.6	0.8	2.5	3.3	70.6	68.3	16000	15375	250	D-19	4320	4165
400	0.0470	2.6	1.6	0.8	3.15	3.6	79.7	77.0	20800	20035	200	D-19	5520	4325
500	0.0366	2.8	1.8	0.8	3.15	3.9	88.8	86.1	25400	24555	200	D-23	5580	5410

\*Circular solid conductors (Class 1).

Conductors including 16sqmm circular stranded (Class 2).

25sqmm and above shaped stranded conductors(Class 2)

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/TI1 compound and sheathed with PVC Type ST1/TM1 compound.

Drum size given above are for cables with extruded bedding. Cable conforms to IEC 60502-1.



■ **600 / 1000 V - FOUR CORE ALUMINUM CONDUCTOR PVC INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES**  
**(AL/PVC/PVC/SWA/PVC and AL/PVC/SWA/PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Bedding		Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter		Approx. Cable Weight		Standard Packing Length	Drum Size	Approx. Gross Weight	
			Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding	Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding
Sqmm	Ohm/Km	mm	mm		mm	mm	mm		Kg/Km		Metre ± 10 %		KG	
25	1.20	1.2	1.0	0.8	1.6	1.8	27.9	26.8	1420	1310	500	D-12	820	765
35	0.868	1.2	1.0	0.8	1.6	1.9	31.5	30.8	1720	1580	500	D-14	1010	940
50	0.641	1.4	1.2	0.8	2.0	2.1	36.5	35.0	2400	2190	500	D-18	1440	1335
70	0.443	1.4	1.2	0.8	2.0	2.2	39.6	38.1	2840	2620	500	D-18	1660	1550
95	0.320	1.6	1.2	0.8	2.5	2.4	45.7	44.2	3910	3600	500	D-19	2200	2040
120	0.253	1.6	1.4	0.8	2.5	2.5	49.3	47.4	4470	4110	500	D-19	2560	2380
150	0.206	1.8	1.4	0.8	2.5	2.7	52.1	50.2	5050	4710	500	D-19	2850	2680
185	0.164	2.0	1.6	0.8	2.5	2.9	59.0	56.7	6080	5650	500	D-22	3510	3300
240	0.125	2.2	1.6	0.8	2.5	3.1	65.0	62.7	7310	6800	250	D-18	2070	1940
300	0.100	2.4	1.6	0.8	2.5	3.3	70.6	68.3	8590	8050	250	D-21	2570	2430
400	0.0778	2.6	1.8	0.8	3.15	3.6	79.7	77.0	11180	10810	200	D-19	2560	2480
500	0.0605	2.8	1.8	0.8	3.15	3.9	88.9	86.1	13690	12690	200	D-21	3160	2960

All conductors circular stranded or circular stranded compacted (Class 2).

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/T11 compound and sheathed with PVC Type ST1/TM1 compound.

Cables conform to IEC 60502-1 and generally to BS 6346.



■ **600 / 1000 V - FOUR CORE WITH REDUCED NEUTRAL COPPER CONDUCTOR PVC INSULATED PVC SHEATHED CABLES (CU/PVC/PVC)**



Nominal Area of Conductor		Maximum Conductor Resistance at 20° C		Thickness of Insulation		Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Phase	Neutral	Phase	Neutral	Phase	Neutral						
Sqmm		Ohm/Km		mm		mm	mm	Kg/Km	Metre ± 10%		KG
10*	6	1.83	3.08	1.0	1.0	1.8	18.2	540	1000	D-12	650
16*	10	1.15	1.83	1.0	1.0	1.8	20.7	760	500	D-10	440
25	16	0.727	1.15	1.2	1.0	1.8	23.3	1140	500	D-11	670
35	16	0.524	1.15	1.2	1.0	1.8	26.7	1450	500	D-12	835
50	25	0.387	0.727	1.4	1.2	1.9	30.3	1970	500	D-12	1100
70	35	0.268	0.524	1.4	1.2	2.0	33.4	2690	500	D-16	1560
95	50	0.193	0.387	1.6	1.4	2.1	38.6	3650	500	D-18	2070
120	70	0.153	0.268	1.6	1.4	2.2	41.5	4570	500	D-18	2530
150	70	0.124	0.268	1.8	1.4	2.4	46.6	5560	500	D-19	3100
185	95	0.0991	0.193	2.0	1.6	2.5	51.3	6900	250	D-18	1970
240	120	0.0754	0.153	2.2	1.6	2.7	56.9	8820	250	D-18	2450
300	150	0.0601	0.124	2.4	1.8	2.9	63.1	11050	250	D-18	3000
300	185	0.0601	0.0991	2.4	2.0	3.0	63.3	11370	250	D-18	3080
400	185	0.0470	0.0991	2.6	2.0	3.2	70.5	14110	200	D-19	3140

\*Phase conductors upto 16sqmm circular stranded(Class 2).

Phase conductors 25sqmm and above shaped stranded (Class 2).

All neutral conductors circular stranded (class 2).

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/TI1 compound and sheathed with PVC Type ST1/TM1 compound.

\*Cables conform to IEC 60502-1

All other cables conform generally to BS 6346 and to IEC 60502-1.





■ **600 / 1000 V - FOUR CORE WITH REDUCED NEUTRAL COPPER CONDUCTOR PVC INSULATED PVC SHEATHED CABLES (CU/PVC/PVC)**



Nominal Area of Conductor		Maximum Conductor Resistance at 20° C		Thickness of Insulation		Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Phase	Neutral	Phase	Neutral	Phase	Neutral						
Sqmm		Ohm/Km		mm		mm	mm	Kg/Km	Metre ± 10%		KG
10*	6	1.83	3.08	1.0	1.0	1.8	18.2	540	1000	D-12	650
16*	10	1.15	1.83	1.0	1.0	1.8	20.7	760	500	D-10	440
25	16	0.727	1.15	1.2	1.0	1.8	23.3	1140	500	D-11	670
35	16	0.524	1.15	1.2	1.0	1.8	26.7	1450	500	D-12	835
50	25	0.387	0.727	1.4	1.2	1.9	30.3	1970	500	D-12	1100
70	35	0.268	0.524	1.4	1.2	2.0	33.4	2690	500	D-16	1560
95	50	0.193	0.387	1.6	1.4	2.2	38.8	3670	500	D-18	2080
120	70	0.153	0.268	1.6	1.4	2.3	41.7	4590	500	D-18	2540
150	70	0.124	0.268	1.8	1.4	2.4	46.6	5560	500	D-19	3100
185	95	0.0991	0.193	2.0	1.6	2.6	51.5	6940	250	D-18	1980
240	120	0.0754	0.153	2.2	1.6	2.8	57.1	8860	250	D-18	2460
300	150	0.0601	0.124	2.4	1.8	3.0	63.1	11080	250	D-18	2870
300	185	0.0601	0.0991	2.4	2.0	3.0	63.3	11370	250	D-18	3080
400	185	0.0470	0.0991	2.6	2.0	3.2	70.5	14110	200	D-19	3140
500	240	0.0366	0.0754	2.8	2.2	3.5	78.7	18300	200	D-21	4080

\*Phase conductors upto 16sqmm circular stranded(Class 2).

Phase conductors 25sqmm and above shaped stranded (Class 2).

All neutral conductors circular stranded (class 2).

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/TI1 compound and sheathed with PVC Type ST1/TM1 compound.

\*Cables conform to IEC 60502-1



■ **600 / 1000 V - FOUR CORE WITH REDUCED NEUTRAL COPPER CONDUCTOR PVC INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES**

**(CU/PVC/PVC/SWA/PVC and CU/PVC/SWA/PVC)**



Nominal Area of Conductor		Maximum Conductor Resistance at 20° C		Thickness of Insulation		Thickness of Bedding		Dia. of Armour Wire	Thickn ess of Outer Sheath	Approx. Overa ll Diameter		Approx. Cable Weight		Stand ard Packin g Length	Drum Size	Approx. Gross Weight	
Phase	Neutra l	Phase	Neutra l	Phase	Neutra l	Extrud ed	Lappe d			Extrud ed Beddi ng	Lappe d Beddi ng	Extrud ed Beddi ng	Lappe d Beddi ng			Extrud ed Beddin g	Lappe d Beddi ng
Sqmm		Ohm/Km		mm		mm		mm	mm	mm		Kg/Km		Metre ± 10%		KG	
10 *	6	1.83	3.08	1.0	1.0	1.0	-	1.25	1.8	22.7	-	1080	-	1000	D-14	1230	-
16*	10	1.15	1.83	1.0	1.0	1.0	-	1.6	1.8	25.9	-	1530	-	500	D-12	875	-
25	16	0.727	1.15	1.2	1.0	1.0	0.8	1.6	1.8	27.9	26.8	1930	1810	500	D-12	1080	1020
35	16	0.524	1.15	1.2	1.0	1.0	0.8	1.6	1.8	31.3	30.2	2360	2230	500	D-14	1330	1270
50	25	0.387	0.727	1.4	1.2	1.0	0.8	1.6	1.9	34.9	33.8	3020	2870	500	D-16	1720	1650
70	35	0.268	0.524	1.4	1.2	1.2	0.8	2.0	2.0	39.2	37.7	4130	3920	500	D-18	2310	2200
95	50	0.193	0.387	1.6	1.4	1.2	0.8	2.0	2.2	44.6	43.1	5340	5110	500	D-18	2910	2800
120	70	0.153	0.268	1.6	1.4	1.4	0.8	2.5	2.3	48.9	47.0	6860	6500	500	D-19	3750	3570
150	70	0.124	0.268	1.8	1.4	1.4	0.8	2.5	2.4	53.8	51.9	8090	7740	500	D-19	4370	4190
185	95	0.0991	0.193	2.0	1.6	1.4	0.8	2.5	2.5	58.5	56.6	9700	9330	250	D-18	2670	2570
240	120	0.0754	0.153	2.2	1.6	1.6	0.8	2.5	2.7	64.5	62.2	11990	11540	250	D-18	3240	3130
300	150	0.0601	0.124	2.4	1.8	1.6	0.8	2.5	2.9	70.7	68.4	14620	14080	250	D-21	4080	3940
300	185	0.0601	0.0991	2.4	2.0	1.6	0.8	2.5	2.9	70.7	68.4	14930	14390	250	D-21	4150	4020
400	185	0.0470	0.0991	2.6	2.0	1.8	0.8	3.15	3.1	79.6	76.9	18970	18310	200	D-19	4110	3980

\*Phase conductors upto 16sqmm circular stranded(Class 2).

Phase conductors 25sqmm and above shaped stranded (Class 2).

All neutral conductors circular stranded (class 2).

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/TI1 compound and sheathed with PVC Type ST1/TM1 compound.

Drum size given above are for cables with extruded bedding.

\*Cables conform to IEC 60502-1

All other cables conform to BS 6346.



■ **600 / 1000 V - FOUR CORE WITH REDUCED NEUTRAL COPPER CONDUCTOR PVC INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES**



**(CU/PVC/PVC/SWA/PVC and CU/PVC/SWA/PVC)**

Nominal Area of Conductor		Maximum Conductor Resistance at 20° C		Thickness of Insulation		Thickness of Bedding		Dia. of Armour Wire	Thickn ess of Outer Sheath	Approx. Overa ll Diameter		Approx. Cable Weight		Standar d Packin g Length	Drum Size	Approx. Gross Weight	
Phase	Neutra l	Phase	Neutra l	Phase	Neutra l	Extrud ed	Lappe d			Extrud ed Beddi ng	Lappe d Beddi ng	Extrud ed Beddi ng	Lappe d Beddi ng			Extrud ed Beddin g	Lappe d Beddi ng
Sqmm		Ohm/Km		mm		mm		mm	mm	mm		Kg/Km		Metre ± 10%		KG	
10 *	6	1.83	3.08	1.0	1.0	1.0	-	1.25	1.8	22.7	-	1080	-	1000	D-14	1230	-
16*	10	1.15	1.83	1.0	1.0	1.0	-	1.6	1.8	25.9	-	1530	-	500	D-12	875	-
25	16	0.727	1.15	1.2	1.0	1.0	0.8	1.6	1.8	27.9	26.8	1930	1835	500	D-12	1080	1020
35	16	0.524	1.15	1.2	1.0	1.0	0.8	1.6	1.9	31.5	30.4	2380	2270	500	D-14	1340	1285
50	25	0.387	0.727	1.4	1.2	1.0	0.8	2.0	2.0	35.9	34.8	3250	3120	500	D-16	1830	1770
70	35	0.268	0.524	1.4	1.2	1.2	0.8	2.0	2.1	39.4	37.9	4150	3945	500	D-18	2315	2215
95	50	0.193	0.387	1.6	1.4	1.2	0.8	2.0	2.3	44.8	43.3	5360	5125	500	D-18	2920	2800
120	70	0.153	0.268	1.6	1.4	1.4	0.8	2.5	2.5	49.3	47.4	6890	6575	500	D-19	3765	3610
150	70	0.124	0.268	1.8	1.4	1.4	0.8	2.5	2.6	54.0	51.2	8110	7665	500	D-19	4380	4150
185	95	0.0991	0.193	2.0	1.6	1.4	0.8	2.5	2.7	58.7	56.5	9730	9305	250	D-18	2675	2565
240	120	0.0754	0.153	2.2	1.6	1.6	0.8	2.5	2.9	64.9	62.1	12030	11535	250	D-18	3250	3125
300	150	0.0601	0.124	2.4	1.8	1.6	0.8	2.5	3.1	70.2	67.9	14660	13990	250	D-21	4090	3915
300	185	0.0601	0.0991	2.4	2.0	1.6	0.8	2.5	3.2	70.4	68.1	14870	14350	250	D-21	4135	4000
400	185	0.0470	0.0991	2.6	2.0	1.8	0.8	3.15	3.4	80.2	76.6	19090	18125	200	D-19	4135	3945
500	240	0.0366	0.0754	2.8	2.2	1.8	0.8	3.15	3.7	88.4	85.7	23300	22360	200	D-23	5170	4970

\*Phase conductors upto 16sqmm circular stranded(Class 2).

Phase conductors 25sqmm and above shaped stranded (Class 2).

All neutral conductors circular stranded (class 2).

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/TI1 compound and sheathed with PVC Type ST1/TM1 compound.

Drum size given above are for cables with extruded bedding.

\*Cables conform to IEC 60502-1



■ **600 / 1000 V - MULTICORE CABLES FOR STREET LIGHTING COPPER CONDUCTOR PVC INSULATED PVC SHEATHED CABLES (CU | PVC | PVC )**



Cable Details	Nominal Area of Conductor		Maximum Conductor Resistance at 20° C		Thickness of Insulation		Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
	Phase	Neutral	Phase	Neutral & Earth	Phase	Neutral & Earth						
	Sqmm		Ohm/Km		mm		mm	mm	Kg/Km	Metre ± 10%		KG
2×16+1×10	16	10	1.15	1.83	1.0	1.0	1.8	19.9	7350	1000	D-12	830
3×25+2×16	25	16	0.727	1.15	1.2	1.0	1.8	28.3	1620	500	D-10	920
3×35+2×16	35	16	0.524	1.15	1.2	1.0	1.9	32.0	2070	500	D-14	1190

Cable Details	Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
	Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Metre ± 10%		KG
5×1.5*	1.5	12.1	0.7	1.8	12.7	230	1000	D-9	290
5×1.5	1.5	12.1	0.7	1.8	13.2	240	1000	D-9	300
5×2.5*	2.5	7.41	0.8	1.8	13.8	290	1000	D-10	350
5×2.5	2.5	7.41	0.8	1.8	14.9	325	1000	D-10	385
5×4	4	4.61	0.8	1.8	16.2	420	1000	D-11	520
5×6	6	3.08	0.8	1.8	17.8	545	1000	D-12	655
5×10	10	1.83	1.0	1.8	20.8	835	500	D-10	480
5×16	16	1.15	1.0	1.8	23.8	1170	500	D-11	685
5×25	25	0.727	1.2	1.9	26.2	1630	500	D-12	925
5×35	35	0.524	1.2	2.0	31.5	2310	500	D-14	1310

\*Circular solid conductors (Class 1).

All other Conductors Circular stranded (Class 2).

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC

Type 9/ ST2 compound OR PVC Type N/TI1 compound and sheathed with PVC Type ST1/TM1 compound.

Cables conform generally to IEC 60502 -1.



■ **600 / 1000 V - SINGLE CORE COPPER  
CONDUCTOR XLPE INSULATED CABLES  
(CU / XLPE )**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	Kg/Km	Yard/ Metre ± 10%		KG
1.5	12.1	0.7	3.0	19	100Y	COIL	1.8
2.5	7.41	0.7	3.4	28	100Y	COIL	2.6
4	4.61	0.7	4.0	42	100Y	COIL	3.8
6	3.08	0.7	4.5	61	100Y	COIL	5.5
10	1.83	0.7	5.5	99	100Y	COIL	8.9
16	1.15	0.7	6.5	153	1000M	D-8	138
25	0.727	0.9	7.8	240	1000M	D-9	216
35	0.524	0.9	8.8	326	1000M	D-9	300
50	0.387	1.0	10.0	440	1000M	D-10	400
70	0.268	1.0	12.2	635	1000M	D-11	570
95	0.193	1.1	13.8	870	500M	D-9	430
120	0.153	1.2	15.4	1098	500M	D-10	550
150	0.124	1.4	17.2	1372	500M	D-10	680
185	0.0991	1.6	19.2	1698	500M	D-11	850
240	0.0754	1.7	21.6	2219	500M	D-12	1110
300	0.0601	1.8	24.1	2767	500M	D-12	1380
400	0.047	2.0	27.4	3553	500M	D-16	1775
500	0.0366	2.2	30.6	4560	500M	D-18	2280
630	0.0283	2.4	34.8	5836	500M	D-18	2910
800	0.0221	2.6	39.2	7447	250M	D-16	3720

\* Circular solid conductors (Class 1).

All other conductors circular stranded (Class 2) or circular stranded flexible (Class 5).

Cables upto and including 35sqmm conform to IEC 60502 - 1.

All other cables conform generally to BS 5467 and IEC 60502 - 1.

Colour of insulation is natural colour.



■ **600 / 1000 V - SINGLE CORE COPPER  
CONDUCTOR PVC INSULATED PVC  
SHEATHED CABLES**

**(CU / XLPE / PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
						Yard/ Metre ± 10%		
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km			KG
1.5*	12.1	0.7	1.4	6.5	57	100Y	COIL	5.2
1.5	12.1	0.7	1.4	6.7	60	100Y	COIL	5.6
2.5*	7.41	0.7	1.4	6.9	69	100Y	COIL	6.4
2.5	7.41	0.7	1.4	7.1	72	100Y	COIL	6.7
4	4.61	0.7	1.4	7.6	90	100Y	COIL	8.3
6	3.08	0.7	1.4	8.2	115	100Y	COIL	10.6
10	1.83	0.7	1.4	8.9	160	100Y	COIL	14.7
16	1.15	0.7	1.4	10.0	220	1000M	D-8	270
25	0.727	0.9	1.4	11.6	320	1000M	D-9	380
35	0.524	0.9	1.4	12.7	420	1000M	D-9	480
50	0.387	1.0	1.4	14.0	550	1000M	D-10	610
70	0.268	1.1	1.4	15.8	760	1000M	D-11	860
95	0.193	1.1	1.5	17.9	1030	500M	D-9	575
120	0.153	1.2	1.5	19.6	1270	500M	D-10	695
150	0.124	1.4	1.6	21.6	1580	500M	D-10	850
185	0.0991	1.6	1.7	23.6	1920	500M	D-11	1060
240	0.0754	1.7	1.8	26.5	2470	500M	D-12	1350
300	0.0601	1.8	1.9	28.9	3080	500M	D-12	1650
400	0.047	2.0	2	32.4	3960	500M	D-16	2190
500	0.0366	2.2	2.1	36.0	4970	500M	D-18	2730
630	0.0283	2.4	2.2	42.4	6420	500M	D-18	3450
800	0.0221	2.6	2.3	47.0	8090	250M	D-16	2240
1000	0.0176	2.8	2.5	53.0	10280	250M	D-18	2810

\* Circular solid conductors (Class 1).

All other conductors circular stranded or circular stranded compacted (Class 2).

Cables upto and including 35sqmm conform to IEC 60502 - 1.

All other cables conform generally to BS 5467 and IEC 60502 - 1.

Colour of insulation is natural colour.



■ **600 / 1000 V - SINGLE CORE COPPER CONDUCTOR XLPE INSULATED ALUMINIUM WIRE ARMoured PVC SHEATHED CABLES**



**(CU / XLPE/ PVC / AWA / PVC)**

Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Extruded Bedding	Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Yard/ Metre ± 10 %		KG
50*	0.387	1.0	0.8	1.6	1.5	18.8	765	500	D-10	445
70*	0.268	1.1	0.8	1.6	1.6	20.6	1000	500	D-10	560
95*	0.193	1.1	0.8	1.6	1.6	22.7	1300	500	D-11	750
120*	0.153	1.2	0.8	1.6	1.6	24.4	1560	500	D-12	890
150	0.124	1.4	1.0	1.6	1.7	26.8	1920	500	D-12	1070
185	0.0991	1.6	1.0	1.6	1.8	29.0	2300	500	D-12	1260
240	0.0754	1.7	1.0	1.6	1.8	31.7	2890	500	D-14	1600
300	0.0601	1.8	1.0	1.6	1.9	34.1	3530	500	D-16	1980
400	0.0470	2.0	1.2	2.0	2.0	38.8	4590	500	D-18	2540
500	0.0366	2.2	1.2	2.0	2.1	42.4	5660	500	D-18	3070
630	0.0283	2.4	1.2	2.0	2.2	48.6	7100	250	D-16	1990
800	0.0221	2.6	1.4	2.5	2.4	54.0	9030	250	D-18	2500
1000	0.0176	2.8	1.4	2.5	2.5	60.8	11500	250	D-18	3120

\* Circular stranded or circular stranded compacted conductors (Class 2).

\*Cables upto and including 120sqmm conform to IEC 60502 - 1.

All cables conform to BS 5467 and generally to IEC 60502 - 1.

\*Wire diameter are larger than those specified in BS 6346.

Colour of insulation is natural colour.



■ **600 / 1000 V - SINGLE CORE COPPER  
CONDUCTOR XLPE INSULATED ALUMINIUM  
WIRE ARMoured PVC SHEATHED CABLES**

**(CU / XLPE/ PVC / AWA / PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Extruded Bedding	Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Metre ± 10 %		KG
50	0.387	1.0	1.0	1.25	1.8	19.1	775	500	D-10	445
70	0.268	1.1	1.0	1.25	1.8	20.9	1000	500	D-10	560
95	0.193	1.1	1.0	1.25	1.8	22.7	1300	500	D-11	750
120	0.153	1.2	1.0	1.6	1.8	25.2	1620	500	D-12	890
150	0.124	1.4	1.0	1.6	1.8	27.0	1940	500	D-12	1070
185	0.0991	1.6	1.0	1.6	1.8	29.0	2300	500	D-12	1260
240	0.0754	1.7	1.0	1.6	1.9	31.9	2910	500	D-14	1610
300	0.0601	1.8	1.0	1.6	1.9	34.1	3530	500	D-16	1980
400	0.0470	2.0	1.2	2.0	2.1	39.0	4610	500	D-18	2550
500	0.0366	2.2	1.2	2.0	2.2	42.6	5690	500	D-18	3080
630	0.0283	2.4	1.2	2.0	2.3	47.0	7150	250	D-16	2000
800	0.0221	2.6	1.4	2.5	2.5	55.5	9200	250	D-18	2540
1000	0.0176	2.8	1.4	2.5	2.5	61.2	11580	250	D-18	3140

\* Circular stranded or circular stranded compacted conductors (Class 2).

\*Cables upto and including 120sqmm conform to IEC 60502 - 1.

All cables conform to IEC 60502 - 1.

Colour of insulation is natural colour.





■ **600 / 1000 V - TWO CORE COPPER  
CONDUCTOR XLPE INSULATED PVC  
SHEATHED CABLES**  
**(CU / XLPE / PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Outer Sheath	Approx.Overall Diameter	Approx.Cable Weight	Standard Packing Length	Drum Size	Approx.Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Metre ± 10%		KG
1.5*	12.1	0.7	1.8	10.8	150	1000	D-8	200
1.5	12.1	0.7	1.8	11.2	170	1000	D-9	230
2.5*	7.41	0.7	1.8	11.6	180	1000	D-9	240
2.5	7.41	0.7	1.8	12.0	190	1000	D-9	250
4	4.61	0.7	1.8	13.0	240	1000	D-9	300
6	3.08	0.7	1.8	14.2	300	1000	D-10	360
10	1.83	0.7	1.8	15.6	405	1000	D-11	505
16	1.15	0.7	1.8	17.8	565	1000	D-12	675
25	0.727	0.9	1.8	21.0	825	500	D-11	515
35	0.524	0.9	1.8	23.2	1070	500	D-12	645
50	0.387	1.0	1.8	26.3	1240	500	D-12	730
70	0.268	1.1	1.8	29.9	1700	500	D-12	960
95	0.193	1.1	1.9	33.9	2280	500	D-16	1350
120	0.153	1.2	2.0	37.5	2830	500	D-18	1660
150	0.124	1.4	2.2	41.5	3510	500	D-18	2000
185	0.0991	1.6	2.3	45.7	4280	500	D-19	2460
240	0.0754	1.7	2.5	51.5	5520	250	D-18	1620
300	0.0601	1.8	2.6	56.1	6810	250	D-18	1940
400	0.0470	2.0	2.9	63.3	8770	250	D-18	2430

\*Circular solid conductors(class 1)

All other conductors circular stranded or circular stranded compacted(class 2).

Cables conform generally to BS 5467 and IEC 60502 - 1.



■ **600 / 1000 V - TWO CORE COPPER  
CONDUCTOR XLPE INSULATED PVC  
SHEATHED CABLES**

**(CU / XLPE / PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Metre ± 10%		KG
1.5*	12.1	0.7	1.8	10.8	150	1000	D-8	200
1.5	12.1	0.7	1.8	11.2	170	1000	D-9	230
2.5*	7.41	0.7	1.8	11.6	180	1000	D-9	240
2.5	7.41	0.7	1.8	12.0	190	1000	D-9	250
4	4.61	0.7	1.8	13.0	240	1000	D-9	300
6	3.08	0.7	1.8	14.2	300	1000	D-10	360
10	1.83	0.7	1.8	16.2	410	1000	D-11	490
16	1.15	0.7	1.8	18.2	570	1000	D-12	680
25	0.727	0.9	1.8	21.0	825	500	D-11	515
35	0.524	0.9	1.8	23.2	1070	500	D-12	645
50	0.387	1.0	1.8	26.3	1240	500	D-12	730
70	0.268	1.1	1.8	29.9	1700	500	D-12	960
95	0.193	1.1	2.0	34.1	2300	500	D-16	1360
120	0.153	1.2	2.1	37.7	2850	500	D-18	1670
150	0.124	1.4	2.2	41.5	3510	500	D-18	2000
185	0.0991	1.6	2.3	45.7	4280	500	D-19	2460
240	0.0754	1.7	2.5	51.5	5520	250	D-18	1620
300	0.0601	1.8	2.6	56.1	6810	250	D-18	1950
400	0.0470	2.0	2.9	63.3	8770	250	D-18	2430
500	0.0366	2.2	3.1	70.5	10900	250	D-21	3145

\*Circular solid conductors(class 1)

All other conductors circular stranded or circular stranded compacted(class 2).

Cables conform to IEC 60502 - 1.



■ **600 /1000 V - TWO CORE COPPER  
CONDUCTOR XLPE INSULATED STEEL WIRE  
ARMOURED PVC SHEATHED CABLES**

**(CU / XLPE / PVC / SWA / PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Extruded Bedding	Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Metre ± 10 %		KG
1.5*	12.1	0.7	0.8	0.9	1.3	12.8	305	1000	D-9	365
1.5	12.1	0.7	0.8	0.9	1.3	13.2	310	1000	D-9	370
2.5*	7.41	0.7	0.8	0.9	1.4	14.0	370	1000	D-10	430
2.5	7.41	0.7	0.8	0.9	1.4	14.4	390	1000	D-10	450
4	4.61	0.7	0.8	0.9	1.4	15.4	460	1000	D-11	560
6	3.08	0.7	0.8	0.9	1.4	16.8	550	1000	D-11	650
10	1.83	0.7	0.8	0.9	1.5	19.9	835	1000	D-12	945
16	1.15	0.7	0.8	1.25	1.5	22.1	1050	1000	D-14	1200
25	0.727	0.9	1.0	1.25	1.6	26.8	1610	500	D-12	915
35	0.524	0.9	1.0	1.6	1.7	29.2	1950	500	D-12	1090
50	0.387	1.0	1.0	1.6	1.8	32.7	2230	500	D-16	1330
70	0.268	1.1	1.0	1.6	1.9	35.9	2790	500	D-18	1640
95	0.193	1.1	1.2	2.0	1.10	42.1	3710	500	D-18	2200
120	0.153	1.2	1.2	2.0	2.1	45.3	4580	500	D-18	2610
150	0.124	1.4	1.2	2.0	2.2	49.1	5410	500	D-19	3300
185	0.0991	1.6	1.4	2.5	2.4	54.4	6890	250	D-18	1960
240	0.0754	1.7	1.4	2.5	2.5	60.7	8430	250	D-18	2350
300	0.0601	1.8	1.6	2.5	2.6	66.3	10140	250	D-18	2780
400	0.0470	2.0	1.6	2.5	2.8	73.3	12500	250	D-19	3450

\*Circular solid conductors (Class 1).

All other conductors Circular stranded or circular stranded compacted (Class 2).

Cables conform to BS 5467 and generally to IEC 60502 - 1.



■ **600 /1000 V - TWO CORE COPPER  
CONDUCTOR XLPE INSULATED STEEL WIRE  
ARMOURED PVC SHEATHED CABLES**  
**(CU / XLPE / PVC / SWA / PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Extruded Bedding	Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Metre ± 10 %		KG
1.5*	12.1	0.7	1.0	0.9	1.8	14.2	355	1000	D-10	415
1.5	12.1	0.7	1.0	0.9	1.8	14.6	370	1000	D-10	430
2.5*	7.41	0.7	1.0	0.9	1.8	15.0	400	1000	D-10	460
2.5	7.41	0.7	1.0	0.9	1.8	15.4	415	1000	D-10	475
4	4.61	0.7	1.0	0.9	1.8	16.4	480	1000	D-11	580
6	3.08	0.7	1.0	0.9	1.8	17.6	570	1000	D-11	670
10	1.83	0.7	1.0	1.25	1.8	20.3	820	1000	D-12	930
16	1.15	0.7	1.0	1.25	1.8	22.3	1030	1000	D-14	1180
25	0.727	0.9	1.0	1.6	1.8	26.3	1530	1000	D-16	1740
35	0.524	0.9	1.0	1.6	1.8	28.5	1840	1000	D-18	2080
50	0.387	1.0	1.0	1.6	1.8	30.9	2070	500	D-14	1190
70	0.268	1.1	1.0	1.6	2.0	34.9	2670	500	D-16	1545
95	0.193	1.1	1.2	2.0	2.1	40.1	3660	500	D-18	2070
120	0.153	1.2	1.2	2.0	2.2	43.7	4350	500	D-18	2420
150	0.124	1.4	1.2	2.0	2.3	47.5	5160	500	D-19	2900
185	0.0991	1.6	1.4	2.5	2.5	53.3	6600	250	D-18	1895
240	0.0754	1.7	1.4	2.5	2.7	59.1	8100	250	D-18	2270
300	0.0601	1.8	1.6	2.5	2.8	64.1	9660	250	D-18	2660
400	0.0470	2.0	1.6	2.5	3.1	71.3	12000	250	D-21	3425
500	0.0366	2.2	1.6	3.15	3.3	79.8	15500	250	D-23	4375

\*Circular solid conductors (Class 1).

All other conductors Circular stranded or circular stranded compacted (Class 2).

Cables conform to IEC 60502 - 1.



■ **600 /1000 V - THREE CORE COPPER  
CONDUCTOR XLPE INSULATED PVC  
SHEATHED CABLES**

**(CU / XLPE / PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Outer Sheath	Approx.Overall Diameter	Approx.Cable Weight	Standard Packing Length	Drum Size	Approx.Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Metre± 10%		KG
1.5*	12.1	0.7	1.8	11.3	170	1000	D-9	230
1.5	12.1	0.7	1.8	11.7	175	1000	D-9	235
2.5*	7.41	0.7	1.8	12.2	210	1000	D-9	270
2.5	7.41	0.7	1.8	12.6	220	1000	D-9	280
4	4.61	0.7	1.8	13.7	280	1000	D-10	340
6	3.08	0.7	1.8	15.0	360	1000	D-10	420
10	1.83	0.7	1.8	16.5	500	1000	D-11	600
16	1.15	0.7	1.8	18.9	705	1000	D-12	815
25	0.727	0.9	1.8	19.9	955	500	D-10	540
35	0.524	0.9	1.8	22.3	1250	500	D-11	725
50	0.387	1.0	1.8	25.5	1610	500	D-12	915
70	0.268	1.1	1.9	28.2	2230	500	D-12	1230
95	0.193	1.1	2.0	32.2	3000	500	D-16	1710
120	0.153	1.2	2.1	35.8	3750	500	D-18	2120
150	0.124	1.4	2.2	39.0	4640	500	D-18	2560
185	0.0991	1.6	2.4	43.6	5730	250	D-14	1580
240	0.0754	1.7	2.6	49.6	7360	250	D-16	2050
300	0.0601	1.8	2.7	54.2	9190	250	D-18	2540
400	0.0470	2.0	3.0	61.8	11850	250	D-18	3200

\*Circular solid conductors (Class 1).

Conductors including 16sqmm circular stranded (Class 2).

25sqmm and above shaped stranded conductors(Class 2)

Cable up to 10 Sqmm conform to IEC 60502-1.

All other cables conform to IEC 60502-1.



■ **600 /1000 V - THREE CORE COPPER  
CONDUCTOR XLPE INSULATED PVC  
SHEATHED CABLES**

**(CU / XLPE / PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Metre ± 10%		KG
1.5*	12.1	0.7	1.8	11.3	170	1000	D-9	230
1.5	12.1	0.7	1.8	11.7	175	1000	D-9	235
2.5*	7.41	0.7	1.8	12.2	210	1000	D-9	270
2.5	7.41	0.7	1.8	12.6	220	1000	D-9	280
4	4.61	0.7	1.8	13.7	280	1000	D-10	340
6	3.08	0.7	1.8	15.0	360	1000	D-10	420
10	1.83	0.7	1.8	17.1	500	1000	D-11	600
16	1.15	0.7	1.8	19.3	705	1000	D-12	815
25	0.727	0.9	1.8	19.9	955	500	D-10	540
35	0.524	0.9	1.8	22.3	1250	500	D-11	725
50	0.387	1.0	1.8	25.5	1610	500	D-12	915
70	0.268	1.1	1.9	28.2	2230	500	D-12	1230
95	0.193	1.1	2.0	32.2	3000	500	D-16	1710
120	0.153	1.2	2.1	35.8	3750	500	D-18	2120
150	0.124	1.4	2.3	39.2	4660	500	D-18	2570
185	0.0991	1.6	2.4	43.6	5730	250	D-14	1580
240	0.0754	1.7	2.6	49.6	7360	250	D-16	2050
300	0.0601	1.8	2.8	54.4	9210	250	D-18	2550
400	0.0470	2.0	3.1	62.0	11890	250	D-18	3210
500	0.0366	2.2	3.3	67.2	14800	250	D-19	4020

\*Circular solid conductors (Class 1).

Conductors including 16sqmm circular stranded (Class 2).

25sqmm and above shaped stranded conductors(Class 2)

All other cables conform to IEC 60502-1.



■ **600 / 1000 V - THREE CORE COPPER CONDUCTOR XLPE STEEL WIRE ARMoured PVC SHEATHED CABLES**



**(CU/XLPE/PVC/SWA/PVC and CU/XLPE/SWA/PVC)**

Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Bedding		Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter		Approx. Cable Weight		Standard Packing Length	Drum Size	Approx. Gross Weight	
			Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding	Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding
Sqmm	Ohm/Km	mm	mm		mm	mm	mm		Kg/Km		Metre ± 10 %		KG	
1.5*	12.1	0.7	0.8	-	0.9	1.3	13.3	-	330	-	1000	D-10	390	-
1.5	12.1	0.7	0.8	-	0.9	1.3	13.7	-	350	-	1000	D-10	410	-
2.5*	7.41	0.7	0.8	-	0.9	1.4	14.4	-	390	-	1000	D-10	450	-
2.5	7.41	0.7	0.8	-	0.9	1.4	14.8	-	415	-	1000	D-10	475	-
4	4.61	0.7	0.8	-	0.9	1.4	15.9	-	490	-	1000	D-11	590	-
6	3.08	0.7	0.8	-	0.9	1.4	17.2	-	580	-	1000	D-12	690	-
10	1.83	0.7	0.8	-	1.25	1.5	19.6	-	850	-	1000	D-12	960	-
16	1.15	0.7	0.8	-	1.25	1.6	22.2	-	1110	-	1000	D-14	1260	-
25	0.727	0.9	1.0	0.8	1.6	1.7	24.3	23.2	1520	1420	500	D-11	870	810
35	0.524	0.9	1.0	0.8	1.6	1.8	26.9	25.8	1910	1790	500	D-12	1065	1010
50	0.387	1.0	1.0	0.8	1.6	1.8	30.1	29.0	2400	2250	500	D-12	1350	1230
70	0.268	1.1	1.0	0.8	1.6	1.9	32.8	31.7	3100	2950	500	D-14	1700	1630
95	0.193	1.1	1.2	0.8	2.0	2.1	38.2	36.7	4310	4060	500	D-16	2400	2270
120	0.153	1.2	1.2	0.8	2.0	2.2	41.8	40.3	5170	4920	500	D-18	2830	2700
150	0.124	1.4	1.4	0.8	2.5	2.3	46.4	44.5	6620	6290	500	D-18	3550	3390
185	0.0991	1.6	1.4	0.8	2.5	2.4	50.8	48.9	7860	7510	250	D-18	2210	2090
240	0.0754	1.7	1.4	0.8	2.5	2.6	56.9	55.0	9810	9410	250	D-18	2690	2590
300	0.0601	1.8	1.6	0.8	2.5	2.7	61.8	59.5	11910	11430	250	D-18	3220	3100
400	0.0470	2.0	1.6	0.8	2.5	2.9	69.2	66.9	14910	14330	250	D-19	3300	3110

\*Circular solid conductors (Class 1).

Conductors including 16sqmm circular stranded (Class 2).

25sqmm and above shaped stranded conductors(Class 2)

Cables conform to BS 5467 and generally to IEC 60502-1.

Drum size given above are for cables with extruded bedding.



■ **600 / 1000 V - THREE CORE COPPER CONDUCTOR XLPE STEEL WIRE ARMoured PVC SHEATHED CABLES**



**(CU/XLPE/PVC/SWA/PVC and CU/XLPE/SWA/PVC)**

Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Bedding		Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter		Approx. Cable Weight		Standard Packing Length	Drum Size	Approx. Gross Weight	
			Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding	Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding
Sqmm	Ohm/Km	mm	mm		mm	mm	mm		Kg/Km		Metre ± 10 %		KG	
1.5*	12.1	0.7	1.0	-	0.9	1.8	14.7	-	380	-	1000	D-10	440	-
1.5	12.1	0.7	1.0	-	0.9	1.8	15.1	-	400	-	1000	D-10	460	-
2.5*	7.41	0.7	1.0	-	0.9	1.8	15.6	-	440	-	1000	D-10	500	-
2.5	7.41	0.7	1.0	-	0.9	1.8	16.0	-	460	-	1000	D-10	560	-
4	4.61	0.7	1.0	-	0.9	1.8	17.1	-	540	-	1000	D-11	640	-
6	3.08	0.7	1.0	-	0.9	1.8	18.4	-	640	-	1000	D-12	750	-
10	1.83	0.7	1.0	-	1.25	1.8	21.2	-	940	-	1000	D-14	1090	-
16	1.15	0.7	1.0	-	1.25	1.8	23.4	-	1200	-	1000	D-14	1350	-
25	0.727	0.9	1.0	0.8	1.6	1.8	24.5	23.4	1520	1445	500	D-11	875	825
35	0.524	0.9	1.0	0.8	1.6	1.8	26.9	25.8	1910	1815	500	D-12	1065	1020
50	0.387	1.0	1.0	0.8	1.6	1.9	30.3	29.2	2420	2275	500	D-12	1360	1245
70	0.268	1.1	1.2	0.8	2.0	2.0	34.2	32.7	3300	3165	500	D-16	1860	1795
95	0.193	1.1	1.2	0.8	2.0	2.2	38.4	36.9	4330	4075	500	D-16	2410	2250
120	0.153	1.2	1.2	0.8	2.0	2.3	42.0	40.5	5190	4965	500	D-18	2840	2725
150	0.124	1.4	1.4	0.8	2.5	2.5	46.8	44.9	6660	6330	500	D-18	3560	3405
185	0.0991	1.6	1.4	0.8	2.5	2.6	51.2	49.3	7900	7550	250	D-18	2220	2130
240	0.0754	1.7	1.6	0.8	2.5	2.8	57.7	55.4	9950	9490	250	D-18	2730	2615
300	0.0601	1.8	1.6	0.8	2.5	3.0	62.4	60.1	12000	11495	250	D-18	3240	3115
400	0.0470	2.0	1.6	0.8	2.5	3.2	69.8	67.5	15020	14345	200	D-19	3325	3190
500	0.0366	2.2	1.8	0.8	3.15	3.5	76.9	76.1	18900	18320	200	D-19	4100	3985

\*Circular solid conductors (Class 1).

Conductors including 16sqmm circular stranded (Class 2).

25sqmm and above shaped stranded conductors(Class 2)

Cables conform to IEC 60502-1.

Drum size given above are for cables with extruded bedding.





■ **600 /1000 V - FOUR CORE COPPER CONDUCTOR XLPE INSULATED PVC SHIEATHED CABLES**

**(CU/ XLPE /PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Metre ± 10%		KG
1.5*	12.1	0.7	1.8	12.1	195	1000	D-9	255
1.5	12.1	0.7	1.8	12.6	205	1000	D-9	265
2.5*	7.41	0.7	1.8	13.1	245	1000	D-10	305
2.5	7.41	0.7	1.8	13.6	260	1000	D-10	320
4	4.61	0.7	1.8	14.8	335	1000	D-10	395
6	3.08	0.7	1.8	16.2	435	1000	D-11	535
10	1.83	0.7	1.8	18.6	615	1000	D-12	725
16	1.15	0.7	1.8	21.1	880	1000	D-12	990
25	0.727	0.9	1.8	22.0	1220	500	D-10	670
35	0.524	0.9	1.8	25.4	1620	500	D-12	920
50	0.387	1.0	1.8	28.3	2100	500	D-12	1160
70	0.268	1.1	2.0	32.1	2930	500	D-16	1680
95	0.193	1.1	2.1	36.3	3950	500	D-18	2220
120	0.153	1.2	2.2	39.9	4940	500	D-18	2710
150	0.124	1.4	2.4	44.8	6150	500	D-18	3320
185	0.0991	1.6	2.6	49.7	7600	250	D-16	2110
240	0.0754	1.7	2.8	54.8	9730	250	D-18	2670
300	0.0601	1.8	3.0	60.6	12190	250	D-18	3290
400	0.0470	2.0	3.3	68.0	15690	200	D-18	3380
500	0.0366	2.2	3.5	76.9	19600	200	D-19	4240

\*Circular solid conductors (Class 1).

Conductors including 16sqmm circular stranded (Class 2).

25sqmm and above shaped stranded conductors(Class 2)

Cables up to and including 16 Sqmm conform to IEC 60502-1.

From 16 Sqmm upto and including 400 Sqmm conform to IEC 60502-1.

From 16 Sqmm upto and including 400 Sqmm conform generally to BS 5467.

500sqmm cable conforms to IEC 60502-1.

[www.zmscable.com](http://www.zmscable.com)

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■ **600 /1000 V - FOUR CORE COPPER  
CONDUCTOR XLPE INSULATED PVC  
SHEATHED CABLES**

**(CU/ XLPE /PVC)**



Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Metre ± 10%		KG
1.5*	12.1	0.7	1.8	12.1	195	1000	D-9	255
1.5	12.1	0.7	1.8	12.6	205	1000	D-9	265
2.5*	7.41	0.7	1.8	13.1	245	1000	D-10	305
2.5	7.41	0.7	1.8	13.6	260	1000	D-10	320
4	4.61	0.7	1.8	14.8	335	1000	D-10	395
6	3.08	0.7	1.8	16.2	435	1000	D-11	535
10	1.83	0.7	1.8	18.6	615	1000	D-12	725
16	1.15	0.7	1.8	21.1	880	1000	D-12	990
25	0.727	0.9	1.8	22.0	1220	500	D-10	670
35	0.524	0.9	1.8	25.4	1620	500	D-12	920
50	0.387	1.0	1.8	28.3	2100	500	D-12	1160
70	0.268	1.1	2.0	32.1	2930	500	D-16	1680
95	0.193	1.1	2.1	36.3	3950	500	D-18	2220
120	0.153	1.2	2.3	39.9	4940	500	D-18	2710
150	0.124	1.4	2.4	44.8	6150	500	D-18	3320
185	0.0991	1.6	2.6	49.7	7600	250	D-16	2110
240	0.0754	1.7	2.8	54.8	9730	250	D-18	2670
300	0.0601	1.8	3.0	60.6	12190	250	D-18	3290
400	0.0470	2.0	3.3	68.0	15690	200	D-18	3380
500	0.0366	2.2	3.5	76.9	19600	200	D-19	4240

\*Circular solid conductors (Class 1).

Conductors including 16sqmm circular stranded (Class 2).

25sqmm and above shaped stranded conductors(Class 2)

Cables conform to IEC 60502-1.



■ **600 / 1000 V - FOUR CORE COPPER CONDUCTOR XLPE STEEL WIRE ARMoured PVC SHEATHED CABLES**

**(CU/XLPE/PVC/SWA/PVC and CU/XLPE/SWA/PVC)**

Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Bedding		Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter		Approx. Cable Weight		Standard Packing Length	Drum Size	Approx. Gross Weight	
			Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding	Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding
Sqmm	Ohm/Km	mm	mm		mm	mm	mm		Kg/Km		Metre ± 10 %		KG	
1.5*	12.1	0.7	0.8	-	0.9	1.4	13.5	-	380	-	1000	D-10	440	-
1.5	12.1	0.7	0.8	-	0.9	1.4	14.8	-	400	-	1000	D-10	460	-
2.5*	7.41	0.7	0.8	-	0.9	1.4	14.5	-	450	-	1000	D-11	550	-
2.5	7.41	0.7	0.8	-	0.9	1.4	15.8	-	470	-	1000	D-11	570	-
4	4.61	0.7	0.8	-	0.9	1.4	17.0	-	570	-	1000	D-11	670	-
6	3.08	0.7	0.8	-	1.25	1.5	18.3	-	790	-	1000	D-12	900	-
10	1.83	0.7	0.8	-	1.25	1.5	21.0	-	1020	-	1000	D-12	1130	-
16	1.15	0.7	0.8	-	1.25	1.6	23.9	-	1350	-	1000	D-14	1500	-
25	0.727	0.9	1.0	0.8	1.6	1.7	26.4	25.7	1850	1730	500	D-12	1040	975
35	0.524	0.9	1.0	0.8	1.6	1.8	30.0	28.4	2360	2220	500	D-12	1290	1220
50	0.387	1.0	1.0	0.8	1.6	1.9	33.1	31.6	2970	2820	500	D-16	1700	1560
70	0.268	1.1	1.2	0.8	2.0	2.1	38.1	36.9	4190	3980	500	D-18	2340	2230
95	0.193	1.1	1.2	0.8	2.0	2.2	42.3	40.9	5370	5150	500	D-18	2930	2820
120	0.153	1.2	1.4	0.8	2.5	2.3	47.1	45.9	6910	6560	500	D-19	3780	3600
150	0.124	1.4	1.4	0.8	2.5	2.4	52.0	50.2	8340	8000	500	D-19	4490	4320
185	0.0991	1.6	1.4	0.8	2.5	2.6	56.9	55.4	9980	9610	250	D-18	2740	2640
240	0.0754	1.7	1.6	0.8	2.5	2.7	62.2	61.4	12400	11910	250	D-18	3340	3220
300	0.0601	1.8	1.6	0.8	2.5	2.9	68.0	67.2	15130	14600	250	D-18	4020	3890
400	0.0470	2.0	1.8	0.8	3.15	3.2	77.1	76.1	19850	19140	200	D-19	4290	4150
500	0.0366	2.2	1.8	0.8	3.15	3.8	86.8	85.5	24460	23920	200	D-21	5310	5200

\*Circular solid conductors (Class 1).

Conductors including 16sqmm circular stranded (Class 2).

25sqmm and above shaped stranded conductors(Class 2)

Cables upto and including 400 Sqmm conform to BS 5467.

500 Sq mm Cable conforms to IEC 60502-1.

Drum size given above are for cables with extruded bedding.

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■ **600 / 1000 V - FOUR CORE COPPER CONDUCTOR XLPE STEEL WIRE ARMoured PVC SHEATHED CABLES**

**(CU/XLPE/PVC/SWA/PVC and CU/XLPE/SWA/PVC)**

Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Bedding		Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter		Approx. Cable Weight		Standard Packing Length	Drum Size	Approx. Gross Weight	
			Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding	Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding
Sqmm	Ohm/Km	mm	mm		mm	mm	mm		Kg/Km		Metre ± 10 %		KG	
1.5*	12.1	0.7	1.0	-	0.9	1.8	15.5	-	430	-	1000	D-10	490	-
1.5	12.1	0.7	1.0	-	0.9	1.8	16.0	-	440	-	1000	D-11	540	-
2.5*	7.41	0.7	1.0	-	0.9	1.8	16.5	-	490	-	1000	D-11	590	-
2.5	7.41	0.7	1.0	-	0.9	1.8	17.0	-	510	-	1000	D-11	610	-
4	4.61	0.7	1.0	-	0.9	1.8	18.2	-	610	-	1000	D-12	720	-
6	3.08	0.7	1.0	-	1.25	1.8	20.3	-	840	-	1000	D-12	950	-
10	1.83	0.7	1.0	-	1.25	1.8	22.7	-	1090	-	1000	D-14	1240	-
16	1.15	0.7	1.0	-	1.6	1.8	25.9	-	1560	-	1000	D-16	1770	-
25	0.727	0.9	1.0	0.8	1.6	1.8	26.6	25.7	1870	1775	500	D-12	1045	995
35	0.524	0.9	1.0	0.8	1.6	1.9	30.2	29.1	2380	2270	500	D-12	1300	1245
50	0.387	1.0	1.0	0.8	1.6	2.0	33.3	32.2	2990	2840	500	D-16	1705	1630
70	0.268	1.1	1.2	0.8	2.0	2.3	38.3	36.8	4210	3995	500	D-18	2345	2240
95	0.193	1.1	1.2	0.8	2.0	2.3	42.5	41.0	5390	5155	500	D-18	2935	2820
120	0.153	1.2	1.4	0.8	2.5	2.5	47.5	45.6	6950	6640	500	D-19	3795	3640
150	0.124	1.4	1.4	0.8	2.5	2.6	52.4	49.8	8380	7985	500	D-19	4510	4310
185	0.0991	1.6	1.4	0.8	2.5	2.8	57.3	55.4	10030	9650	250	D-18	2745	2655
240	0.0754	1.7	1.6	0.8	2.5	3.0	62.8	60.5	12500	12025	250	D-18	3365	3245
300	0.0601	1.8	1.6	0.8	2.5	3.2	68.6	66.3	15200	14655	250	D-21	4220	4085
400	0.0470	2.0	1.8	0.8	3.15	3.5	77.7	75.0	19950	19145	200	D-22	4460	4300
500	0.0366	2.2	1.8	0.8	3.15	3.8	86.8	86.1	24460	23590	200	D-21	5310	5140

\*Circular solid conductors (Class 1).

Conductors including 16sqmm circular stranded (Class 2).

25sqmm and above shaped stranded conductors(Class 2)

Cables conform to IEC 60502-1

Drum size given above are for cables with extruded bedding.



■ **600 / 1000 V - FOUR CORE ALUMINIUM CONDUCTOR XLPE INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES**

**(AL/XLPE/PVC/SWA/PVC and AL/XLPE/SWA/PVC)**

Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Bedding		Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter		Approx. Cable Weight		Standard Packing Length	Drum Size	Approx. Gross Weight	
			Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding	Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding
25	1.20	0.9	1.0	0.8	1.6	1.8	26.6	25.5	1270	1170	500	D-12	745	695
35	0.868	0.9	1.0	0.8	1.6	1.9	29.9	28.8	1540	1410	500	D-12	880	815
50	0.641	1.0	1.0	0.8	1.6	2.0	33.3	32.2	1840	1720	500	D-16	1130	1070
70	0.443	1.1	1.2	0.8	1.6	2.2	38.3	36.8	2570	2390	500	D-18	1530	1440
95	0.320	1.1	1.2	0.8	2.0	2.3	42.3	40.8	3090	2860	500	D-18	1790	1670
120	0.253	1.2	1.4	0.8	2.0	2.5	47.5	45.6	4060	3750	500	D-19	2350	2200
150	0.206	1.4	1.4	0.8	2.5	2.6	50.6	48.7	4630	4300	500	D-19	2640	2470
185	0.164	1.6	1.4	0.8	2.5	2.8	56.6	55.2	5490	5170	250	D-18	1610	1530
240	0.125	1.7	1.6	0.8	2.5	3.0	63.0	60.7	6650	6200	250	D-18	1900	1790
300	0.100	1.8	1.6	0.8	2.5	3.2	68.6	66.3	7830	7300	250	D-19	2280	2150
400	0.0778	2.0	1.8	0.8	3.15	3.5	77.7	75.0	10310	9660	200	D-19	2380	2250
500	0.0605	2.2	1.8	0.8	3.15	3.8	86.8	84.1	12650	11620	200	D-21	2890	2740

\*All conductors shaped stranded (Class 2)

Cables conform to IEC 60502-1

Drum size given above are for cables with extruded bedding



■ **600 / 1000 V - FOUR CORE WITH REDUCED NEUTRAL COPPER CONDUCTOR XLPE INSULATED PVC SHEATHED CABLES (CU/XLPE/PVC)**



Nominal Area of Conductor		Maximum Conductor Resistance at 20° C		Thickness of Insulation		Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Phase	Neutral	Phase	Neutral	Phase	Neutral						
Sqmm		Ohm/Km		mm		mm	mm	Kg/Km	Metre ± 10%		KG
25	16	0.727	1.15	0.9	0.7	1.8	22.0	1090	500	D-10	605
35	16	0.524	1.15	0.9	0.7	1.8	25.4	1410	500	D-12	815
50	25	0.387	0.727	1.0	0.9	1.8	28.3	1890	500	D-12	1060
70	35	0.268	0.524	1.1	0.9	1.9	31.8	2610	500	D-14	1460
95	50	0.193	0.387	1.1	1.0	2.0	36.1	3520	500	D-18	2000
120	70	0.153	0.268	1.2	1.1	2.2	39.7	4480	500	D-18	2480
150	70	0.124	0.268	1.4	1.1	2.3	44.6	5440	500	D-18	2960
185	95	0.0991	0.193	1.6	1.1	2.4	49.3	6760	250	D-16	1900
240	120	0.0754	0.153	1.7	1.2	2.6	54.4	8631	250	D-18	2400
300	150	0.0601	0.124	1.8	1.4	2.8	60.2	10810	250	D-18	2940
300	185	0.0601	0.0991	1.8	1.6	2.9	60.4	11120	250	D-18	3020
400	185	0.0470	0.0991	2.0	1.6	3.1	67.6	13840	200	D-18	3010

\*All phase conductors 25 sqmm and above shaped stranded (Class 2)

All neutral conductors circular stranded (Class 2)

Cables conform generally to BS 5467.



■ **600 / 1000 V - FOUR CORE WITH REDUCED NEUTRAL COPPER CONDUCTOR XLPE INSULATED PVC SHEATHED CABLES**

**(CU/XLPE/PVC)**



Nominal Area of Conductor		Maximum Conductor Resistance at 20° C		Thickness of Insulation		Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
Phase	Neutral	Phase	Neutral	Phase	Neutral						
Sqmm		Ohm/Km		mm		mm	mm	Kg/Km	Metre ± 10%		KG
25	16	0.727	1.15	0.9	0.7	1.8	22.0	1090	500	D-10	605
35	16	0.524	1.15	0.9	0.7	1.8	25.4	1410	500	D-12	815
50	25	0.387	0.727	1.0	0.9	1.8	28.3	1890	500	D-12	1060
70	35	0.268	0.524	1.1	0.9	1.9	31.8	2610	500	D-14	1460
95	50	0.193	0.387	1.1	1.0	2.1	36.3	3540	500	D-18	2010
120	70	0.153	0.268	1.2	1.1	2.2	39.7	4480	500	D-18	2480
150	70	0.124	0.268	1.4	1.1	2.3	44.6	5440	500	D-18	2960
185	95	0.0991	0.193	1.6	1.1	2.5	49.5	6780	250	D-16	1910
240	120	0.0754	0.153	1.7	1.2	2.7	54.6	8660	250	D-18	2405
300	150	0.0601	0.124	1.8	1.4	2.9	60.4	10850	250	D-18	2950
400	185	0.0470	0.0991	2.0	1.6	3.1	67.6	13900	200	D-18	3020
500	240	0.0366	0.0754	2.2	1.7	3.4	76.7	17400	200	D-22	3950

\*All phase conductors 25 sqmm and above shaped stranded (Class 2)

All neutral conductors circular stranded (Class 2)

Cables conform generally to BS 5467.



■ **600 / 1000 V - FOUR CORE WITH REDUCED NEUTRAL COPPER CONDUCTOR XLPE INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES**



**(CU/XLPE/PVC/SWA/PVC and CU/XLPE/SWA/PVC)**

Nominal Area of Conductor		Maximum Conductor Resistance at 20° C		Thickness of Insulation		Thickness of Bedding		Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter		Approx. Cable Weight		Standard Packing Length	Drum Size	Approx. Gross Weight	
Phase	Neutral	Phase	Neutral	Phase	Neutral	Extruded	Lapped			Extruded Bedding	Lapped Bedding	Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding
Sqmm		Ohm/Km		mm		mm		mm	mm	mm		Kg/Km		Metre ± 10%		KG	
10	6	1.83	3.08	0.7	0.7	1.0	-	1.25	1.8	22.0	-	1043	-	1000	D-14	1190	-
16	10	1.15	1.83	0.7	0.7	1.0	-	1.25	1.8	24.7	-	1360	-	1000	D-14	1510	-
25	16	0.727	1.15	0.9	0.7	1.0	0.8	1.6	1.8	26.6	25.5	1780	1690	500	D-12	1000	955
35	16	0.524	1.15	0.9	0.7	1.0	0.8	1.6	1.8	30.0	28.9	2200	2100	500	D-12	1210	1160
50	25	0.387	0.727	1.0	0.9	1.0	0.8	1.6	1.9	33.1	32.0	2780	2650	500	D-16	1600	1530
70	35	0.268	0.524	1.1	0.9	1.2	0.8	2.0	2.1	38.1	36.6	3910	3715	500	D-18	2200	2095
95	50	0.193	0.387	1.1	1.0	1.2	0.8	2.0	2.2	42.3	40.8	4990	4760	500	D-18	2740	2620
120	70	0.153	0.268	1.2	1.1	1.2	0.8	2.0	2.4	45.9	44.4	6060	5835	500	D-19	3350	3240
150	70	0.124	0.268	1.4	1.1	1.4	0.8	2.5	2.5	52.2	49.6	7700	7305	500	D-19	4170	3975
185	95	0.0991	0.193	1.6	1.1	1.4	0.8	2.5	2.7	57.1	55.2	9260	8895	250	D-18	2560	2465
240	120	0.0754	0.153	1.7	1.2	1.6	0.8	2.5	2.9	62.6	60.3	11450	11000	250	D-18	3100	2990
300	150	0.0601	0.124	1.8	1.4	1.6	0.8	2.5	3.0	68.2	65.9	13880	13340	250	D-18	3710	3575
300	185	0.0601	0.0991	1.8	1.6	1.6	0.8	2.5	3.1	68.4	66.1	14190	13685	250	D-18	3790	3660
400	185	0.0470	0.0991	2.0	1.6	1.6	0.8	3.15	3.3	76.9	74.6	18050	17410	250	D-22	4980	4825
500	240	0.0366	0.0754	2.2	1.7	1.8	0.8	3.15	3.6	86.4	83.7	22300	21485	200	D-23	4960	7495

All Phase conductors upto 16Sqmm circular stranded(Class 2)

All Phase conductors 25sqmm and above shaped stranded(Class 2)

All neutral conductors circular stranded(Class 2).

10 Sqmm and 16 Sqmm cables conform to IEC 60502-1, \*Cable as per MEW, Kuwait specification.

All other cables conform to BS 5467.

Drum size given above are for cables with extruded bedding.





■ **600 / 1000 V - FOUR CORE WITH REDUCED NEUTRAL COPPER CONDUCTOR XLPE INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES**



**(CU/XLPE/PVC/SWA/PVC and CU/XLPE/SWA/PVC)**

Nominal Area of Conductor		Maximum Conductor Resistance at 20° C		Thickness of Insulation		Thickness of Bedding		Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter		Approx. Cable Weight		Standard Packing Length	Drum Size	Approx. Gross Weight	
Phase	Neutral	Phase	Neutral	Phase	Neutral	Extruded	Lapped			Extruded Bedding	Lapped Bedding	Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding
Sqmm		Ohm/Km		mm		mm		mm	mm	mm		Kg/Km		Metre ± 10%		KG	
10	6	1.83	3.08	0.7	0.7	1.0	-	1.25	1.8	22.0	-	1043	-	1000	D-14	1190	-
16	10	1.15	1.83	0.7	0.7	1.0	-	1.25	1.8	24.7	-	1360	-	1000	D-14	1510	-
25	16	0.727	1.15	0.9	0.7	1.0	0.8	1.6	1.8	26.6	25.5	1780	1690	500	D-12	1000	955
35	16	0.524	1.15	0.9	0.7	1.0	0.8	1.6	1.8	30.0	28.9	2200	2100	500	D-12	1210	1160
50	25	0.387	0.727	1.0	0.9	1.0	0.8	1.6	1.9	33.1	32.0	2780	2650	500	D-16	1600	1530
70	35	0.268	0.524	1.1	0.9	1.2	0.8	2.0	2.1	38.1	36.6	3910	3715	500	D-18	2200	2095
95	50	0.193	0.387	1.1	1.0	1.2	0.8	2.0	2.2	42.3	40.8	4990	4760	500	D-18	2740	2620
120	70	0.153	0.268	1.2	1.1	1.2	0.8	2.0	2.4	45.9	44.4	6060	5835	500	D-19	3350	3240
150	70	0.124	0.268	1.4	1.1	1.4	0.8	2.5	2.5	52.2	49.6	7700	7305	500	D-19	4170	3975
185	95	0.0991	0.193	1.6	1.1	1.4	0.8	2.5	2.7	57.1	55.2	9260	8895	250	D-18	2560	2465
240	120	0.0754	0.153	1.7	1.2	1.6	0.8	2.5	2.9	62.6	60.3	11450	11000	250	D-18	3100	2990
300	150	0.0601	0.124	1.8	1.4	1.6	0.8	2.5	3.0	68.2	65.9	13880	13340	250	D-18	3710	3575
300	185	0.0601	0.0991	1.8	1.6	1.6	0.8	2.5	3.1	68.4	66.1	14190	13685	250	D-18	3790	3660
400	185	0.0470	0.0991	2.0	1.6	1.6	0.8	3.15	3.3	76.9	74.6	18050	17410	250	D-22	4980	4825
500	240	0.0366	0.0754	2.2	1.7	1.8	0.8	3.15	3.6	86.4	83.7	22300	21485	200	D-23	4960	7495

All Phase conductors upto 16Sqmm circular stranded(Class 2)

All Phase conductors 25sqmm and above shaped stranded(Class 2)

All neutral conductors circular stranded(Class 2).

All cables conform to IEC 60502

Drum size given above are for cables with extruded bedding.



■ **600 / 1000 V - FOUR CORE WITH REDUCED NEUTRAL ALUMINIUM CONDUCTOR XLPE INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES**



**(AL/XLPE/PVC/SWA/PVC and AL/XLPE/SWA/PVC)**

Nominal Area of Conductor		Maximum Conductor Resistance at 20° C		Thickness of Insulation		Thickness of Bedding		Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter		Approx. Cable Weight		Standard Packing Length	Drum Size	Approx. Gross Weight	
Phase	Neutral	Phase	Neutral	Phase	Neutral	Extruded	Lapped			Extruded Bedding	Lapped Bedding	Extruded Bedding	Lapped Bedding			Extruded Bedding	Lapped Bedding
Sqmm		Ohm/Km		mm		mm		mm	mm	mm		Kg/Km		Metre ± 10%		KG	
35	16	0.868	1.91	0.9	0.7	1.0	0.8	1.6	1.8	29.7	28.6	1480	1350	500	D-12	850	785
50	25	0.641	1.20	1.0	0.9	1.0	0.8	1.6	1.9	33.1	32.0	1780	1640	500	D-16	1100	1030
70	35	0.443	0.868	1.1	0.9	1.2	0.8	2.0	2.1	38.0	36.5	2480	2270	500	D-18	1480	1380
95	50	0.320	0.641	1.1	1.0	1.2	0.8	2.0	2.2	42.1	40.6	2980	2750	500	D-18	1730	1620
120	70	0.253	0.443	1.2	1.1	1.2	0.8	2.0	2.3	45.7	44.2	3460	3220	500	D-19	2050	1930
150	70	0.206	0.443	1.4	1.1	1.4	0.8	2.5	2.5	50.4	48.5	4440	4100	500	D-19	2540	2370
185	95	0.164	0.320	1.6	1.1	1.4	0.8	2.5	2.7	56.4	54.5	5270	4910	250	D-21	3060	2880
240	120	0.125	0.253	1.7	1.2	1.6	0.8	2.5	2.9	62.8	60.5	6370	5880	500	D-22	3660	3410
300	150	0.100	0.206	1.8	1.4	1.6	0.8	2.5	3.0	68.2	65.9	7450	6920	300	D-20	2660	2430
300*	185	0.100	0.164	1.8	1.6	-	0.8	2.5	2.7	-	65.7	-	6970	300	D-19	-	2410
300	185	0.100	0.164	1.8	1.6	1.6	0.8	2.5	3.1	68.4	66.1	7560	7030	250	D-18	2130	2000
400	185	0.0778	0.164	2.0	1.6	1.6	0.8	3.15	3.3	76.9	74.6	9750	9110	250	D-19	2760	2600

All Phase conductors shaped stranded (Class 2) .

All Neutral conductors circular stranded(Class 2).

Cable conform to IEC 60502-1, \*Cable as per MEW, Kuwait Specification.

Drum size given above are for cables with extruded bedding.



■ **600 / 1000 V - MULTICORE CABLES FOR STREET LIGHTING COPPER CONDUCTOR XLPE INSULATION PVC SHEATHED CABLES**



**(CU/XLPE/PVC)**

Cable Details	Nominal Area of Conductor		Maximum Conductor Resistance at 20° C		Thickness of Insulation		Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
	Phase	Neutral & Earth	Phase	Neutral	Phase	Neutral						
	Sqmm		Ohm/Km		mm		mm	mm	Kg/Km	Metre ± 1 0%		KG
2×16+1×10	16	10	1.15	1.83	0.7	0.7	1.8	18.9	660	1000	D-12	770
3×25+2×16	25	16	0.727	1.15	0.9	0.7	1.8	27.2	1510	1000	D-16	1720
3×35+2×16	35	25	0.524	1.15	0.9	0.7	1.8	30.2	1850	1000	D-14	1080

Cable Details	Nominal Area of Conductor	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
	Sqmm	Ohm/Km	mm	mm	mm	Kg/Km	Metre ± 10%		KG
5×1.5*	1.5	12.1	0.7	1.8	13.0	225	1000	D-10	285
5×1.5	1.5	12.1	0.7	1.8	13.5	235	1000	D-10	295
5×2.5*	2.5	7.41	0.7	1.8	14.1	280	1000	D-10	340
5×2.5	2.5	7.41	0.7	1.8	14.6	295	1000	D-10	355
5×4	4	4.61	0.7	1.8	15.9	390	1000	D-11	490
5×6	6	3.08	0.7	1.8	17.6	505	1000	D-12	615
5×10	10	1.83	0.7	1.8	19.5	740	1000	D-12	850
5×16	16	1.15	0.7	1.8	22.4	1060	500	D-11	630
5×25	25	0.727	0.9	1.8	27.2	1650	500	D-12	925
5×35	35	0.524	0.9	1.8	30.2	2170	500	D-14	1235

Circular solid conductors(Class 1)

All other conductors circular stranded(Class 2)

Cables conform to IEC 60502-1.

[www.zmscable.com](http://www.zmscable.com)

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\* ZMS--- TRANS MORE \*



■ **600 / 1000 V - AUXILIARY CABLES(CONTROL CABLES) COPPER CONDUCTOR PVC INSULATED PVC SHEATHED CABLES**

**(CU/PVC/PVC) SIZE:1.5 SQMM**



Number of cores	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Outer Sheath	Approx.Overall Diameter	Approx.Cable Weight	Standard Packing Length	Drum Size	Approx.Gross Weight
No.	Ohm/Km	mm	mm	mm	Kg/Km	Metre ± 10%		KG
2	12.1	0.6	1.8	10.6	150	1000	D-8	200
3	12.1	0.6	1.8	11.0	170	1000	D-8	220
4	12.1	0.6	1.8	11.7	195	1000	D-9	255
5	12.1	0.6	1.8	12.7	235	1000	D-9	295
7	12.1	0.6	1.8	13.6	280	1000	D-10	340
8	12.1	0.6	1.8	14.5	320	1000	D-10	380
12	12.1	0.6	1.8	17.1	430	1000	D-12	540
19	12.1	0.6	1.8	19.6	600	500	D-10	360
27	12.1	0.6	1.8	23.1	810	500	D-11	505
37	12.1	0.6	1.8	25.6	1040	500	D-12	630
48	12.1	0.6	1.9	29.3	1320	500	D-12	770
61	12.1	0.6	2.0	32.0	1630	500	D-14	965
91	12.1	0.6	2.2	38.4	2360	500	D-18	1420

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/T11 compound and sheathed with PVC Type ST1/TM1 compound.

Cables conductors circular stranded, cables with solid or flexible conductor available on request.

Core identification by number printing on white cores.



■ **600 / 1000 V - AUXILIARY CABLES (CONTROL CABLES) COPPER CONDUCTOR PVC INSULATED PVC SHEATHED CABLES**



**(CU/PVC/PVC) SIZE:1.5 SQMM**

Number of cores	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	Kg/Km	Metre ± 10%		KG
2	12.1	0.8	1.8	11.4	170	1000	D-8	220
3	12.1	0.8	1.8	11.9	190	1000	D-8	240
4	12.1	0.8	1.8	12.8	225	1000	D-9	285
5	12.1	0.8	1.8	13.8	265	1000	D-9	325
7	12.1	0.8	1.8	15.1	320	1000	D-10	380
8	12.1	0.8	1.8	16.1	370	1000	D-11	470
12	12.1	0.8	1.8	19.0	490	1000	D-12	600
19	12.1	0.8	1.8	21.9	690	500	D-10	405
27	12.1	0.8	1.8	25.8	930	500	D-12	575
37	12.1	0.8	1.8	28.7	1190	500	D-12	705
48	12.1	0.8	1.9	32.8	1515	500	D-14	910
61	12.1	0.8	2.0	35.9	1870	500	D-16	1145
91	12.1	0.8	2.2	43.1	2695	500	D-18	1585

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/T11 compound and sheathed with PVC Type ST1/TM1 compound.

Cables conform to IEC 60502-1.

All conductors circular stranded, cables with solid or flexible conductor available on request.

Core identification by number printing on white cores.



■ **600 / 1000 V - AUXILIARY CABLES (CONTROL CABLES) COPPER CONDUCTOR PVC INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES (CU/PVC/PVC/SWA/PVC) SIZE:1.5 SQMM**



Number of cores	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Extruded Bedding	Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Metre ± 10 %		KG
2**	12.1	0.6	0.8	0.9	1.4	12.8	310	1000	D-9	370
3**	12.1	0.6	0.8	0.9	1.4	13.3	340	1000	D-10	400
4**	12.1	0.6	0.8	0.9	1.4	14.1	385	1000	D-10	445
5**	12.1	0.6	0.8	0.9	1.4	14.9	430	1000	D-10	490
7	12.1	0.6	0.8	0.9	1.4	15.8	490	1000	D-11	590
8**	12.1	0.6	0.8	0.9	1.5	16.9	560	1000	D-11	660
12	12.1	0.6	0.8	1.25	1.5	20.2	710	500	D-10	465
19	12.1	0.6	0.8	1.25	1.6	22.9	1050	500	D-11	625
27	12.1	0.6	1.0	1.6	1.7	27.7	1530	500	D-12	875
37	12.1	0.6	1.0	1.6	1.8	30.4	1860	500	D-14	1080
48	12.1	0.6	1.0	1.6	1.9	34.1	2260	500	D-16	1340
61**	12.1	0.6	1.2	2.0	2.0	38.0	2940	500	D-18	1710
91**	12.1	0.6	1.2	2.0	2.2	44.4	3890	500	D-18	2185

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type AT11 compound and sheathed with PVC Type ST1/TM1 compound.

\*\*Cables conform generally to BS 6346 & IEC 60502-1.

All others cables conform to BS 6346.

All conductors circular stranded, cables with solid or flexible conductor available on request.

Core identification by number printing on white cores.



■ **600 / 1000 V - AUXILIARY CABLES (CONTROL CABLES) COPPER CONDUCTOR PVC INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES (CU/PVC/PVC/SWA/PVC) SIZE:1.5 SQMM**



Number of cores	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Extruded Bedding	Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Metre ± 10 %		KG
2	12.1	0.8	1.0	0.9	1.8	14.8	380	1000	D-10	440
3	12.1	0.8	1.0	0.9	1.8	15.3	420	1000	D-10	480
4	12.1	0.8	1.0	0.9	1.8	16.2	470	1000	D-11	570
5	12.1	0.8	1.0	0.9	1.8	17.2	530	1000	D-11	630
7	12.1	0.8	1.0	0.9	1.8	18.5	620	1000	D-12	730
8	12.1	0.8	1.0	1.25	1.8	20.2	790	1000	D-12	900
12	12.1	0.8	1.0	1.25	1.8	23.1	980	500	D-11	590
19	12.1	0.8	1.0	1.6	1.8	26.7	1400	500	D-12	810
27	12.1	0.8	1.0	1.6	1.8	30.6	1760	500	D-14	1030
37	12.1	0.8	1.0	1.6	1.9	33.7	2130	500	D-14	1215
48	12.1	0.8	1.0	2.0	2.0	38.6	2820	500	D-18	1650
61	12.1	0.8	1.2	2.0	2.1	42.1	3450	500	D-18	1965
91	12.1	0.8	1.2	2.0	2.3	49.3	4430	500	D-19	2535

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type AT11 compound and sheathed with PVC Type ST1/TM1 compound.

All Cables conform to IEC 60502-1.

All conductors circular stranded, cables with solid or flexible conductor available on request.

Core identification by number printing on white cores.



■ **600 / 1000 V - AUXILIARY CABLES (CONTROL CABLES) COPPER CONDUCTOR PVC INSULATED PVC SHEATHED CABLES**



**(CU/PVC/PVC) SIZE: 2.5 SQMM**

Number of cores	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	Kg/Km	Metre ± 10%		KG
2	7.41	0.7	1.8	11.8	190	1000	D-9	250
3	7.41	0.7	1.8	12.3	225	1000	D-9	285
4	7.41	0.7	1.8	13.3	265	1000	D-10	325
5	7.41	0.7	1.8	14.3	315	1000	D-10	375
7	7.41	0.7	1.8	15.4	380	500	D-8	240
8	7.41	0.7	1.8	16.5	445	500	D-9	285
12	7.41	0.7	1.8	19.6	595	500	D-10	360
19	7.41	0.7	1.8	22.6	845	500	D-11	525
27	7.41	0.7	1.8	26.8	1150	500	D-12	685
37	7.41	0.7	1.9	30.0	1510	500	D-12	865
48	7.41	0.7	2.0	34.4	1920	500	D-16	1170
61	7.41	0.7	2.1	37.6	2380	500	D-18	1430
91	7.41	0.7	2.3	45.2	3460	500	D-19	2050

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/T11 compound and sheathed with PVC Type ST1/TM1 compound.

Cables conform generally to BS 6346 & IEC 60502-1.

All conductors circular stranded, cables with solid or flexible conductor available on request.

Core identification by number printing on white cores.





■ **600 / 1000 V - AUXILIARY CABLES(CONTROL CABLES) COPPER CONDUCTOR PVC INSULATED PVC SHEATHED CABLES (CU/PVC/PVC) SIZE:2.5 SQMM**



Number of cores	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of outer Sheath	Approx.Overall Diameter	Approx.Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	Kg/Km	Metre ± 10%		KG
2	7.41	0.8	1.8	12.2	200	1000	D-9	260
3	7.41	0.8	1.8	12.8	235	1000	D-9	295
4	7.41	0.8	1.8	13.8	280	1000	D-10	340
5	7.41	0.8	1.8	14.9	330	1000	D-10	390
7	7.41	0.8	1.8	16.3	410	500	D-9	265
8	7.41	0.8	1.8	17.4	465	500	D-9	295
12	7.41	0.8	1.8	20.7	630	500	D-10	375
19	7.41	0.8	1.8	23.9	900	500	D-11	550
27	7.41	0.8	1.8	28.3	1220	500	D-12	720
37	7.41	0.8	1.9	31.7	1600	500	D-14	950
48	7.41	0.8	2.0	36.3	2035	500	D-16	1230
61	7.41	0.8	2.1	39.7	2520	500	D-18	1500
91	7.41	0.8	2.3	47.7	3650	500	D-19	2145

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/T11 compound and sheathed with PVC Type ST1/TM1 compound.

Cables conform to IEC 60502-1.

All conductors circular stranded, cables with solid or flexible conductor available on request.

Core identification by number printing on white cores.



■ **600 / 1000 V - AUXILIARY CABLES(CONTROL CABLES) COPPER CONDUCTOR PVC INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES**



**(CU/PVC/PVC/SWA/PVC) SIZE:2.5 SQMM**

Number of cores	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Extruded Bedding	Dia. of Armour Wire	Thickness of Outer Sheath	Approx.Overall Diameter	Approx.Cable Weight	Standard Packing Length	Drum Size	Approx.Gross Weight
No.	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Metre ± 10 %		KG
2**	7.41	0.7	0.8	0.9	1.4	14.0	370	1000	D-10	430
3**	7.41	0.7	0.8	0.9	1.4	14.6	415	1000	D-10	475
4**	7.41	0.7	0.8	0.9	1.4	15.5	470	1000	D-11	570
5**	7.41	0.7	0.8	0.9	1.5	16.7	545	1000	D-11	645
7	7.41	0.7	0.8	1.25	1.5	18.5	720	1000	D-12	830
8**	7.41	0.7	0.8	1.25	1.5	19.6	815	1000	D-12	925
12	7.41	0.7	0.8	1.25	1.6	22.9	1050	500	D-11	625
19	7.41	0.7	1.0	1.6	1.7	27.2	1550	500	D-12	885
27	7.41	0.7	1.0	1.6	1.8	31.6	2010	500	D-14	1160
37	7.41	0.7	1.0	1.6	1.9	34.8	2460	500	D-16	1440
48	7.41	0.7	1.2	2.0	2.1	40.6	3330	500	D-18	1910
61**	7.41	0.7	1.2	2.0	2.2	43.8	3910	500	D-18	2200
91**	7.41	0.7	1.4	2.5	2.5	53.0	5790	500	D-19	3220

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/T11 compound and sheathed with PVC Type ST1/TM1 compound.

\*\*Cables conform generally to BS 6346 & IEC 60502-1.

All others cables conform to BS 6346.

All conductors circular stranded, cables with solid or flexible conductor available on request.

Core identification by number printing on white cores.



■ **600 / 1000 V - AUXILIARY CABLES (CONTROL CABLES) COPPER CONDUCTOR PVC INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES**



**(CU/PVC/PVC/SWA/PVC) SIZE:2.5 SQMM**

Number of cores	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Extruded Bedding	Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Metre ± 10 %		KG
2	7.41	0.8	1.0	0.9	1.8	15.6	440	1000	D-10	500
3	7.41	0.8	1.0	0.9	1.8	16.2	485	1000	D-11	585
4	7.41	0.8	1.0	0.9	1.8	17.2	550	1000	D-11	650
5	7.41	0.8	1.0	0.9	1.8	18.3	620	1000	D-12	730
7	7.41	0.8	1.0	1.25	1.8	20.4	830	1000	D-12	940
8	7.41	0.8	1.0	1.25	1.8	21.5	920	1000	D-14	1070
12	7.41	0.8	1.0	1.25	1.8	24.8	1160	500	D-11	680
19	7.41	0.8	1.0	1.6	1.8	28.7	1670	500	D-12	945
27	7.41	0.8	1.0	1.6	1.9	33.3	2140	500	D-14	1220
37	7.41	0.8	1.0	1.6	2.0	36.7	2630	500	D-16	1525
48	7.41	0.8	1.2	2.0	2.1	42.5	3515	500	D-18	2000
61	7.41	0.8	1.2	2.0	2.2	45.9	4140	500	D-18	2310
91	7.41	0.8	1.4	2.5	2.5	55.5	6090	500	D-21	3465

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/T11 compound and sheathed with PVC Type ST1/TM1 compound.

All Cables conform to IEC 60502-1.

All conductors circular stranded, cables with solid or flexible conductor available on request.

Core identification by number printing on white cores.



■ **600 / 1000 V - AUXILIARY CABLES (CONTROL CABLES) COPPER CONDUCTOR PVC INSULATED PVC SHEATHED CABLES**



**(CU/PVC/PVC) SIZE:4 SQMM**

Number of cores	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	Kg/Km	Metre ± 10%		KG
2	4.61	0.8	1.8	13.2	255	1000	D-10	315
3	4.61	0.8	1.8	13.9	300	1000	D-10	360
4	4.61	0.8	1.8	15.0	360	1000	D-10	420
5	4.61	0.8	1.8	16.2	435	500	D-9	280
7	4.61	0.8	1.8	17.5	535	500	D-9	330
8	4.61	0.8	1.8	18.8	625	500	D-10	375
12	4.61	0.8	1.8	22.5	845	500	D-11	520
19	4.61	0.8	1.8	26.1	1220	500	D-12	720
27	4.61	0.8	2.0	31.5	1710	500	D-14	1010
37	4.61	0.8	2.1	35.3	2250	500	D-18	1370
48	4.61	0.8	2.3	40.7	2890	500	D-18	1690

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type AT11 compound and sheathed with PVC Type ST1/TM1 compound.

All conductors circular stranded.

Cables generally conform to BS 6346 and IEC 60502-1.

Core identification by number printing on white cores.



■ **600 / 1000 V - AUXILIARY CABLES (CONTROL CABLES) COPPER CONDUCTOR PVC INSULATED PVC SHEATHED CABLES**



**(CU/PVC/PVC) SIZE:4 SQMM**

Number of cores	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	Kg/Km	Metre ± 10%		KG
2	4.61	1.0	1.8	14.0	280	1000	D-10	340
3	4.61	1.0	1.8	14.8	330	1000	D-10	390
4	4.61	1.0	1.8	16.0	390	1000	D-11	490
5	4.61	1.0	1.8	17.3	470	500	D-9	295
7	4.61	1.0	1.8	19.0	590	500	D-10	355
8	4.61	1.0	1.8	20.4	670	500	D-10	395
12	4.61	1.0	1.8	24.5	930	500	D-11	565
19	4.61	1.0	1.8	28.4	1340	500	D-12	780
27	4.61	1.0	2.0	34.3	1870	500	D-16	1145
37	4.61	1.0	2.1	38.4	2450	500	D-18	1465
48	4.61	1.0	2.3	44.3	3155	500	D-18	1815

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/T11 compound and sheathed with PVC Type ST1/TM1 compound.

All conductors circular stranded.

Cables conform to IEC 60502-1.

Core identification by number printing on white cores.



■ **600 / 1000 V - AUXILIARY CABLES (CONTROL CABLES) COPPER CONDUCTOR PVC INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES (CU/PVC/PVC/SWA/PVC) SIZE:4 SQMM**



Number of cores	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Extruded Bedding	Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Metre ± 10 %		KG
2**	4.61	0.8	0.8	0.9	1.4	15.4	460	1000	D-11	560
3**	4.61	0.8	0.8	0.9	1.4	16.1	515	1000	D-11	615
4**	4.61	0.8	0.8	1.25	1.5	18.1	700	1000	D-12	810
5**	4.61	0.8	0.8	1.25	1.5	19.3	790	500	D-10	455
7	4.61	0.8	0.8	1.25	1.6	20.8	935	500	D-10	530
8**	4.61	0.8	0.8	1.25	1.6	22.1	1060	500	D-11	630
12	4.61	0.8	1.0	1.6	1.7	27.1	1550	500	D-12	885
19	4.61	0.8	1.0	1.6	1.8	30.9	2060	500	D-14	1180
27	4.61	0.8	1.2	2.0	2.0	37.5	2990	500	D-18	1740
37	4.61	0.8	1.2	2.0	2.1	41.3	3670	500	D-18	2080
48	4.61	0.8	1.2	2.0	2.2	46.5	4490	500	D-19	2570

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/T11 compound and sheathed with PVC Type ST1/TM1 compound.

All conductors circular stranded.

\*\*Cables generally conform to BS 6346.

All other cables conform to BS 6346.

Core identification by number printing on white cores.



■ **600 / 1000 V - AUXILIARY CABLES (CONTROL CABLES) COPPER CONDUCTOR PVC INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES (CU/PVC/PVC/SWA/PVC) SIZE:4 SQMM**



Number of cores	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Extruded Bedding	Dia. of Armour Wire	Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Metre ± 10 %		KG
2	4.61	1.0	1.0	0.9	1.8	17.4	550	1000	D-11	650
3	4.61	1.0	1.0	1.25	1.8	18.9	710	1000	D-12	820
4	4.61	1.0	1.0	1.25	1.8	20.1	810	1000	D-12	920
5	4.61	1.0	1.0	1.25	1.8	21.4	920	500	D-10	520
7	4.61	1.0	1.0	1.25	1.8	23.1	1075	500	D-10	640
8	4.61	1.0	1.0	1.6	1.8	25.2	1340	500	D-12	780
12	4.61	1.0	1.0	1.6	1.8	29.3	1720	500	D-14	1010
19	4.61	1.0	1.0	1.6	1.9	33.4	2270	500	D-14	1285
27	4.61	1.0	1.2	2.0	2.1	40.5	3290	500	D-18	1885
37	4.61	1.0	1.2	2.0	2.2	44.6	4010	500	D-18	2245
48	4.61	1.0	1.2	2.5	2.4	51.5	5355	500	D-21	3095

All the cables are insulated with either PVC Type 5 Heat Resisting 85°C compound and sheathed with PVC Type 9/ST2 compound OR PVC Type A/T11 compound and sheathed with PVC Type ST1/TM1 compound.

All conductors circular stranded.

All cables conform to IEC 60502-1.

Core identification by number printing on white cores.



■ **600 / 1000 V - AUXILIARY CABLES(CONTROL CABLES) COPPER CONDUCTOR XLPE INSULATED PVC SHEATHED CABLES**



**(CU/XLPE/PVC) SIZE:1.5 SQMM**

Number of cores	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of outer Sheath	Approx.Overall Diameter	Approx.Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	Kg/Km	Metre ± 10%		KG
2	12.1	0.7	1.8	11.2	160	1000	D-9	220
3	12.1	0.7	1.8	11.6	175	1000	D-9	235
4	12.1	0.7	1.8	12.5	205	1000	D-9	265
5	12.1	0.7	1.8	13.5	240	1000	D-10	300
7	12.1	0.7	1.8	14.5	285	1000	D-10	345
8	12.1	0.7	1.8	15.5	325	1000	D-11	425
12	12.1	0.7	1.8	18.3	430	500	D-10	275
19	12.1	0.7	1.8	21.1	595	500	D-10	360
27	12.1	0.7	1.8	24.9	800	500	D-12	510
37	12.1	0.7	1.8	27.7	1020	500	D-12	620
48	12.1	0.7	1.8	31.5	1280	500	D-14	790
61	12.1	0.7	1.9	34.5	1580	500	D-16	1000
91	12.1	0.7	2.1	41.5	2280	500	D-18	1380

Cables conform to IEC 60502-1 & Generally to BS 5467.

All conductors circular stranded, cables with solid conductor available on request.

Core identification by number printing on white cores.





■ **600 / 1000 V - AUXILIARY CABLES(CONTROL CABLES)COPPER CONDUCTOR XLPE INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES**

**(CU/XLPE/PVC/SWA/PVC) SIZE:1.5 SQMM**



Number of cores	Maximum Conductor Resistance at 20° C	Thickness of Insulation	Thickness of Extruded Bedding	Dia. of Armour Wire	Thickness of Outer Sheath	Approx.Overall Diameter	Approx.Cable Weight	Standard Packing Length	Drum Size	Approx.Gross Weight
No.	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Metre ± 10 %		KG
2*	12.1	0.7	0.8	0.9	1.3	13.2	325	1000	D-10	385
3*	12.1	0.7	0.8	0.9	1.3	13.7	350	1000	D-10	410
4*	12.1	0.7	0.8	0.9	1.4	14.8	400	1000	D-10	460
5*	12.1	0.7	0.8	0.9	1.4	15.7	450	1000	D-11	550
7	12.1	0.7	0.8	0.9	1.4	16.7	510	1000	D-11	610
8*	12.1	0.7	0.8	1.25	1.5	18.6	675	1000	D-12	785
12	12.1	0.7	0.8	1.25	1.5	21.4	845	500	D-10	485
19	12.1	0.7	0.8	1.25	1.6	24.4	1080	500	D-12	650
27	12.1	0.7	1.0	1.6	1.7	29.5	1590	500	D-12	905
37	12.1	0.7	1.0	1.6	1.8	32.5	1900	500	D-16	1160
48*	12.1	0.7	1.0	1.6	1.9	36.5	2300	500	D-18	1390
61*	12.1	0.7	1.2	2.0	2.1	40.9	3010	500	D-18	1750
91*	12.1	0.7	1.2	2.0	2.2	47.7	3970	500	D-19	2310

\*Cables conform generally BS 5467 and IEC 60502-1.

All other cables conform to BS 5467.

All conductors circular stranded, cables with solid conductor available on request.

Core identification by number printing on white cores.



■ **600/1000V AUXILIARY CABLES(CONTROL CABLES) COPPER CONDUCTOR XLPE INSULATED STEEL WIRE ARMoured PVC SHEATHED CABLES**



**(CU/XLPE/PVC/SWA/PVC)SIZE:1.5 SQMM**

Number of cores	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Thickness of Extruded Bedding	Dia. of Armor Wire	Thickness of outer sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Meter ± 10%		KG
2	12.1	0.7	1	0.9	1.8	14.6	375	1000	D-10	435
3	12.1	0.7	1	0.9	1.8	15.1	400	1000	D-10	460
4	12.1	0.7	1	0.9	1.8	16	450	1000	D-10	550
5	12.1	0.7	1	0.9	1.8	16.9	500	1000	D-11	600
7	12.1	0.7	1	0.9	1.8	18.2	575	1000	D-12	685
8	12.1	0.7	1	1.25	1.8	19.9	730	1000	D-12	840
12	12.1	0.7	1	1.25	1.8	22.7	910	500	D-11	555
19	12.1	0.7	1	1.25	1.8	25.5	1150	500	D-12	685
17	12.1	0.7	1	1.6	1.8	30	1610	500	D-12	915
37	12.1	0.7	1	1.6	1.8	32.5	1900	500	D-16	1160
48	12.1	0.7	1	1.6	1.9	36.8	2330	500	D-16	1375
61	12.1	0.7	1.2	2	2.1	41.2	3045	500	D-18	1760
91	12.1	0.7	1.2	2	2.2	48	3975	500	D-19	2310

All cables conform to IEC60502-1.

All conductors circular stranded,cables with solid conductor available on request.

Core identification by number printing on white cores.



■ **600/1000V AUXILIARY CABLES(CONTROL CABLES) COPPER CONDUCTOR XLPE INSULATED PVC SHEATHED CABLES**

**(CU/XLPE/PVC)SIZE:2.5 SQMM**



Number of cores	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Thickness of outer sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	Kg/Km	Meter ± 10%		KG
2	7.41	0.7	1.8	12.0	190	1000	D-9	250
3	7.41	0.7	1.8	12.5	220	1000	D-9	280
4	7.41	0.7	1.8	13.5	255	1000	D-10	315
5	7.41	0.7	1.8	14.6	305	1000	D-10	365
7	7.41	0.7	1.8	15.7	365	500	D-8	235
8	7.41	0.7	1.8	16.8	420	500	D-9	270
12	7.41	0.7	1.8	20.0	565	500	D-10	345
19	7.41	0.7	1.8	23.1	795	500	D-11	500
17	7.41	0.7	1.8	27.4	1080	500	D-12	650
37	7.41	0.7	1.8	30.5	1390	500	D-14	845
48	7.41	0.7	1.9	35.0	1770	500	D-16	1100
61	7.41	0.7	2.0	38.3	2190	500	D-18	1340
91	7.41	0.7	2.3	46.3	3190	500	D-19	1920

All cables conform to IEC60502-1&Generally to BS 5467.

All conductors circular stranded,cables with solid conductor available on request.

Core identification by number printing on white cores.



■ **600/1000V AUXILIARY CABLES(CONTROL CABLES) COPPER CONDUCTOR XLPE INSULATED STEEL WIRE ARMORED PVC SHEATHED CABLES**



**(CU/XLPE/PVC/SWA/PVC) SIZE:2.5 SQMM**

Number of cores	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Thickness of Extruded Bedding	Dia. of Armor Wire	Thickness of outer sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Meter ± 10%		KG
2*	7.41	0.7	0.8	0.9	1.4	14.2	375	1000	D-10	435
3*	7.41	0.7	0.8	0.9	1.4	14.8	415	1000	D-10	475
4*	7.41	0.7	0.8	0.9	1.4	15.8	465	1000	D-11	565
5*	7.41	0.7	0.8	0.9	1.4	16.8	530	1000	D-11	630
7	7.41	0.7	0.8	0.9	1.4	17.9	615	1000	D-12	725
8*	7.41	0.7	0.8	1.25	1.6	20.1	810	1000	D-12	920
12	7.41	0.7	0.8	1.25	1.6	23.3	1030	500	D-11	615
19	7.41	0.7	1.0	1.6	1.7	27.7	1520	500	D-12	870
17	7.41	0.7	1.0	1.6	1.8	32.2	1950	500	D-16	1190
37	7.41	0.7	1.0	1.6	1.8	35.3	2360	500	D-18	1420
48*	7.41	0.7	1.2	2.0	2.1	41.4	3230	500	D-18	1860
61*	7.41	0.7	1.2	2.0	2.2	44.7	3760	500	D-18	2120
91*	7.41	0.7	1.4	2.5	2.4	53.9	5540	500	D-21	3190

\*Cables conform generally to BS5467 and IEC 60502-1.

All other cables conform to BS 5467.

All conductors circular stranded,cables with solid conductor available on request.

Core identification by number printing on white cores.



■ **600/1000V AUXILIARY CABLES(CONTROL CABLES)COPPER CONDUCTOR XLPE INSULATED STEEL WIRE ARMORED PVC SHEATHED CABLES**



**(CU/XLPE/PVC/SWA/PVC) SIZE:2.5 SQMM**

Number of cores	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Thickness of Extruded Bedding	Dia. of Armor Wire	Thickness of outer sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Meter ± 10%		KG
2	7.41	0.7	0.8	0.9	1.4	14.2	375	1000	D-10	435
3	7.41	0.7	0.8	0.9	1.4	14.8	415	1000	D-10	475
4	7.41	0.7	0.8	0.9	1.4	15.8	465	1000	D-11	565
5	7.41	0.7	0.8	0.9	1.4	16.8	530	1000	D-11	630
7	7.41	0.7	0.8	0.9	1.4	17.9	615	1000	D-12	725
8	7.41	0.7	0.8	1.25	1.6	20.1	810	1000	D-12	920
12	7.41	0.7	0.8	1.25	1.6	23.3	1030	500	D-11	615
19	7.41	0.7	1.0	1.6	1.7	27.7	1520	500	D-12	870
17	7.41	0.7	1.0	1.6	1.8	32.2	1950	500	D-16	1190
37	7.41	0.7	1.0	1.6	1.8	35.3	2360	500	D-18	1420
48	7.41	0.7	1.2	2.0	2.1	41.4	3230	500	D-18	1860
61	7.41	0.7	1.2	2.0	2.2	44.7	3760	500	D-18	2120
91	7.41	0.7	1.4	2.5	2.4	53.9	5540	500	D-21	3190

All cables conform to IEC60502-1.

All conductors circular stranded,cables with solid conductor available on request.

Core identification by number printing on white cores.



■ **600/1000V AUXILIARY CABLES(CONTROL CABLES)COPPER CONDUCTOR XLPE INSULATED PVC SHEATHED CABLES (CU / XLPE / PVC) SIZE:4 SQMM**



Number of cores	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Thickness of outer sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	Kg/Km	Meter ± 10%		KG
2	4.61	0.7	1.8	13.0	240	1000	D-9	300
3	4.61	0.7	1.8	13.7	280	1000	D-10	340
4	4.61	0.7	1.8	14.8	335	1000	D-10	395
5	4.61	0.7	1.8	15.9	400	1000	D-11	500
7	4.61	0.7	1.8	17.2	490	1000	D-11	590
8	4.61	0.7	1.8	18.5	565	500	D-10	340
12	4.61	0.7	1.8	22.1	770	500	D-11	485
19	4.61	0.7	1.8	25.6	1110	500	D-12	665
27	4.61	0.7	1.8	30.5	1520	500	D-14	910
37	4.61	0.7	1.9	34.2	2000	500	D-16	1210
48	4.61	0.7	2.1	39.5	2500	500	D-18	1490

Cables conform to IEC 60502-1 and BS5467.  
 All conductors circular stranded.  
 Core identification by number printing on white cores.



■ **600/1000V- AUXILIARY CABLES(CONTROL CABLES)COPPER CONDUCTOR XLPE INSULATED STEEL WIRE ARMORED PVC SHEATHED CABLES**



**(CU / XLPE / PVC / SWA / PVC) SIZE:4 SQMM**

Number of cores	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Thickness of Extruded Bedding	Dia. of Armor Wire	Thickness of outer sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Meter ± 10%		KG
2*	4.61	0.7	0.8	0.9	1.4	15.2	440	1000	D-11	540
3*	4.61	0.7	0.8	0.9	1.4	15.9	490	1000	D-11	590
4*	4.61	0.7	0.8	0.9	1.4	17.0	570	1000	D-11	670
5*	4.61	0.7	0.8	1.25	1.5	19.0	755	500	D-10	440
7	4.61	0.7	0.8	1.25	1.5	20.3	880	500	D-10	500
8*	4.61	0.7	0.8	1.25	1.5	22.9	1130	500	D-11	665
12	4.61	0.7	1.0	1.6	1.6	26.5	1460	500	D-12	840
19	4.61	0.7	1.0	1.6	1.7	30.2	1920	500	D-12	1070
27	4.61	0.7	1.0	1.6	1.9	35.5	2500	500	D-16	1460
37	4.61	0.7	1.2	2.0	2.0	40.4	3400	500	D-18	1940
48*	4.61	0.7	1.2	2.0	2.2	45.7	4180	500	D-19	2410

\*Cables conform generally to BS5467 and IEC 60502-1.

All other cables conform to BS 5467.

All conductors circular stranded

Core identification by number printing on white cores.



■ **600/1000V- AUXILIARY CABLES(CONTROL CABLES)COPPER CONDUCTOR XLPE INSULATED STEEL WIRE ARMORED PVC SHEATHED CABLES**

**(CU / XLPE / PVC / SWA / PVC) SIZE:4 SQMM**



Number of cores	Maximum Conductor Resistance at 20°C	Thickness of Insulation	Thickness of Extruded Bedding	Dia. of Armor Wire	Thickness of outer sheath	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight
No.	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km	Meter ± 10%		KG
2	4.61	0.7	1.0	0.9	1.8	16.4	490	1000	D-11	590
3	4.61	0.7	1.0	0.9	1.8	17.1	550	1000	D-11	650
4	4.61	0.7	1.0	0.9	1.8	18.2	620	1000	D-12	730
5	4.61	0.7	1.0	1.25	1.8	20.0	800	500	D-10	460
7	4.61	0.7	1.0	1.25	1.8	21.6	940	500	D-10	530
8	4.61	0.7	1.0	1.25	1.8	23.9	1160	500	D-11	680
12	4.61	0.7	1.0	1.6	1.8	26.9	1500	500	D-12	860
19	4.61	0.7	1.0	1.6	1.8	30.4	1940	500	D-12	1080
27	4.61	0.7	1.0	1.6	1.9	35.5	2500	500	D-16	1460
37	4.61	0.7	1.2	2.0	2.1	40.6	3420	500	D-18	1950
48	4.61	0.7	1.2	2.0	2.2	46.0	4185	500	D-18	2335

All Cables conform IEC 60502-1.

All conductors circular stranded.

Core identification by number printing on white cores.





■ **A.C. Resistance & Reactance values.**

**XLPE Insulated cables**

Nominal Area of Conductor	AC Resistance				AC Resistance		
	Single core		Multi core		Single core		Multi core
	Copper	Aluminum	Copper	Aluminum	Trefoil	Flat	
sqmm	Ω /km		Ω /km		Ω /km		Ω /km
1.5	15.43	-	15.43	-	-	-	0.115
2.5	9.45	-	9.45	-	-	-	0.107
4	5.88	-	5.88	-	-	-	0.093
6	3.93	-	3.93	-	-	-	0.089
10	2.33	-	2.33	-	-	-	0.084
16	1.47	2.42	1.47	2.42	0.114	0.172	0.081
25	0.927	1.54	0.927	1.54	0.113	0.172	0.081
35	0.668	1.11	0.668	1.11	0.11	0.167	0.079
50	0.494	0.822	0.494	0.822	0.106	0.161	0.075
70	0.342	0.568	0.342	0.568	0.103	0.160	0.074
95	0.247	0.411	0.247	0.411	0.098	0.155	0.073
120	0.197	0.325	0.197	0.325	0.097	0.153	0.072
150	0.160	0.265	0.160	0.265	0.097	0.153	0.072
185	0.128	0.211	0.128	0.211	0.096	0.153	0.072
240	0.0986	0.162	0.0989	0.162	0.092	0.147	0.071
300	0.0800	0.130	0.0802	0.130	0.090	0.147	0.070
400	0.0640	0.102	0.0645	0.102	0.09	0.146	0.070
500	0.0525	0.0810	0.0530	0.081	0.089	0.146	0.070
630	0.0428	0.0658	-	-	0.086	0.144	-
800	0.0380	0.0541	-	-	0.084	0.143	-
1000	0.0344	0.0457	-	-	0.081	0.140	-

Note: Maximum Conductor Operating Temperature=90°C



■ **A.C. Resistance & Reactance values.**

**PVC Insulated cables**

Nominal Area of Conductor	AC Resistance								AC Resistance		
	Single core				Multi core				Single core		Multi core
	Copper		Aluminum		Copper		Aluminum		Trefoil	Flat	
	at 70°C	at 85°C	at 70°C	at 85°C	at 70°C	at 85°C	at 70°C	at 85°C			
Sqmm	Ω /km		Ω /km		Ω /km		Ω /km		Ω /km	Ω /km	Ω /km
1.5	15.19	15.19	-	-	15.19	15.19	-	-	-	-	0.115
2.5	9.3	9.3	-	-	9.3	9.3	-	-	-	-	0.111
4	5.79	5.79	-	-	5.79	5.79	-	-	-	-	0.096
6	3.87	3.87	-	-	3.87	3.87	-	-	-	-	0.092
10	2.30	2.30	-	-	2.30	2.30	-	-	-	-	0.091
16	1.38	1.44	2.29	2.41	1.38	1.44	2.29	2.41	0.121	0.210	0.086
25	0.870	0.913	1.44	1.51	0.870	0.913	1.44	1.51	0.116	0.202	0.085
35	0.627	0.658	1.04	1.10	0.627	0.658	1.04	1.10	0.115	0.201	0.083
50	0.464	0.486	0.771	0.809	0.464	0.486	0.77	0.809	0.112	0.195	0.080
70	0.321	0.337	0.533	0.559	0.321	0.337	0.533	0.559	0.107	0.188	0.077
95	0.232	0.243	0.385	0.405	0.232	0.243	0.385	0.405	0.103	0.186	0.077
120	0.185	0.193	0.305	0.320	0.184	0.193	0.305	0.320	0.103	0.185	0.075
150	0.150	0.159	0.248	0.261	0.150	0.159	0.248	0.261	0.101	0.185	0.075
185	0.120	0.126	0.198	0.208	0.121	0.126	0.198	0.208	0.099	0.184	0.074
240	0.0926	0.097	0.152	0.16	0.0929	0.0972	0.152	0.16	0.096	0.181	0.074
300	0.075	0.0785	0.122	0.129	0.0752	0.0786	0.122	0.129	0.094	0.18	0.073
400	0.06	0.0628	0.096	0.1	0.0604	0.063	0.096	0.101	0.091	0.178	0.073
500	0.0484	0.0515	0.0757	0.0793	0.0491	0.0518	0.0757	0.0795	0.089	0.176	0.072
630	0.0398	0.0426	0.0605	0.0648	-	-	-	-	0.086	0.173	-
800	0.0334	0.0357	0.05	0.0533	-	-	-	-	0.086	0.171	-
1000	0.029	0.031	0.0415	0.0451	-	-	-	-	0.084	0.168	-

Note:

Maximum Conductor Operating Temperature for PVC Type 5 Insulation 85°C

Maximum Conductor Operating Temperature for PVC 11/Type A Insulation 70°C

Current Rating & Voltage drop for Cables & Wires Up to and including 600/1000V

Current Rating of Cables:



- Current rating of cables given in the tables below are based on the ERA(Electrical Research Association) report 69-30, part V(for XLPE Cables) and part III(for PVC Cables) which is accepted world wide.

**Single core Copper,XLPE Insulated Armored/Unarmored Cables:**

Nominal Area of Conductor	In Air		In Ground	In Duct	Voltage drop of 3 single core cables Trefoil
	Single core in Trefoil		Single core in Trefoil	Single core in Trefoil	
	Unarmored	Armored	Armored	Armored	
Sqmm	A		A	A	V/A/km
1.5	27	27	32	29	26.7
2.5	37	37	43	40	16.4
4	48	48	55	52	10.2
6	60	60	70	67	6.8
10	82	82	93	88	4
16	112	112	122	114	2.5
25	150	150	157	151	1.62
35	178	178	186	174	1.17
50	212	220	225	225	0.88
70	271	281	276	270	0.62
95	336	344	330	318	0.46
120	392	400	375	356	0.38
150	453	460	419	385	0.32
185	525	528	471	425	0.28
240	626	622	542	476	0.23
300	725	709	606	519	0.21
400	844	810	671	551	0.2
500	977	916	744	598	0.18
630	1129	1032	817	645	0.17
800	1282	1121	864	672	0.16
1000	1430	1216	915	714	0.15

Operating conditions:

Ambient air temperature: 30°C      Ground temperature: 20°C  
 Depth of laying: 0.5m      Thermal resistivity of soil: 1.2K.m/W



■ **Current Rating & Voltage for Cable & Wire Up to and including 600/1000V**  
**Single core Aluminum, XLPE Insulated Armored/Unarmored Cables:**

Nominal Area of Conductor	In Air		In Ground	In Duct	Voltage drop of 3 single core cables Trefoil
	Single core in Trefoil		Single core in Trefoil	Single core in Trefoil	
	Unarmored	Armored	Armored	Armored	
Sqmm	A		A	A	V/A/km
4	37	37	44	42	16.5
6	48	48	55	51	10.2
10	65	65	73	70	6.8
16	88	88	95	89	4.2
25	115	115	123	116	2.7
35	144	144	144	139	1.93
50	157	165	172	173	1.44
70	201	210	211	210	1.0
95	249	257	253	247	0.73
120	289	299	288	280	0.59
150	334	344	322	306	0.49
185	389	397	364	340	0.4
240	465	470	420	385	0.32
300	539	538	472	426	0.27
400	594	594	534	481	0.25
500	656	656	606	546	0.21
630	744	744	688	620	0.19
800	842	842	779	703	0.18
1000	946	946	872	788	0.17

Operating conditions:

Ambient air temperature: 30°C  
 Ground temperature: 20°C  
 Depth of laying: 0.5m  
 Thermal resistivity of soil: 1.2K.m/W



■ **Current Rating & Voltage for Cable & Wire Up to and including 600/1000V**

**Two core Copper, XLPE Insulated Armored/Unarmored Cables:**

Nominal Area of Conductor	In Air		In Ground	In Duct	Voltage drop
	Single core in Trefoil		Single core in Trefoil	Single core in Trefoil	
	Unarmored	Armored	Armored	Armored	
Sqmm	A		A	A	V/A/km
1.5	27	29	37	31	30.9
2.5	37	39	47	40	18.9
4	48	52	63	52	11.8
6	61	67	79	66	7.9
10	82	90	106	87	4.7
16	118	120	137	112	2.9
25	149	156	177	144	1.9
35	184	193	212	173	1.35
50	223	232	252	205	1.00
70	283	292	308	253	0.7
95	350	360	371	304	0.52
120	409	416	420	347	0.42
150	467	353	471	390	0.35
185	542	548	531	442	0.29
240	658	647	615	512	0.24
300	745	738	688	575	0.21
400	867	849	776	650	0.2

Operating conditions:

Ambient air temperature: 30°C

Ground temperature: 20°C

Depth of laying: 0.5m

Thermal resistivity of soil: 1.2K.m/W



■ **Current Rating & Voltage for Cable & Wire Up to and including 600/1000V**

**Two core Aluminum, XLPE Insulated Armored/Unarmored Cables:**

Nominal Area of Conductor	In Air		In Ground	In Duct	Voltage drop
	Single core in Trefoil		Single core in Trefoil	Single core in Trefoil	
	Unarmored	Armored	Armored	Armored	
Sqmm	A		A	A	V/A/km
1.5	22	22	25	21	-
2.5	29	29	35	28	-
4	37	37	44	63	19.0
6	48	48	55	46	11.8
10	65	65	76	61	7.9
16	98	89	105	86	4.8
25	110	110	134	108	3.1
35	135	135	160	131	2.23
50	163	163	191	156	1.65
70	209	209	234	191	1.15
95	257	257	280	231	0.84
120	287	287	301	262	0.67
150	328	328	344	289	0.55
185	376	376	394	331	0.45
240	444	444	459	380	0.35
300	499	499	509	420	0.3
400	573	573	556	480	0.25

Operating conditions:

Ambient air temperature: 30°C

Ground temperature: 20°C

Depth of laying: 0.5m

Thermal resistivity of soil: 1.2K.m/W



■ **Current Rating & Voltage for Cable & Wire Up to and including 600/1000V**  
**3 & 4 core Copper, XLPE Insulated Armored/Unarmored Cables:**

Nominal Area of Conductor	In Air		In Ground	In Duct	Voltage drop
	Single core in Trefoil		Single core in Trefoil	Single core in Trefoil	
	Unarmored	Armored	Armored	Armored	
Sqmm	A		A	A	V/A/km
1.5	23	24	32	25	26.7
2.5	33	33	41	33	16.4
4	41	45	53	44	10.2
6	54	56	67	54	6.8
10	71	78	89	73	4.0
16	101	101	115	94	2.5
25	128	133	148	121	1.65
35	157	163	177	145	1.15
50	192	199	211	172	0.87
70	244	250	259	211	0.60
95	300	309	310	255	0.45
120	351	357	353	292	0.37
150	403	409	394	329	0.3
185	465	471	445	372	0.26
240	554	556	514	429	0.21
300	639	633	575	483	0.19
400	742	728	649	554	0.17

Operating conditions:

Ambient air temperature: 30°C  
 Ground temperature: 20°C  
 Depth of laying: 0.5m  
 Thermal resistivity of soil: 1.2K.m/W



■ **Current Rating & Voltage for Cable & Wire Up to and including 600/1000V**  
**3 & 4 core Aluminum, XLPE Insulated Armored/Unarmored Cables:**

Nominal Area of Conductor	In Air		In Ground	In Duct	Voltage drop
	Single core in Trefoil		Single core in Trefoil	Single core in Trefoil	
	Unarmored	Armored	Armored	Armored	
Sqmm	A		A	A	V/A/km
1.5	18	18	23	19	-
2.5	24	24	29	25	-
4	32	32	38	32	16.5
6	41	41	49	41	10.2
10	55	55	64	53	6.8
16	77	77	88	72	4.2
25	96	101	113	93	1.93
35	118	123	136	110	2.7
50	144	149	160	131	1.45
70	183	188	198	163	0.97
95	226	232	237	195	0.72
120	264	270	270	224	0.58
150	301	309	302	252	0.47
185	350	357	344	286	0.39
240	417	422	398	332	0.32
300	482	483	447	375	0.26
400	562	570	499	412	0.21

Operating conditions:

Ambient air temperature: 30°C  
 Ground temperature: 20°C  
 Depth of laying: 0.5m  
 Thermal resistivity of soil: 1.2K.m/W





■ **Current Rating & Voltage for Cable & Wire Up to and including 600/1000V**

Single Core Copper, PVC Insulated, Armored/Unarmored Cables:

**Three Single Cores in Trefoil touching:**

Nominal Area of Conductor	In Air				In Ground		In Duct		voltage drop of 3 single core cables	
	Unarmored		Armored		Armored		Armored		at 70°C	at 85°C
	at 70°C	at 85°C	at 70°C	at 85°C	at 70°C	at 85°C	at 70°C	at 85°C		
Sqmm	A				A		A		V/A/km	V/A/km
1.5	22	26	22	26	27	31	25	29	26.3	26.3
2.5	31	36	31	36	37	42	35	40	16.1	16.1
4	41	48	41	48	49	56	45	51	10.0	10.0
6	50	59	50	59	61	70	57	65	6.7	6.7
10	69	81	69	81	61	92	76	86	4.0	4.0
16	94	108	94	108	106	118	100	111	2.4	2.500
25	126	144	126	144	137	152	132	146	1.52	1.59
35	150	172	150	172	162	180	151	168	1.1	1.16
50	172	197	181	207	193	215	189	211	0.83	0.86
70	218	249	228	261	236	263	230	255	0.59	0.61
95	272	312	280	321	283	315	269	300	0.44	0.46
120	316	363	325	373	321	358	296	311	0.37	0.38
150	364	415	371	423	358	396	326	360	0.31	0.33
185	423	484	424	485	402	447	357	396	0.27	0.28
240	504	577	498	571	462	515	399	444	0.23	0.24
300	581	666	570	653	516	575	437	487	0.21	0.21
400	678	777	647	742	571	636	465	517	0.19	0.19
500	780	887	728	828	628	694	497	551	0.18	0.18
630	897	1017	815	924	687	757	536	591	0.16	0.17
800	1016	1152	879	997	720	794	559	616	0.16	0.16
1000	1131	1283	948	1075	759	837	591	654	0.15	0.16

**Installation conditions for above Rating:**

Maximum Conductor Temp.for PVC Type 5 Insulation	85°C
Maximum Conductor Temp.for PVC T11/Type A Insulation	70°C
Ambient air temperature:	30°C
Ground temperature:	20°C
Depth of laying:	0.5m
Thermal resistivity of soil:	1.2K.m/W

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■ **Current Rating & Voltage for Cable & Wire Up to and including 600/1000V**

Single Core Aluminum, PVC Insulated, Armored/Unarmored Cables:

**Three Single Cores in Trefoil touching:**

Nominal Area of Conductor	In Air				In Ground		In Duct		voltage drop of 3 single core cables	
	Unarmored		Armored		Armored		Armored		at 70°C	at 85°C
	at 70°C	at 85°C	at 70°C	at 85°C	at 70°C	at 85°C	at 70°C	at 85°C		
Sqmm	A				A		A		V/A/km	V/A/km
16	73	83	73	83	82	91	77	86	3.97	4.180
25	97	111	97	111	107	119	101	112	2.5	2.62
35	120	137	120	137	125	139	121	135	1.81	1.92
50	129	148	132	151	146	163	146	163	1.35	1.41
70	164	188	167	191	179	199	179	199	0.94	0.99
95	202	231	204	233	215	239	212	237	0.69	0.72
120	235	269	238	272	245	273	240	268	0.56	0.58
150	270	309	272	311	274	305	267	296	0.46	0.48
185	314	359	316	362	311	346	292	323	0.38	0.4
240	375	429	374	427	333	370	306	339	0.31	0.32
300	435	496	430	490	367	407	334	370	0.27	0.28
400	500	574	500	574	405	452	365	407	0.23	0.23
500	552	632	552	632	430	479	387	432	0.2	0.21
630	626	709	626	709	488	538	440	485	0.18	0.19
800	707	803	707	803	551	608	496	548	0.17	0.18
1000	795	894	795	894	619	677	558	610	0.16	0.17

**Installation conditions for above Rating:**

Maximum Conductor Temp.for PVC Type 5 Insulation	85°C
Maximum Conductor Temp.for PVC T11/Type A Insulation	70°C
Ambient air temperature:	30°C
Ground temperature:	20°C
Depth of laying:	0.5m
Thermal resistivity of soil:	1.2K.m/W



■ **Current Rating & Voltage for Cable & Wire Up to and including 600/1000V**  
**Two Core Copper, PVC Insulated, Armored/Unarmored Cables:**

Nominal Area of Conductor	In Air				In Ground		In Duct		voltage drop of 3 single core cables	
	Unarmored		Armored		Armored		Armored		at 70°C	at 85°C
	at 70°C	at 85°C	at 70°C	at 85°C	at 70°C	at 85°C	at 70°C	at 85°C		
Sqmm	A				A		A		V/A/km	V/A/km
1.5	22	26	22	26	31	35	25	28	30.4	30.4
2.5	31	36	31	36	39	44	32	36	18.6	18.6
4	41	48	41	48	52	59	43	49	11.6	11.6
6	52	61	53	62	65	74	55	63	7.7	7.7
10	67	79	73	86	88	100	73	83	4.6	4.6
16	91	104	95	109	113	126	93	103	2.8	2.9
25	122	140	127	145	150	167	123	137	1.75	1.83
35	150	172	155	177	181	201	146	162	1.26	1.33
50	182	209	189	217	214	238	174	193	0.94	0.99
70	228	261	237	271	264	294	214	239	0.66	0.69
95	283	324	293	336	317	353	258	287	0.49	0.51
120	329	377	337	386	359	400	294	328	0.40	0.41
150	377	429	384	437	402	445	330	365	0.34	0.35
185	435	500	444	510	455	508	374	416	0.28	0.29
240	518	594	524	601	525	585	433	483	0.24	0.24
300	596	684	596	684	587	655	486	541	0.21	0.21
400	693	796	683	784	659	736	546	608	0.19	0.19

**Installation conditions for above Rating:**

Maximum Conductor Temp.for PVC Type 5 Insulation	85°C
Maximum Conductor Temp.for PVC T11/Type A Insulation	70°C
Ambient air temperature:	30°C
Ground temperature:	20°C
Depth of laying:	0.5m
Thermal resistivity of soil:	1.2K.m/W



■ **Current Rating & Voltage for Cable & Wire Up to and including 600/1000V**

**Two Core Aluminum, PVC Insulated, Armored/Unarmored Cables:**

Nominal Area of Conductor Sqmm	In Air				In Ground		In Duct		voltage drop of 3 single core cables	
	Unarmored		Armored		Armored		Armored		at 70°C	at 85°C
	at 70°C	at 85°C	at 70°C	at 85°C	at 70°C	at 85°C	at 70°C	at 85°C		
	A				A		A		V/A/km	V/A/km
16	70	80	73	83	87	97	71	79	4.6	4.8
25	90	103	92	105	112	125	92	102	2.89	3.02
35	109	124	112	128	136	151	109	121	2.09	2.21
50	134	153	136	156	159	177	131	146	1.55	1.63
70	169	194	174	199	199	222	162	180	1.08	1.13
95	209	239	213	244	238	265	194	215	0.79	0.82
120	241	276	241	276	261	291	227	253	0.63	0.66
150	276	315	276	315	299	332	251	279	0.52	0.54
185	316	362	316	362	342	380	288	319	0.42	0.44
240	374	427	374	427	397	441	330	368	0.34	0.35
300	419	478	419	478	441	489	365	404	0.28	0.30
400	482	551	482	551	478	531	418	466	0.24	0.25

**Installation conditions for above Rating:**

Maximum Conductor Temp.for PVC Type 5 Insulation	85°C
Maximum Conductor Temp.for PVC T11/Type A Insulation	70°C
Ambient air temperature:	30°C
Ground temperature:	20°C
Depth of laying:	0.5m
Thermal resistivity of soil:	1.2K.m/W



■ **Current Rating & Voltage for Cable & Wire Up to and including 600/1000V**  
**3 & 4 Core Copper, PVC Insulated, Armored/Unarmored Cables:**

Nominal Area of Conductor Sqmm	In Air				In Ground		In Duct		voltage drop of 3 single core cables	
	Unarmored		Armored		Armored		Armored		at 70°C	at 85°C
	at 70°C	at 85°C	at 70°C	at 85°C	at 70°C	at 85°C	at 70°C	at 85°C		
	A				A		A		V/A/km	V/A/km
1.5	20	23	20	23	26	30	21	24	26.3	26.3
2.5	28	33	27	32	33	38	27	31	16.1	16.1
4	35	41	35	41	45	51	36	41	10.0	10.0
6	45	53	45	53	56	64	45	52	6.7	6.7
10	59	69	62	73	74	84	61	69	4.0	4.0
16	78	90	81	93	96	107	79	88	2.4	2.5
25	104	119	109	125	126	140	102	113	1.51	1.59
35	127	145	133	152	151	168	123	137	1.10	1.15
50	155	178	161	184	179	199	145	162	0.82	0.85
70	197	225	204	233	221	246	181	202	0.57	0.60
95	244	280	252	289	265	295	217	242	0.42	0.44
120	283	324	291	333	302	336	248	275	0.34	0.36
150	323	368	333	379	338	374	278	307	0.29	0.30
185	374	430	382	439	382	427	315	353	0.25	0.25
240	445	510	451	517	440	490	364	405	0.21	0.21
300	511	586	512	587	493	550	407	455	0.18	0.19
400	592	680	588	675	552	616	466	522	0.16	0.17

**Installation conditions for above Rating:**

Maximum Conductor Temp.for PVC Type 5 Insulation	85°C
Maximum Conductor Temp.for PVC T11/Type A Insulation	70°C
Ambient air temperature:	30°C
Ground temperature:	20°C
Depth of laying:	0.5m
Thermal resistivity of soil:	1.2K.m/W



■ **Current Rating & Voltage for Cable & Wire Up to and including 600/1000V**  
**3 & 4 Core Aluminum, PVC Insulated, Armored/Unarmored Cables:**

Nominal Area of Conductor	In Air				In Ground		In Duct		voltage drop of 3 single core cables	
	Unarmored		Armored		Armored		Armored		at 70°C	at 85°C
	at 70°C	at 85°C	at 70°C	at 85°C	at 70°C	at 85°C	at 70°C	at 85°C		
Sqmm	A				A		A		V/A/km	V/A/km
16	59	67	62	71	74	82	60	67	4.00	4.2
25	78	89	80	92	95	106	77	86	2.5	2.62
35	95	108	98	112	114	126	93	102	1.81	1.91
50	116	133	120	137	136	151	111	123	1.34	1.41
70	148	169	151	173	168	187	137	152	0.93	0.98
95	183	209	188	215	202	225	165	184	0.68	0.71
120	211	242	217	248	231	257	189	211	0.54	0.57
150	244	279	248	283	259	288	212	236	0.45	0.47
185	280	320	287	328	294	327	242	270	0.37	0.38
240	335	383	343	392	343	381	283	315	0.29	0.31
300	386	440	395	450	388	430	321	355	0.25	0.26
400	431	493	431	493	420	467	340	377	0.21	0.22

**Installation conditions for above Rating:**

Maximum Conductor Temp.for PVC Type 5 Insulation	85°C
Maximum Conductor Temp.for PVC T11/Type A Insulation	70°C
Ambient air temperature:	30°C
Ground temperature:	20°C
Depth of laying:	0.5m
Thermal resistivity of soil:	1.2K.m/W



# Current Rating Factors

## Rating Factors for variation in Ambient temperature for cables laid in AIR

Ambient temperature	20	25	30	35	40	45	50	55
XLPE insulated cable 90°C	1.06	1.02	1.0	0.96	0.91	0.87	0.82	0.76
PVC insulated cable 85°C	1.07	1.02	1.0	0.95	0.90	0.85	0.80	0.74
PVC insulated cable 70°C	1.09	1.03	1.0	0.94	0.87	0.79	0.71	0.61

## Rating factor for variation in Ground temperature for Cable

### Laid Direct in Ground or in Ducts

Ground temperature	15	20	25	30	35	40	45	50
XLPE insulated cable 90°C	1.04	1.0	1.0	0.93	0.89	0.85	0.80	0.76
PVC insulated cable 85°C	1.04	1.0	1.0	0.92	0.88	0.83	0.78	0.73
PVC insulated cable 70°C	1.05	1.0	1.0	0.89	0.84	0.77	0.71	0.63

## Group Rating Factors for more than one Multicore Armored or Unarmored cables laid on Trays, Clipped to the surface, run in Trench etc.:

No. of load conductors	2	3	4	5	6	8	10	12	14	16	18	20
Correction factors	0.8	0.7	0.65	0.6	0.57	0.52	0.48	0.45	0.43	0.41	0.39	0.38

## Group Rating Factors for more than Three single core cables laid in conduits buried in Concrete, on surface of wall, in Trunking, Racks, etc.

No. of load conductors	4	6	8	10	12	16	20	24	28	32	36	40
Correction factors	0.8	0.69	0.62	0.59	0.55	0.51	0.48	0.43	0.41	0.39	0.38	0.36



# Current Rating Factors

## Rating Factors for Depth of Laying for cables laid Direct in Ground or in Ducts:

Depth laying	Cables laid Direct in Ground			Cables laid in Ducts	
	Meter	Up to 50mm <sup>2</sup>	70mm <sup>2</sup> to 300mm <sup>2</sup>	Above 300mm <sup>2</sup>	Single core
0.5	1.000	1.000	1.000	1.000	1.000
0.6	0.990	0.985	0.971	0.980	0.990
0.75	0.976	0.965	0.952	0.958	0.987
0.8	0.971	0.960	0.945	0.950	0.979
1.0	0.951	0.930	0.924	0.930	0.960
1.25	0.941	0.920	0.894	0.900	0.950
1.5	0.931	0.901	0.874	0.891	0.940
1.75	0.921	0.890	0.864	0.880	0.940
2.0	0.910	0.880	0.854	0.871	0.930
2.5	0.900	0.871	0.844	0.860	0.930
3.0 or more	0.891	0.849	0.824	0.851	0.920

## Group Rating Factors for more than One Twin or Multicore Armored or Unarmored Cables in Horizontal Formation Laid in Direct Ground:

No. of cables	2	3	4	5	6	7	8	9	10	11	12
Cables laid touching	0.81	0.7	0.63	0.59	0.55	0.52	0.5	0.48	0.47	0.45	0.44
Cables laid 15cm apart	0.87	0.78	0.74	0.70	0.68	0.66	0.64	0.63	0.62	0.61	0.6
Cables laid 30cm apart	0.91	0.84	0.81	0.78	0.77	0.75	0.75	0.74	0.73	0.73	0.72
Cables laid 45cm apart	0.93	0.88	0.86	0.84	0.83	0.81	0.81	0.81	0.8	0.8	0.8
Cables laid 60cm apart	0.95	0.9	0.89	0.87	0.87	0.86	0.86	0.85	0.85	0.85	0.84





# Current Rating Factors

**Rating Factors for variation in Thermal Resistivity of Soil for Two or Three Single-core Cables laid Direct in the Ground**

Nominal Area of Conductor(mm <sup>2</sup> )	Thermal Resistivity of Soil in k.m/W										
	0.7	0.8	0.9	1.0	1.2	1.5	2.0	2.5	3.0	3.5	4.0
50	1.21	1.16	1.11	1.07	1.0	0.91	0.81	0.73	0.68	0.63	0.59
70	1.22	1.16	1.12	1.07	1.0	0.91	0.81	0.73	0.68	0.63	0.59
95	1.22	1.16	1.12	1.07	1.0	0.91	0.81	0.73	0.68	0.63	0.59
120	1.22	1.16	1.12	1.07	1.0	0.91	0.81	0.73	0.68	0.63	0.59
150	1.22	1.16	1.12	1.07	1.0	0.91	0.81	0.73	0.68	0.63	0.59
185	1.22	1.17	1.12	1.07	1.0	0.91	0.81	0.73	0.68	0.62	0.59
240	1.23	1.17	1.12	1.07	1.0	0.91	0.80	0.73	0.68	0.62	0.59
300	1.23	1.17	1.12	1.07	1.0	0.91	0.80	0.73	0.68	0.62	0.59
400	1.23	1.17	1.12	1.07	1.0	0.91	0.80	0.73	0.67	0.62	0.58
500	1.23	1.17	1.12	1.07	1.0	0.91	0.80	0.73	0.67	0.62	0.58
630	1.23	1.17	1.12	1.07	1.0	0.91	0.80	0.73	0.67	0.61	0.58
800	1.23	1.17	1.12	1.07	1.0	0.91	0.80	0.72	0.66	0.61	0.58
1000	1.25	1.18	1.12	1.07	1.0	0.91	0.80	0.72	0.66	0.61	0.58



# Current Rating Factors

**Rating Factors for variation in Thermal Resistivity of Soil for Twin or Multi-core Cables laid Direct in the Ground**

Nominal Area of Conductor(mm <sup>2</sup> )	Thermal Resistivity of Soil in k.m/W										
	0.7	0.8	0.9	1.0	1.2	1.5	2.0	2.5	3.0	3.5	4.0
1.5/2.5	1.12	1.09	1.07	1.04	1.0	0.94	0.86	0.80	0.75	0.70	0.66
4	1.13	1.10	1.07	1.05	1.0	0.94	0.85	0.79	0.74	0.69	0.65
6	1.14	1.10	1.07	1.05	1.0	0.93	0.85	0.79	0.74	0.68	0.64
10	1.15	1.11	1.08	1.05	1.0	0.93	0.85	0.78	0.73	0.67	0.63
16	1.16	1.12	1.08	1.05	1.0	0.93	0.84	0.77	0.72	0.66	0.62
25	1.17	1.13	1.09	1.05	1.0	0.93	0.83	0.77	0.71	0.65	0.61
35	1.17	1.13	1.09	1.06	1.0	0.92	0.83	0.76	0.71	0.65	0.61
50	1.17	1.13	1.09	1.06	1.0	0.92	0.83	0.76	0.71	0.65	0.61
70	1.18	1.14	1.09	1.06	1.0	0.92	0.83	0.75	0.70	0.64	0.60
95	1.18	1.14	1.09	1.06	1.0	0.92	0.83	0.75	0.69	0.64	0.60
120	1.19	1.14	1.10	1.06	1.0	0.92	0.82	0.75	0.69	0.63	0.59
150	1.19	1.14	1.10	1.06	1.0	0.92	0.82	0.75	0.69	0.63	0.59
185	1.19	1.14	1.10	1.06	1.0	0.92	0.82	0.74	0.69	0.63	0.59
240	1.20	1.15	1.10	1.07	1.0	0.92	0.81	0.74	0.69	0.63	0.59
300	1.20	1.15	1.10	1.07	1.0	0.92	0.81	0.74	0.69	0.63	0.59
400	1.20	1.15	1.10	1.07	1.0	0.92	0.81	0.74	0.69	0.63	0.59



# Current Rating Factors

**Rating Factors for variation in Thermal Resistivity of Soil for Two Single-core Cables in Ducts:**

Nominal Area of Conductor(mm <sup>2</sup> )	Thermal Resistivity of Soil in k.m/W										
	0.7	0.8	0.9	1.0	1.2	1.5	2.0	2.5	3.0	3.5	4.0
50	1.08	1.06	1.04	1.03	1.00	0.96	0.90	0.85	0.81	0.77	0.74
70	1.08	1.06	1.05	1.03	1.00	0.96	0.90	0.84	0.80	0.76	0.73
95	1.08	1.07	1.05	1.03	1.00	0.95	0.89	0.84	0.80	0.75	0.72
120	1.09	1.07	1.05	1.03	1.00	0.95	0.89	0.83	0.79	0.75	0.71
150	1.09	1.07	1.05	1.03	1.00	0.95	0.88	0.83	0.79	0.74	0.71
185	1.09	1.07	1.05	1.03	1.00	0.95	0.88	0.83	0.78	0.74	0.70
240	1.10	1.08	1.05	1.04	1.00	0.95	0.88	0.82	0.78	0.73	0.70
300	1.10	1.08	1.06	1.04	1.00	0.95	0.87	0.82	0.77	0.72	0.69
400	1.11	1.08	1.06	1.04	1.00	0.94	0.87	0.82	0.77	0.72	0.68
500	1.12	1.08	1.06	1.04	1.00	0.94	0.87	0.81	0.76	0.71	0.68
630	1.12	1.09	1.06	1.04	1.00	0.94	0.87	0.81	0.76	0.71	0.67
800	1.13	1.10	1.07	1.04	1.00	0.94	0.86	0.80	0.75	0.71	0.67
1000	1.13	1.10	1.07	1.04	1.00	0.94	0.86	0.80	0.75	0.70	0.66



# Current Rating Factors

**Rating Factors for variation in Thermal Resistivity of Soil for Three Single-core Cables laid in Ducts:**

Nominal Area of Conductor(mm <sup>2</sup> )	Thermal Resistivity of Soil in k.m/W										
	0.7	0.8	0.9	1.0	1.2	1.5	2.0	2.5	3.0	3.5	4.0
50	1.11	1.08	1.06	1.04	1.00	0.94	0.87	0.82	0.77	0.73	0.69
70	1.12	1.09	1.06	1.04	1.00	0.94	0.87	0.81	0.76	0.72	0.68
95	1.12	1.09	1.06	1.04	1.00	0.94	0.87	0.81	0.76	0.72	0.68
120	1.13	1.10	1.07	1.04	1.00	0.94	0.86	0.80	0.75	0.72	0.67
150	1.13	1.10	1.07	1.04	1.00	0.94	0.86	0.80	0.75	0.71	0.67
185	1.13	1.10	1.07	1.04	1.00	0.93	0.86	0.79	0.75	0.70	0.67
240	1.14	1.11	1.07	1.04	1.00	0.93	0.86	0.79	0.74	0.70	0.66
300	1.14	1.11	1.08	1.05	1.00	0.93	0.85	0.79	0.74	0.69	0.65
400	1.14	1.11	1.08	1.05	1.00	0.93	0.85	0.78	0.73	0.68	0.65
500	1.15	1.11	1.08	1.05	1.00	0.93	0.85	0.78	0.73	0.68	0.64
630	1.15	1.12	1.09	1.05	1.00	0.93	0.84	0.78	0.72	0.68	0.64
800	1.16	1.12	1.09	1.05	1.00	0.93	0.84	0.77	0.72	0.67	0.64
1000	1.16	1.13	1.09	1.05	1.00	0.92	0.84	0.77	0.71	0.67	0.63



# Current Rating Factors

**Rating Factors for variation in Thermal Resistivity of Soil for Twin or Multi-core Cables laid in Single Way Ducts:**

Nominal Area of Conductor(mm <sup>2</sup> )	Thermal Resistivity of Soil in k.m/W										
	0.7	0.8	0.9	1.0	1.2	1.5	2.0	2.5	3.0	3.5	4.0
1.5/2.5	1.04	1.03	1.02	1.02	1.0	0.98	0.94	0.91	0.88	0.86	0.83
4	1.04	1.04	1.03	1.02	1.0	0.97	0.94	0.90	0.87	0.85	0.82
6	1.05	1.04	1.03	1.02	1.0	0.97	0.93	0.90	0.86	0.84	0.81
10	1.05	1.04	1.03	1.02	1.0	0.97	0.93	0.89	0.86	0.83	0.80
16	1.06	1.04	1.03	1.02	1.0	0.97	0.92	0.88	0.85	0.82	0.79
25	1.06	1.05	1.03	1.02	1.0	0.96	0.92	0.88	0.84	0.82	0.78
35	1.06	1.05	1.03	1.02	1.0	0.96	0.92	0.87	0.83	0.81	0.77
50	1.07	1.05	1.03	1.02	1.0	0.96	0.91	0.87	0.83	0.80	0.77
70	1.07	1.05	1.04	1.02	1.0	0.96	0.91	0.86	0.82	0.79	0.76
95	1.07	1.05	1.04	1.03	1.0	0.95	0.91	0.86	0.82	0.79	0.76
120	1.08	1.06	1.04	1.03	1.0	0.95	0.90	0.85	0.81	0.78	0.74
150	1.09	1.06	1.04	1.03	1.0	0.95	0.90	0.85	0.80	0.77	0.73
185	1.09	1.07	1.05	1.03	1.0	0.95	0.89	0.84	0.80	0.76	0.72
240	1.09	1.07	1.05	1.03	1.0	0.95	0.88	0.83	0.79	0.75	0.71
300	1.10	1.07	1.05	1.03	1.0	0.95	0.88	0.83	0.78	0.75	0.71
400	1.10	1.07	1.05	1.03	1.0	0.95	0.88	0.83	0.78	0.75	0.71



# Short Circuit curves for Copper Conductor PVC 85 °C Insulated Cable

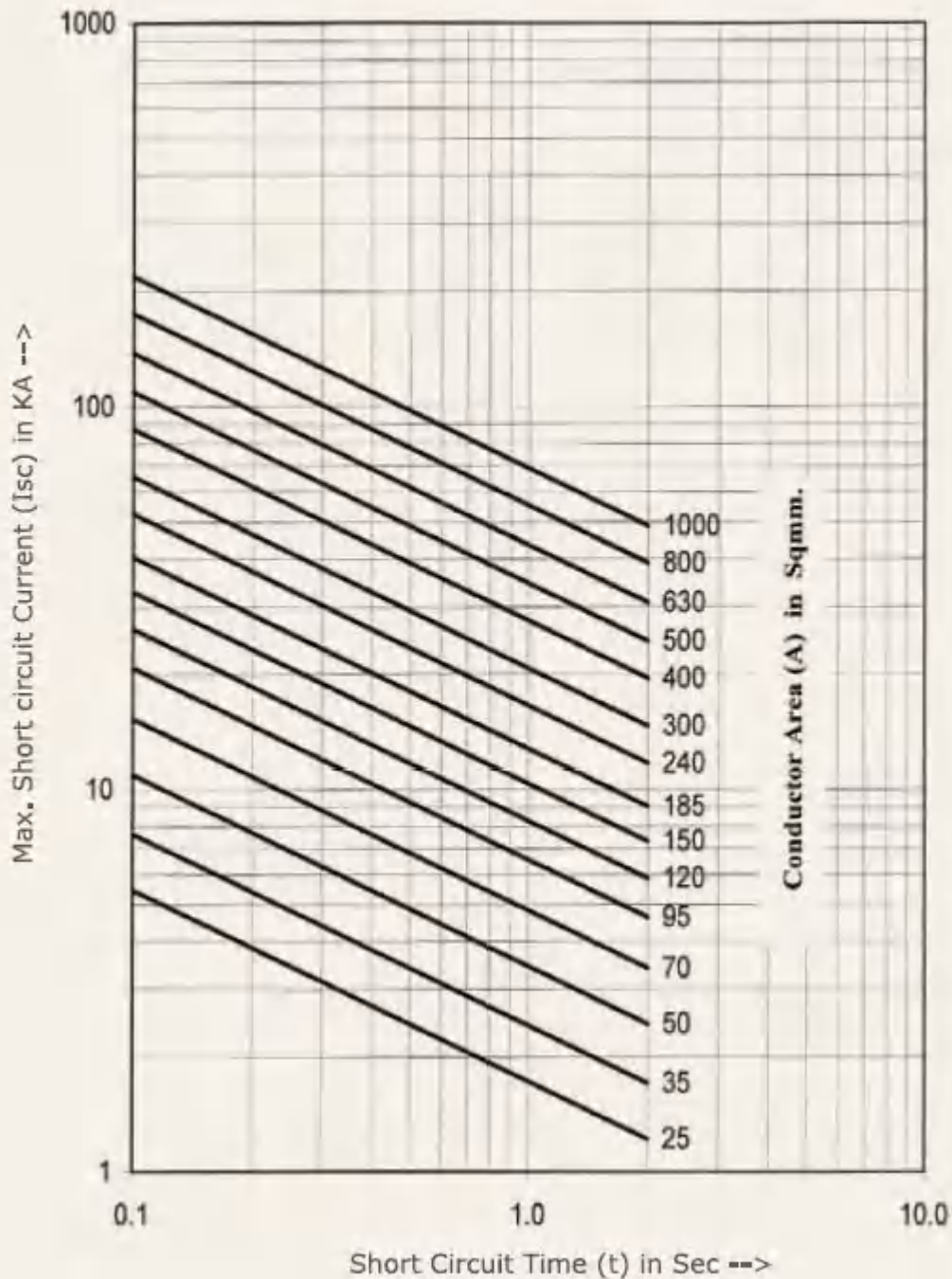
$$I_{sc} = 0.069 \frac{A}{\sqrt{t}}$$

I<sub>sc</sub>-Short Circuit Current in KA

A-Conductor Area in Sqmm

T-Short Circuit Time in Sec.

Note: Max. Permissible conductor temperature during short circuit = 160°C





## Short Circuit curves for Copper Conductor PVC 70°C Insulated Cable

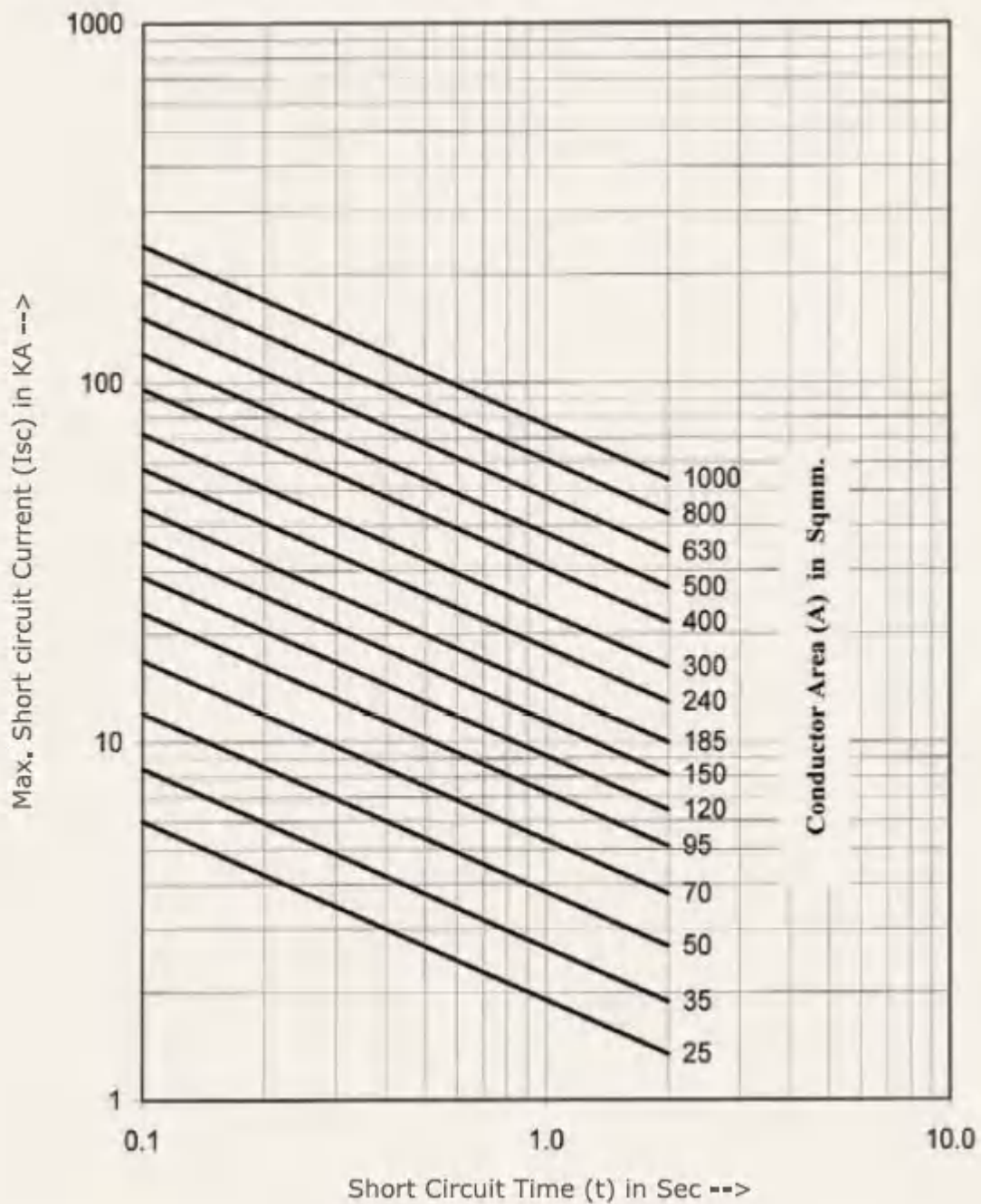
$$I_{sc} = 0.076 \frac{A}{\sqrt{t}}$$

I<sub>sc</sub>-Short Circuit Current in KA

A-Conductor Area in Sqmm

T-Short Circuit Time in Sec.

Note: Max. Permissible conductor temperature during short circuit = 160°C





## Short Circuit curves for Copper Conductor XLPE Insulated Cable

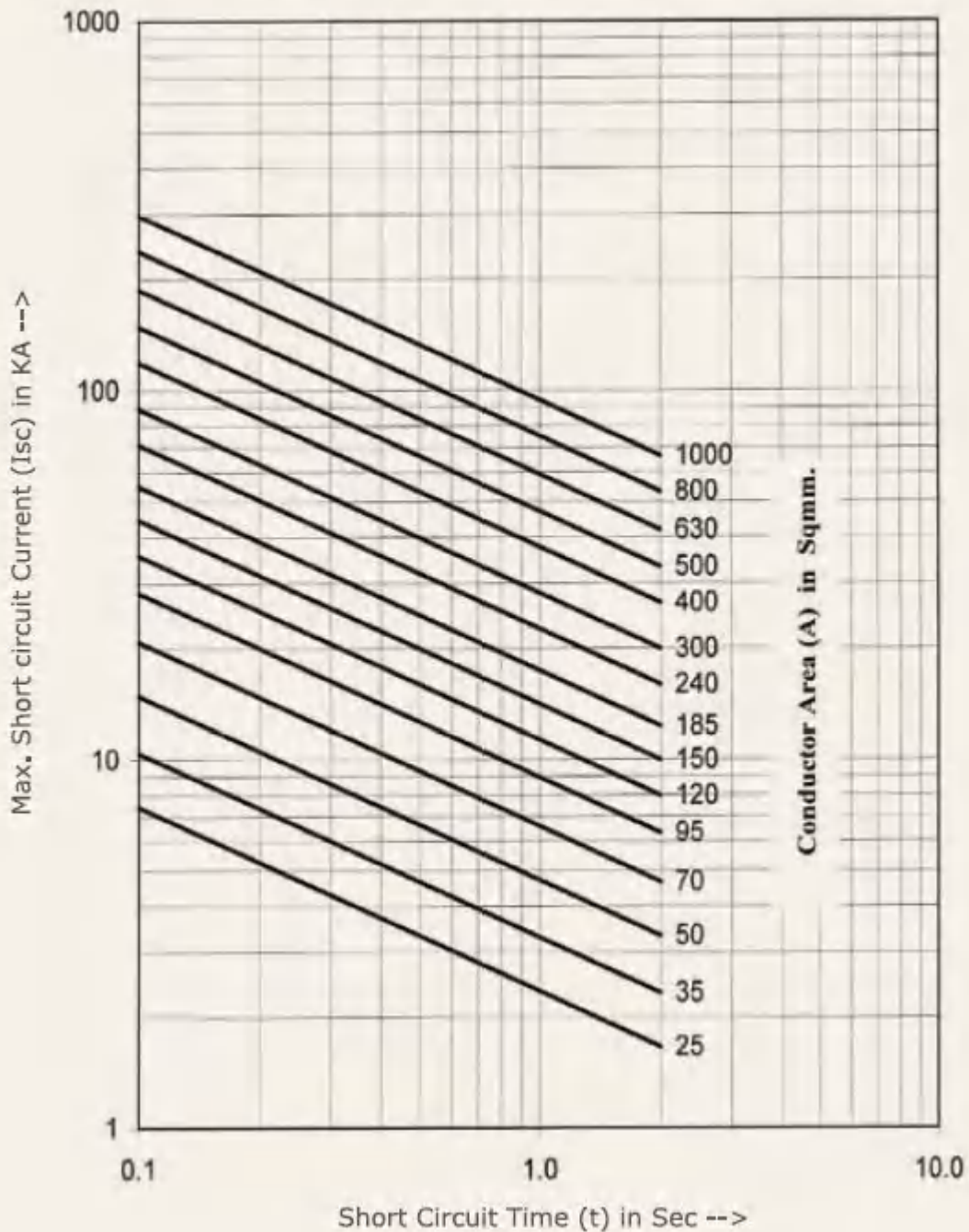
$$I_{sc} = 0.094 \frac{A}{\sqrt{t}}$$

I<sub>sc</sub>-Short Circuit Current in KA

A-Conductor Area in Sqmm

T-Short Circuit Time in Sec.

Note: Max. Permissible conductor temperature during short circuit = 250°C







### DRUM SIZE AND DIMENSIONS

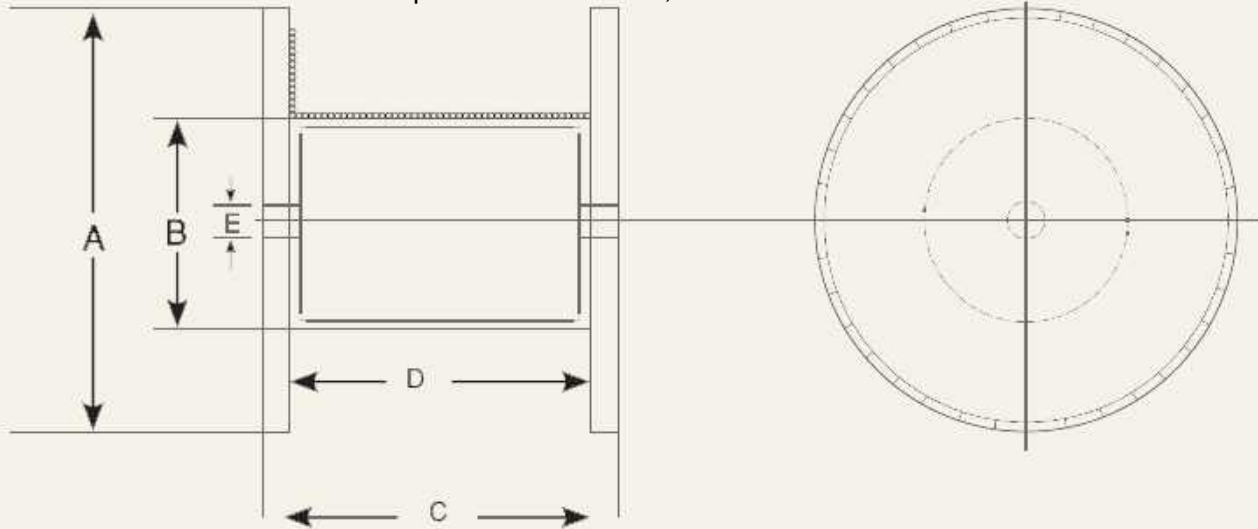
A-Flange diameter(Excluding Lagging),mm

B-Barrel diameter,mm

C-Overall width,mm

D-Traversal width,mm

E-Minimum spindle hole diameter,mm



Drum size	A	B	C	D	E
D-NO					
D-6	600	250	470	400	110
D-7	700	325	570	500	110
D-8	800	375	570	500	110
D-9	900	425	620	550	110
D-10	1000	500	690	600	110
D-11	1100	575	740	650	110
D-12	1200	675	950	850	110
D-14	1400	800	950	850	110
D-16	1600	950	970	850	110
D-18	1800	1100	1220	1100	110
D-19	1900	1100	1230	1100	110
D-20	2000	1300	1235	1100	110
D-21	2100	1150	1290	1100	110
D-22	2200	1400	1390	1250	110
D-23	2340	1200	1795	1625	110
D-24	2400	1200	1795	1625	110
D-25-S	2540	1200	1825	1625	110
D-25	2540	1400	1800	1625	110
D-26	2600	1400	1970	1800	110

Drum dimensions in actual deliveries are subject to change without notice.

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