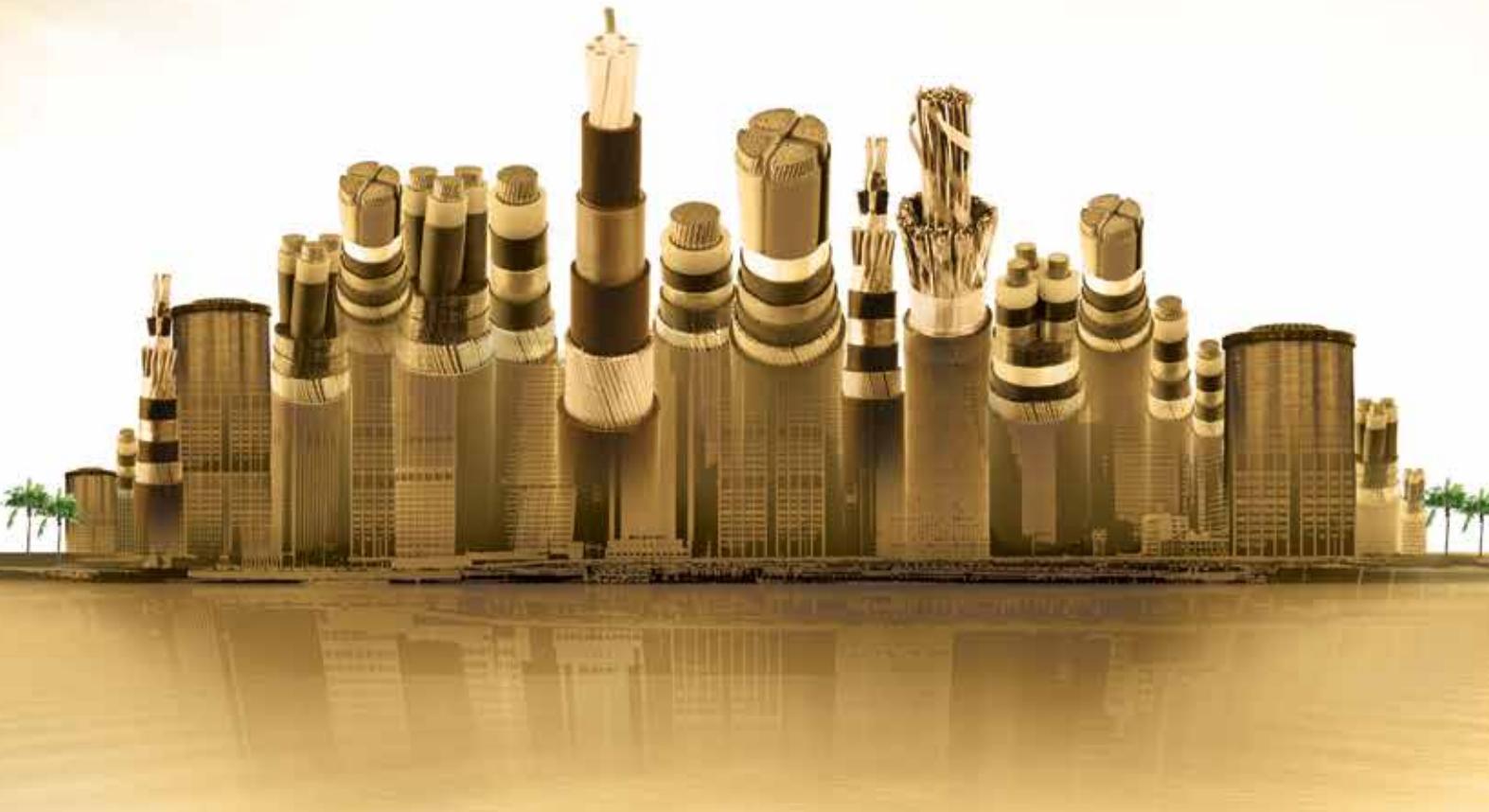


شركة الخليج للكابلات والصناعات المتعددة - الأردن  
Gulf Cable & Multi Industries Co. Jordan



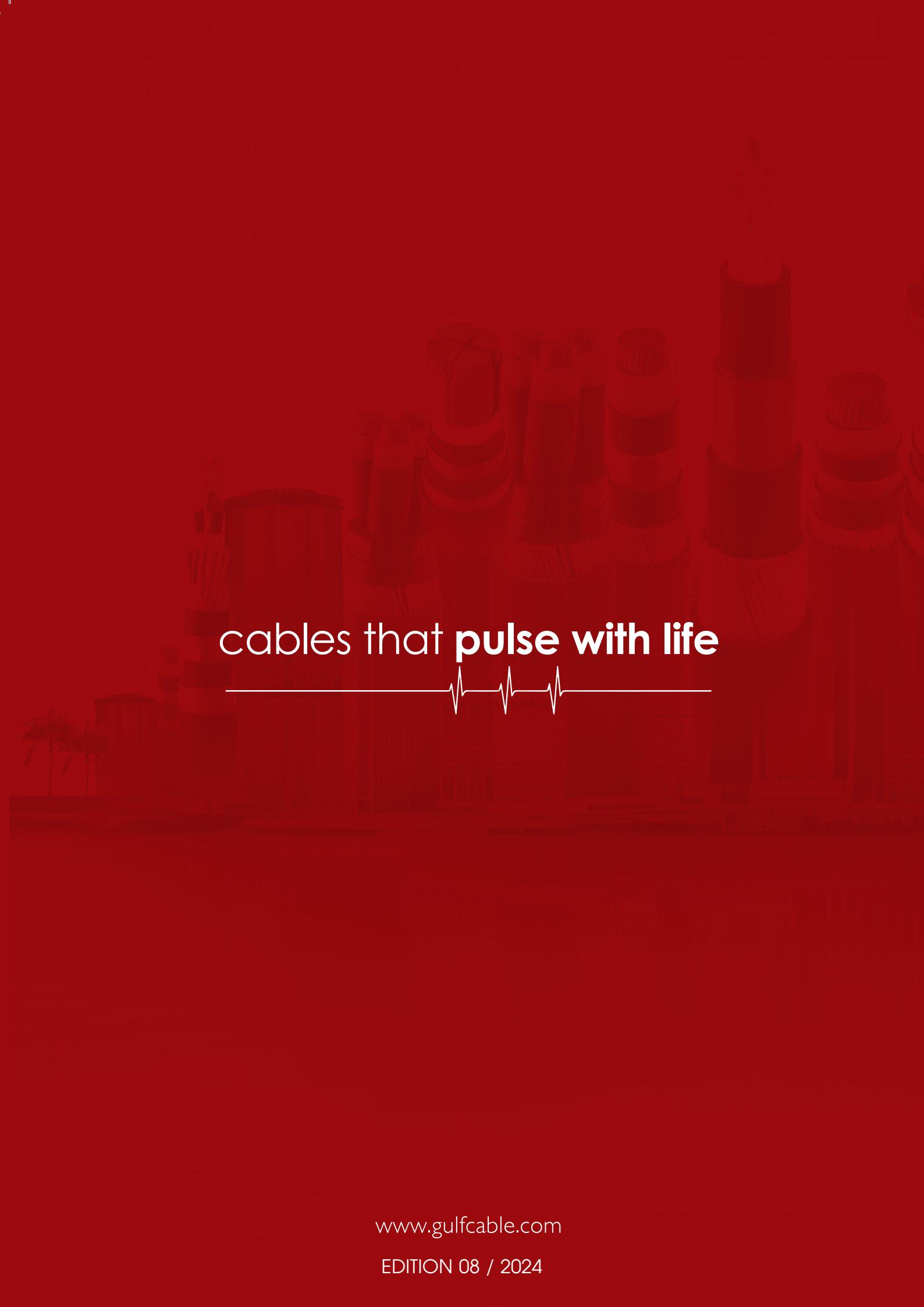
شركة مجموعة الخليج للكابلات والصناعات الكهربائية ش.م.ل.ع.  
Gulf Cables & Electrical Industries Group Co. K.S.C.P.

We Build Cables For Life



# MEDIUM VOLTAGE CABLES

PRODUCT DATA TABLES



cables that **pulse with life**

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

EDITION 08 / 2024

# NOTES

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## □ Introduction:

Gulf Cables and Electrical Industries Group Co. K.S.C.P was established in 1975 with objective of meeting growing local and export markets requirements, it owns two factories one located in kuwait the other in jordan. our vision is to be the leader of gulf and middle east region in manufacturing and supplying Cables and Conductors. Through continuous improvements driven by the integrity, teamwork and innovation, we are committed to provide such a quality that:

- 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 products are designed and manufactured to meet the needs of the Local, Regional and International Markets. All our products meet the respective world standards.

we handle all available means for exporting products - land, marine and air.

we are also equipped to meet all export requirements and formalities in the local arab markets, including Saudi Arabia, United Arab Emirates, Oman, Bahrain, Jordan , Iraq and MENA. opportunities to export to Syria, Lebanon, Yemen and other countries worldwide will also be available soon.

We have developed and established communication channels with our customers through which, 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.

## □ 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  
Fire Resistant Cables  
PVC or XLPE Insulated Conductors  
Domestic Applications / Internal Wiring  
LSZH Cables & Wires  
Solar (PV) Cables  
Lead Sheathed Cables  
Enamelled Wires  
Telephone, communication & Instrumentation Cables

## □ Quality:

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.

## □ Certificates:

ISO 9001:2015  
ISO 14001:2015  
ISO 45001:2018 } CERTIFIED BY TUV NORD  
BS EN ISO 9001 : 2015 CERTIFIED BY BASEC  
ISO 9001 : 2015 CERTIFIED BY SGS



We Build Cables For Life

# MEDIUM VOLTAGE CABLES

## □ Quality & Integrated Management System

Quality has always been our top priority and to meet customer's expectation has been our prim 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.

Since 1997, we have Quality Assurance System to ISO:9001. The System has been certified by TUV-Nord, as well as BASEC. The salient features of this system include:

- Well defined and documented system comprising of System manual, Operating procedures, work instructions, Quality Assurance plans, Material specifications, work specifications, traceability system, Design guidelines.
- Sound vendor development and approval system
- Systematic scrutiny of customer requirements and internal communication to integrate the same into product
- Thorough incoming material inspection
- Round the clock process checks at defined points and frequencies
- 100% testing before any product leaves our premises
- Well established customer interface

Our Jordan Plant management system is certified according to requirements of ISO 9001:2015 by SGS.



## □ Environmental Management System

We at GC recognize that Environmental Issues have become critical challenge globally. We are committed to contributing towards "Leaving a beautiful planet as a legacy to future generations".

For achieving this, we believe that we need to work in harmony with the nature; recognize the environmental impact related to our business activities & products and undertake protection of environment through technologically and economically feasible goals within our scope.

To pursue this in year 2007, we have implemented Environmental Management System satisfying requirements of ISO:14001. The System has been certified by TUV-Nord.



## Occupational Health & Safety Management System

We at GC recognize that way to greater sustainability is through better Health measures for employees and better Safety measures for protecting men, machines, materials and environment.

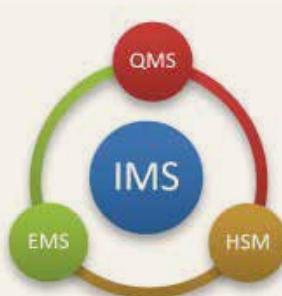
For achieving this, we believe that we need to provide a healthy and safe working

habitat at our facility and take adequate steps to prevent accidents and injury arising from the course of our activities, by minimizing, so far as is reasonably practicable, the causes of hazards inherent in the working environment.

To pursue this in year 2007, we have implemented Occupational Health & Safety Management System satisfying requirements of OHSAS:18001 and continue to meet the upgraded standard ISO 45001. The System has been certified by TUV-Nord.

In order to more effectively and efficiently deliver our organizations objectives, from managing employees needs to monitoring risks and hazards, from reducing inefficiencies and maximizing resources, an Integrated Management System (IMS) approach have been adopted.

Our integrated Management system includes all three ISO Standards requirements of ISO 9001, ISO 14001 & ISO 45001. Established IMS policy is made aware to employees at all levels within GC and available to the interested parties/stakeholders in GC website.





We Build Cables For Life

# MEDIUM VOLTAGE CABLES

## VOLTAGE RATING:

TWO DISTINCT SYSTEMS OF VOLTAGE DESIGNATION ARE GENERALLY IN USE. EQUIVALENCE BETWEEN THESE TWO SYSTEMS, BASED ON INSULATION THICKNESS AND MAXIMUM VALUE OF HIGHEST SYSTEM VOLTAGE IS AS TABULATED BELOW:

### IEC DESIGNATION

Uo/U (Um)  
3.6 / 6 (7.2) KV  
6 / 10 (12) KV  
8.7 / 15 (17.5) KV  
12 / 20 (24) KV  
18 / 30 (36) KV

### BS DESIGNATION

Uo/U (Um)  
3.8 / 6.6 (7.2) KV  
6.35 / 11 (12) KV  
8.7 / 15 (17.5) KV  
12.7 / 22 (24) KV  
19 / 33 (36) KV

WHERE,

- Uo IS RATED POWER FREQUENCY VOLTAGE BETWEEN CONDUCTOR AND EARTH OR METALLIC SCREEN, FOR WHICH THE CABLE IS DESIGNED.
- U IS THE RATED POWER FREQUENCY VOLTAGE BETWEEN CONDUCTORS, FOR WHICH THE CABLE IS DESIGNED.
- Um IS THE MAXIMUM VALUE OF "HIGHEST SYSTEM VOLTAGE" FOR WHICH THE EQUIPMENT MAY BE USED.

FROM ABOVE TABULATION, EQUIVALENT IEC / BS DESIGNATION CAN BE DETERMINED FOR ANY SYSTEM AS APPROPRIATE.

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.

### Product

### Standard

Medium Voltage Power Cables up to 30 KV

- XLPE insulated, single core or multicore armoured or unarmoured cables

IEC 60502 / BS 6622

Auxiliary Cables

- 16 core or 34 core pilot cables to be used along with underground powerlines 11 KV, 132 KV and beyond

MEW / ESI Standards

#### *General Note:*

- The tabulations on subsequent pages furnish overall dimensions, weight, drum dimensions etc.. Please note that these are "Approximate" values and subject to manufacturing tolerance. We reserve the right to change the data because of product development and / or changes in standard without notice.
- Although Gulf Cables has made every reasonable effort to ensure its accuracy, the information contained herein is subject to error of omission and to change without notice. In no event will Gulf Cable be liable for any damages whatsoever, arising in connection with the information described.

# MEDIUM VOLTAGE CABLES

We Build Cables For Life



**□ 3.8 / 6.6 KV - SINGLE CORE  
(HIGHEST SYSTEM VOLTAGE - 7.2 KV)**

**COPPER CONDUCTOR XLPE INSULATED  
ALUMINIUM WIRE ARMOURED  
PVC SHEATHED CABLES**

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

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Dia of Armour Wire Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km			KG
35	0.524	7.1	2.5	1.6	1.7	21.7	740	1000	D-14	890
50	0.387	8.2	2.5	1.6	1.7	22.8	885	1000	D-14	1035
70	0.268	9.8	2.5	1.6	1.7	24.4	1105	1000	D-14	1255
95	0.193	11.4	2.5	1.6	1.8	26.2	1395	1000	D-16	1605
120	0.153	12.8	2.5	1.6	1.9	27.8	1650	1000	D-18	1890
150	0.124	14.2	2.5	1.6	1.9	29.2	1940	1000	D-18	2180
185	0.0991	15.9	2.5	1.6	2.0	31.1	2335	1000	D-18	2575
240	0.0754	18.5	2.6	2.0	2.1	34.9	3005	1000	D-19	3325
300	0.0601	20.6	2.8	2.0	2.2	37.6	3665	500	D-18	2075
400	0.0470	23.3	3.0	2.0	2.3	41.1	4555	500	D-18	2520
500	0.0366	26.5	3.2	2.5	2.4	45.9	5800	500	D-19	3220
630	0.0283	30.0	3.2	2.5	2.5	49.6	7160	500	D-19	3900
800	0.0221	34.4	3.2	2.5	2.7	54.4	8925	250	D-18	2470
1000	0.0176	38.5	3.2	2.5	2.8	58.7	10970	250	D-18	2985

All conductors circular compacted.

Equivalent voltage designation as per IEC: 60502 - 2 : 3.6/6.0 KV.

Cables conform to IEC 60502 - 2.



We Build Cables For Life

# MEDIUM VOLTAGE CABLES



**□ 3.8 / 6.6 KV - SINGLE CORE  
(HIGHEST SYSTEM VOLTAGE - 7.2 KV)**  
COPPER CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
ALUMINIUM WIRE ARMOURED  
PVC SHEATHED CABLES  
(CU / SC / XLPE / SC / CUT / PVC / AWA / PVC)

Area of Conductor	DC Conductor Resistance at 20°C	Conductor Diameter	Thickness of XLPE Insulation	Thickness of Extruded Bedding	Dia of Armour Wire	Thickness of Outer Sheath	Overall Diameter	Cable Weight	Standard Packing Length	Drum Size	Gross Weight
Nominal	Maximum	Approx	Nominal	Nominal	Nominal	Nominal	Approx	Approx			Approx
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	mm	Kg/Km	Metre +/- 5%		KG
35	0.524	7.1	2.5	1.2	1.6	1.7	23.6	885	1000	D-14	1035
50	0.387	8.2	2.5	1.2	1.6	1.8	24.9	1040	1000	D-14	1190
70	0.268	9.8	2.5	1.2	1.6	1.8	26.5	1275	1000	D-16	1485
95	0.193	11.4	2.5	1.2	1.6	1.9	28.3	1575	1000	D-18	1815
120	0.153	12.8	2.5	1.2	1.6	1.9	29.7	1825	1000	D-18	2065
150	0.124	14.2	2.5	1.2	1.6	2.0	31.3	2140	1000	D-18	2380
185	0.0991	15.9	2.5	1.2	2.0	2.0	33.8	2610	1000	D-18	2850
240	0.0754	18.5	2.6	1.2	2.0	2.1	36.8	3230	500	D-18	1855
300	0.0601	20.6	2.8	1.2	2.0	2.2	39.6	3925	500	D-18	2200
400	0.0470	23.3	3.0	1.2	2.0	2.3	43.1	4845	500	D-18	2665
500	0.0366	26.5	3.2	1.3	2.5	2.5	48.3	6175	500	D-19	3410
630	0.0283	30.0	3.2	1.4	2.5	2.6	52.2	7590	500	D-19	4115
800	0.0221	34.4	3.2	1.4	2.5	2.7	56.8	9365	250	D-18	2580
1000	0.0176	38.5	3.2	1.5	2.5	2.9	61.5	11490	250	D-18	3115

All conductors circular compacted.  
Equivalent voltage designation as per IEC 60502 - 2 : 3.6/6.0 KV.  
Cables conform to IEC 60502 - 2.

# MEDIUM VOLTAGE CABLES

We Build Cables For Life



**□ 3.8 / 6.6 KV - THREE CORE  
(HIGHEST SYSTEM VOLTAGE - 7.2 KV)**

COPPER CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
STEEL WIRE ARMOURED  
PVC SHEATHED CABLES

(CU / SC / XLPE / SC / CUT / PVC / SWA / PVC)

Area of Conductor	DC Conductor Resistance at 20°C	Conductor Diameter	Thickness of XLPE Insulation	Thickness of Extruded Bedding	Dia of Armour Wire	Thickness of Outer Sheath	Overall Diameter	Cable Weight	Standard Packing Length	Drum Size	Gross Weight
Nominal	Maximum	Approx	Nominal	Nominal	Nominal	Nominal	Approx	Approx	Metre +/- 5%		Approx
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	mm	Kg/Km			KG
35	0.524	7.1	2.5	1.2	2.0	2.3	42.8	3345	500	D-18	1910
50	0.387	8.2	2.5	1.3	2.5	2.5	46.8	4285	500	D-19	2460
70	0.268	9.8	2.5	1.4	2.5	2.6	50.7	5170	500	D-19	2905
95	0.193	11.4	2.5	1.4	2.5	2.7	54.3	6190	500	D-21	3515
120	0.153	12.8	2.5	1.5	2.5	2.8	57.7	7115	500	D-22	4025
150	0.124	14.2	2.5	1.5	2.5	2.9	61.0	8185	500	D-22	4565
185	0.0991	15.9	2.5	1.6	2.5	3.0	65.0	9570	250	D-18	2630
240	0.0754	18.5	2.6	1.7	2.5	3.2	71.7	11735	250	D-21	3355
300	0.0601	20.6	2.8	1.8	3.15	3.5	79.4	14965	250	D-22	4210
400	0.0470	23.3	3.0	2.0	3.15	3.8	87.5	18325	250	D-23	5080

All conductors circular compacted.

Equivalent voltage designation as per IEC 60502 - 2 : 3.6/6.0 KV.  
Cables conform to IEC 60502 - 2.



We Build Cables For Life

## MEDIUM VOLTAGE CABLES



**□ 6.35 / 11 KV - SINGLE CORE  
(HIGHEST SYSTEM VOLTAGE -12 KV)**

COPPER CONDUCTOR XLPE INSULATED  
ALUMINIUM WIRE ARMOURED  
PVC SHEATHED CABLES

(CU / SC / XLPE / SC / AWA / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Dia of Armour Wire Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km			KG
35	0.524	7.1	3.4	1.6	1.7	23.5	815	1000	D-14	965
50	0.387	8.2	3.4	1.6	1.8	24.8	970	1000	D-14	1120
70	0.268	9.8	3.4	1.6	1.8	26.4	1200	1000	D-16	1410
95	0.193	11.4	3.4	1.6	1.9	28.2	1490	1000	D-18	1730
120	0.153	12.8	3.4	1.6	1.9	29.6	1740	1000	D-18	1980
150	0.124	14.2	3.4	1.6	2.0	31.2	2045	1000	D-18	2285
185	0.0991	15.9	3.4	2.0	2.0	33.7	2510	1000	D-18	2750
240	0.0754	18.5	3.4	2.0	2.1	36.5	3095	500	D-18	1790
300	0.0601	20.6	3.4	2.0	2.2	38.8	3735	500	D-18	2110
400	0.0470	23.3	3.4	2.0	2.3	41.9	4610	500	D-18	2545
500	0.0366	26.5	3.4	2.5	2.4	46.3	5835	500	D-19	3240
630	0.0283	30.0	3.4	2.5	2.5	50.0	7200	500	D-19	3920
800	0.0221	34.4	3.4	2.5	2.7	54.8	8950	250	D-18	2480
1000	0.0176	38.5	3.4	2.5	2.8	59.1	11005	250	D-18	2990

All conductors circular compacted.

Equivalent voltage designation as per IEC: 60502 - 2 : 6/10 KV.

Cables conform to IEC 60502 - 2.

# MEDIUM VOLTAGE CABLES

We Build Cables For Life



■ 6.35 / 11 KV - SINGLE CORE  
(HIGHEST SYSTEM VOLTAGE -12 KV)

COPPER CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
ALUMINIUM WIRE ARMOURED  
PVC SHEATHED CABLES

(CU / SC / XLPE / SC / CUT / PVC / AWA / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Extruded Bedding Nominal	Dia of Armour Wire Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	mm	Kg/Km			KG
35	0.524	7.1	3.4	1.2	1.6	1.8	25.6	980	1000	D-16	1190
50	0.387	8.2	3.4	1.2	1.6	1.8	26.7	1130	1000	D-16	1340
70	0.268	9.8	3.4	1.2	1.6	1.9	28.5	1380	1000	D-18	1620
95	0.193	11.4	3.4	1.2	1.6	1.9	30.1	1670	1000	D-18	1910
120	0.153	12.8	3.4	1.2	1.6	2.0	31.7	1945	1000	D-18	2185
150	0.124	14.2	3.4	1.2	2.0	2.1	34.1	2340	1000	D-19	2660
185	0.0991	15.9	3.4	1.2	2.0	2.1	35.8	2735	1000	D-19	3055
240	0.0754	18.5	3.4	1.2	2.0	2.2	38.6	3355	500	D-18	1915
300	0.0601	20.6	3.4	1.2	2.0	2.3	41.0	4030	500	D-18	2255
400	0.0470	23.3	3.4	1.3	2.5	2.4	45.3	5075	500	D-19	2855
500	0.0366	26.5	3.4	1.3	2.5	2.5	48.7	6205	500	D-19	3420
630	0.0283	30.0	3.4	1.4	2.5	2.6	52.6	7620	500	D-19	4130
800	0.0221	34.4	3.4	1.4	2.5	2.8	57.4	9425	250	D-18	2595
1000	0.0176	38.5	3.4	1.5	2.5	2.9	61.9	11540	250	D-18	3125

All conductors circular compacted.  
Equivalent voltage designation as per IEC 60502 - 2 : 6/10 KV.  
Cables conform to IEC 60502 - 2.



We Build Cables For Life

# MEDIUM VOLTAGE CABLES



□ 6.35 / 11 KV - SINGLE CORE  
(HIGHEST SYSTEM VOLTAGE - 12 KV)

COPPER CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
PVC SHEATHED CABLES

(CU / SC / XLPE / SC / CUT / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	Kg/Km			KG
35	0.524	7.1	3.4	1.6	19.6	620	1000	D-12	730
50	0.387	8.2	3.4	1.6	20.7	755	1000	D-12	865
70	0.268	9.8	3.4	1.7	22.5	975	1000	D-14	1125
95	0.193	11.4	3.4	1.7	24.1	1240	1000	D-14	1390
120	0.153	12.8	3.4	1.8	25.7	1490	1000	D-16	1700
150	0.124	14.2	3.4	1.8	27.1	1770	1000	D-18	2010
185	0.0991	15.9	3.4	1.9	29.0	2150	1000	D-18	2390
240	0.0754	18.5	3.4	2.0	31.8	2710	1000	D-18	2950
300	0.0601	20.6	3.4	2.0	34.0	3335	1000	D-18	3575
400	0.0470	23.3	3.4	2.2	37.3	4185	500	D-18	2335
500	0.0366	26.5	3.4	2.2	40.5	5220	500	D-18	2850
630	0.0283	30.0	3.4	2.4	44.4	6550	500	D-18	3515
800	0.0221	34.4	3.4	2.5	49.0	8225	500	D-19	4435
1000	0.0176	38.5	3.4	2.6	53.3	10215	500	D-19	5425

All conductors circular compacted.

Equivalent voltage designation as per IEC 60502 - 2 : 6/10 KV

Cables conform to IEC :60502 - 2.

# MEDIUM VOLTAGE CABLES

We Build Cables For Life



**□ 6.35 / 11 KV - THREE CORE  
(HIGHEST SYSTEM VOLTAGE - 12 KV)**

COPPER CONDUCTOR XLPE INSULATED  
STEEL WIRE ARMOURED  
PVC SHEATHED CABLES

(CU / SC / XLPE / SC / SWA / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Dia of Armour Wire Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km			KG
35	0.524	7.1	3.4	2.5	2.4	46.2	3755	500	D-19	2200
50	0.387	8.2	3.4	2.5	2.5	48.8	4280	500	D-19	2460
70	0.268	9.8	3.4	2.5	2.7	53.2	5215	500	D-19	2930
95	0.193	11.4	3.4	2.5	2.8	56.9	6230	500	D-21	3535
120	0.153	12.8	3.4	2.5	2.9	60.1	7125	250	D-18	2020
150	0.124	14.2	3.4	2.5	3.0	63.3	8145	250	D-18	2275
185	0.0991	15.9	3.4	2.5	3.1	67.2	9490	250	D-18	2615
240	0.0754	18.5	3.4	3.15	3.3	74.5	12300	250	D-21	3495
300	0.0601	20.6	3.4	3.15	3.5	79.5	14470	250	D-22	4090
400	0.0470	23.3	3.4	3.15	3.7	86.1	17510	250	D-23	4875

All conductors circular compacted.

Equivalent voltage designation as per IEC 60502 - 2 : 6/10 KV

Cables conform to IEC :60502 - 2.



We Build Cables For Life

# MEDIUM VOLTAGE CABLES



**□ 6.35 / 11 KV - THREE CORE  
(HIGHEST SYSTEM VOLTAGE -12 KV)**

COPPER CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
STEEL WIRE ARMOURED  
PVC SHEATHED CABLES

(CU / SC / XLPE / SC / CUT / PVC / SWA / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Extruded Bedding Nominal	Dia of Armour Wire Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	mm	mm	Kg/Km			KG
35	0.524	7.1	3.4	1.3	2.5	2.5	48.3	4160	500	D-19	2400
50	0.387	8.2	3.4	1.4	2.5	2.6	51.1	4765	500	D-19	2700
70	0.268	9.8	3.4	1.4	2.5	2.7	54.8	5615	500	D-21	3225
95	0.193	11.4	3.4	1.5	2.5	2.9	58.8	6705	500	D-22	3820
120	0.153	12.8	3.4	1.6	2.5	3.0	62.2	7690	500	D-23	4345
150	0.124	14.2	3.4	1.6	2.5	3.1	65.5	8780	500	D-23	4890
185	0.0991	15.9	3.4	1.7	2.5	3.2	69.5	10190	250	D-21	2965
240	0.0754	18.5	3.4	1.8	3.15	3.4	77.0	13155	250	D-21	3710
300	0.0601	20.6	3.4	1.9	3.15	3.6	82.4	15495	250	D-23	4375
400	0.0470	23.3	3.4	2.0	3.15	3.8	89.3	18590	250	D-23	5145

All conductors circular compacted.

Equivalent voltage designation as per IEC 60502 - 2 : 6/10 KV.

Cables conform to IEC 60502 - 2.

# MEDIUM VOLTAGE CABLES

We Build Cables For Life



□ 6.35 / 11 KV - THREE CORE  
(HIGHEST SYSTEM VOLTAGE - 12 KV)

COPPER CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
PVC SHEATHED CABLES

(CU / SC / XLPE / SC / CUT / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	Kg/Km			KG
35	0.524	7.1	3.4	2.3	40.3	2035	500	D-18	1260
50	0.387	8.2	3.4	2.4	42.9	2480	500	D-18	1480
70	0.268	9.8	3.4	2.5	46.6	3185	500	D-19	1915
95	0.193	11.4	3.4	2.6	50.2	4040	500	D-19	2340
120	0.153	12.8	3.4	2.7	53.4	4815	500	D-19	2730
150	0.124	14.2	3.4	2.8	56.7	5720	250	D-18	1670
185	0.0991	15.9	3.4	2.9	60.5	6910	250	D-18	1970
240	0.0754	18.5	3.4	3.1	66.5	8705	250	D-18	2415
300	0.0601	20.6	3.4	3.3	71.7	10725	250	D-21	3100
400	0.0470	23.3	3.4	3.5	78.4	13390	250	D-21	3770

All conductors circular compacted.  
Equivalent voltage designation as per IEC 60502 - 2 : 6/10 KV.  
Cables conform to IEC 60502 - 2.



We Build Cables For Life

## MEDIUM VOLTAGE CABLES



□ 6.35 / 11 KV -THREE CORE  
(HIGHEST SYSTEM VOLTAGE - 12 KV)

ALUMINIUM CONDUCTOR XLPE INSULATED  
STEEL WIRE ARMOURED  
PVC SHEATHED CABLES

(AL / SC / XLPE / SC / SWA / PVC)

Area of Conductor	DC Conductor Resistance at 20°C	Conductor Diameter	Thickness of XLPE Insulation	Dia of Armour Wire	Thickness of Outer Sheath	Overall Diameter	Cable Weight	Standard Packing Length	Drum Size	Gross Weight
Nominal	Maximum	Approx	Nominal	Nominal	Nominal	Approx	Approx	Metre +/- 5%		Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km			KG
35	0.868	7.1	3.4	2.5	2.4	46.2	3140	500	D-19	1890
50	0.641	8.2	3.4	2.5	2.5	48.8	3435	500	D-19	2035
70	0.443	10.0	3.4	2.5	2.7	53.7	4035	500	D-19	2340
95	0.320	11.8	3.4	2.5	2.8	57.8	4625	250	D-18	1395
120	0.253	13.2	3.4	2.5	2.9	61.0	5095	250	D-18	1515
150	0.206	14.6	3.4	2.5	3.0	64.2	5610	250	D-18	1640
185	0.164	16.25	3.4	2.5	3.1	68.1	6225	250	D-21	1975
240	0.125	18.8	3.4	3.15	3.3	75.2	8060	250	D-21	2435
300	0.100	20.5	3.4	3.15	3.5	79.3	8945	250	D-22	2705
400	0.0778	23.8	3.4	3.15	3.7	87.2	10595	250	D-23	3150

All conductors circular compacted.

Equivalent voltage designation as per IEC 60502 - 2 : 6/10 KV.

Cables conform to IEC 60502 - 2.

# MEDIUM VOLTAGE CABLES

We Build Cables For Life



□ 6.35 / 11 KV - THREE CORE  
(HIGHEST SYSTEM VOLTAGE - 12 KV)

ALUMINIUM CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
STEEL WIRE ARMOURED  
PVC SHEATHED CABLES

(AL / SC / XLPE / SC / CUT / PVC / SWA / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Extruded Bedding Nominal	Dia of Armour Wire Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	mm	mm	Kg/Km			KG
35	0.868	7.1	3.4	1.3	2.5	2.5	48.3	3545	500	D-19	2090
50	0.641	8.2	3.4	1.4	2.5	2.6	51.1	3915	500	D-19	2280
70	0.443	10.0	3.4	1.4	2.5	2.7	55.2	4470	500	D-21	2655
95	0.320	11.8	3.4	1.5	2.5	2.9	59.7	5105	500	D-22	3025
120	0.253	13.2	3.4	1.6	2.5	3.0	63.1	5665	250	D-18	1835
150	0.206	14.6	3.4	1.6	2.5	3.1	66.3	6210	250	D-18	1795
185	0.164	16.25	3.4	1.7	2.5	3.2	70.4	6930	250	D-21	2155
240	0.125	18.8	3.4	1.8	3.15	3.4	77.7	8860	250	D-21	2635
300	0.100	20.5	3.4	1.9	3.15	3.6	82.2	9965	250	D-23	2990
400	0.0778	23.8	3.4	2.0	3.15	3.8	90.3	11680	250	D-23	3420

All conductors circular compacted.

Equivalent voltage designation as per IEC 60502 - 2 : 6/10 KV.

Cables conform to IEC 60502 - 2.



We Build Cables For Life

## MEDIUM VOLTAGE CABLES



**□ 8.7 / 15 KV - SINGLE CORE  
(HIGHEST SYSTEM VOLTAGE - 17.5 KV)**

**COPPER CONDUCTOR XLPE INSULATED  
ALUMINIUM WIRE ARMOURED  
PVC SHEATHED CABLES**

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

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Dia of Armour Wire Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	Kg/Km			KG
35	0.524	7.1	4.5	1.6	1.8	25.9	920	1000	D-16	1130
50	0.387	8.2	4.5	1.6	1.8	27.0	1070	1000	D-16	1280
70	0.268	9.8	4.5	1.6	1.9	28.8	1315	1000	D-18	1555
95	0.193	11.4	4.5	1.6	1.9	30.4	1600	1000	D-18	1840
120	0.153	12.8	4.5	2.0	2.0	32.8	1940	1000	D-18	2180
150	0.124	14.2	4.5	2.0	2.1	34.4	2255	1000	D-19	2575
185	0.0991	15.9	4.5	2.0	2.1	36.1	2655	1000	D-18	2895
240	0.0754	18.5	4.5	2.0	2.2	38.9	3255	500	D-18	1865
300	0.0601	20.6	4.5	2.0	2.3	41.2	3900	500	D-18	2190
400	0.0470	23.3	4.5	2.5	2.4	45.3	4915	500	D-19	2775
500	0.0366	26.5	4.5	2.5	2.5	48.7	6025	500	D-19	3335
630	0.0283	30.0	4.5	2.5	2.6	52.4	7405	500	D-19	4020
800	0.0221	34.4	4.5	2.5	2.8	57.2	9200	250	D-18	2535
1000	0.0176	38.5	4.5	2.5	2.9	61.5	11240	250	D-18	3050

All conductors circular compacted.  
Cables conform to IEC 60502 - 2.

# MEDIUM VOLTAGE CABLES

We Build Cables For Life



**□ 8.7 / 15 KV - SINGLE CORE  
(HIGHEST SYSTEM VOLTAGE - 17.5 KV)**  
**COPPER CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
PVC SHEATHED CABLES**  
**(CU / SC / XLPE / SC / CUT / PVC)**

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	Kg/Km			KG
35	0.524	7.1	4.5	1.7	22.0	705	1000	D-14	855
50	0.387	8.2	4.5	1.7	23.1	840	1000	D-14	990
70	0.268	9.8	4.5	1.7	24.7	1060	1000	D-14	1210
95	0.193	11.4	4.5	1.8	26.5	1340	1000	D-16	1550
120	0.153	12.8	4.5	1.9	28.1	1595	1000	D-18	1835
150	0.124	14.2	4.5	1.9	29.5	1880	1000	D-18	2120
185	0.0991	15.9	4.5	2.0	31.4	2270	1000	D-18	2510
240	0.0754	18.5	4.5	2.1	34.3	2865	1000	D-19	3185
300	0.0601	20.6	4.5	2.1	36.4	3470	500	D-18	1975
400	0.0470	23.3	4.5	2.2	39.5	4320	500	D-18	2400
500	0.0366	26.5	4.5	2.3	42.9	5380	500	D-18	2930
630	0.0283	30.0	4.5	2.4	46.6	6705	500	D-19	3675
800	0.0221	34.4	4.5	2.6	51.4	8420	500	D-19	4530
1000	0.0176	38.5	4.5	2.7	55.7	10425	250	D-18	2845

All conductors circular compacted.  
Cables conform to IEC 60502 - 2.



We Build Cables For Life

## MEDIUM VOLTAGE CABLES



**□ 8.7 / 15 KV - SINGLE CORE  
(HIGHEST SYSTEM VOLTAGE - 17.5 KV)**

COPPER CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
ALUMINIUM WIRE ARMOURED  
PVC SHEATHED CABLES

(CU / SC / XLPE / SC / CUT / PVC / AWA / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Extruded Bedding Nominal	Dia of Armour Wire Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	mm	Kg/Km			KG
35	0.524	7.1	4.5	1.2	1.6	1.9	28.0	1100	1000	D-18	1340
50	0.387	8.2	4.5	1.2	1.6	1.9	29.1	1255	1000	D-18	1495
70	0.268	9.8	4.5	1.2	1.6	1.9	30.7	1500	1000	D-18	1740
95	0.193	11.4	4.5	1.2	2.0	2.0	33.3	1885	1000	D-18	2125
120	0.153	12.8	4.5	1.2	2.0	2.1	34.9	2170	1000	D-19	2490
150	0.124	14.2	4.5	1.2	2.0	2.1	36.3	2480	500	D-18	1480
185	0.0991	15.9	4.5	1.2	2.0	2.2	38.2	2890	500	D-18	1690
240	0.0754	18.5	4.5	1.2	2.0	2.3	41.1	3550	500	D-18	2015
300	0.0601	20.6	4.5	1.2	2.0	2.3	43.2	4195	500	D-18	2340
400	0.0470	23.3	4.5	1.3	2.5	2.5	47.7	5285	500	D-19	2960
500	0.0366	26.5	4.5	1.4	2.5	2.6	51.3	6450	500	D-19	3545
630	0.0283	30.0	4.5	1.4	2.5	2.7	55.0	7855	500	D-21	4350
800	0.0221	34.4	4.5	1.5	2.5	2.8	59.8	9680	250	D-18	2660
1000	0.0176	38.5	4.5	1.6	2.5	3.0	64.5	11840	250	D-18	3200

All conductors circular compacted.  
Cables conform to IEC 60502 - 2.

# MEDIUM VOLTAGE CABLES

We Build Cables For Life



□ 8.7 / 15 KV - THREE CORE  
(HIGHEST SYSTEM VOLTAGE - 17.5 KV)  
COPPER CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
PVC SHEATHED CABLES  
(CU / SC / XLPE / SC / CUT / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	Kg/Km			KG
35	0.524	7.1	4.5	2.5	45.5	2355	500	D-19	1495
50	0.387	8.2	4.5	2.6	48.1	2820	500	D-19	1730
70	0.268	9.8	4.5	2.7	51.7	3540	500	D-19	2090
95	0.193	11.4	4.5	2.8	55.4	4425	250	D-18	1345
120	0.153	12.8	4.5	2.9	58.6	5225	250	D-18	1545
150	0.124	14.2	4.5	3.0	61.8	6145	250	D-18	1775
185	0.0991	15.9	4.5	3.1	65.7	7365	250	D-18	2080
240	0.0754	18.5	4.5	3.3	71.9	9280	250	D-21	2740
300	0.0601	20.6	4.5	3.5	76.9	11260	250	D-21	3235
400	0.0470	23.3	4.5	3.7	83.5	13970	250	D-23	3990

All conductors circular compacted.  
Cables conform to IEC 60502 - 2.



We Build Cables For Life

## MEDIUM VOLTAGE CABLES



**□ 8.7 / 15 KV - THREE CORE  
(HIGHEST SYSTEM VOLTAGE - 17.5 KV)**

COPPER CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
STEEL WIRE ARMOURED  
PVC SHEATHED CABLES

(CU / SC / XLPE / SC / CUT / PVC / SWA / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Extruded Bedding Nominal	Dia of Armour Wire Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	mm	mm	Kg/Km			KG
35	0.524	7.1	4.5	1.4	2.5	2.7	53.7	4735	500	D-19	2685
50	0.387	8.2	4.5	1.5	2.5	2.8	56.5	5360	500	D-21	3100
70	0.268	9.8	4.5	1.5	2.5	2.9	60.1	6270	500	D-22	3605
95	0.193	11.4	4.5	1.6	2.5	3.0	64.0	7370	500	D-23	4185
120	0.153	12.8	4.5	1.7	2.5	3.1	67.4	8375	500	D-23	4690
150	0.124	14.2	4.5	1.7	2.5	3.2	70.6	9445	500	D-23	5225
185	0.0991	15.9	4.5	1.8	3.15	3.4	76.2	11745	250	D-21	3355
240	0.0754	18.5	4.5	1.9	3.15	3.6	82.6	14055	250	D-23	4015
300	0.0601	20.6	4.5	2.0	3.15	3.8	87.8	16380	250	D-23	4595
400	0.0470	23.3	4.5	2.1	3.15	4.0	94.6	19585	250	D-23	5395

All conductors circular compacted.  
Cables conform to IEC 60502 - 2.

# MEDIUM VOLTAGE CABLES

We Build Cables For Life



**□ 8.7 / 15 KV - THREE CORE  
(HIGHEST SYSTEM VOLTAGE - 17.5 KV)**  
ALUMINIUM CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
STEEL WIRE ARMOURED  
PVC SHEATHED CABLES  
(AL / SC / XLPE / SC / CUT / PVC / SWA / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Extruded Bedding Nominal	Dia of Armour Wire Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	mm	mm	Kg/Km			KG
35	0.868	7.1	4.5	1.4	2.5	2.7	53.7	4115	500	D-19	2380
50	0.641	8.2	4.5	1.5	2.5	2.8	56.5	4515	500	D-21	2675
70	0.443	10.0	4.5	1.5	2.5	2.9	60.5	5095	500	D-22	3015
95	0.320	11.8	4.5	1.6	2.5	3.0	64.8	5770	250	D-18	1685
120	0.253	13.2	4.5	1.7	2.5	3.1	68.3	6360	250	D-21	2010
150	0.206	14.6	4.5	1.7	2.5	3.2	71.5	6930	250	D-21	2150
185	0.164	16.25	4.5	1.8	3.15	3.4	77.0	8505	250	D-21	2545
240	0.125	18.8	4.5	1.9	3.15	3.6	83.3	9830	250	D-23	2955
300	0.100	20.5	4.5	2.0	3.15	3.8	87.5	10845	250	D-23	3210
400	0.0778	23.8	4.5	2.1	3.15	4.0	95.7	12690	250	D-23	3675

All conductors circular compacted.  
Cables conform to IEC 60502 - 2.



We Build Cables For Life

# MEDIUM VOLTAGE CABLES



**□ 12.7 / 22 KV - SINGLE CORE  
(HIGHEST SYSTEM VOLTAGE - 24 KV)**  
COPPER CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
ALUMINIUM WIRE ARMOURED  
PVC SHEATHED CABLES

(CU / SC / XLPE / SC / CUT / PVC / AWA / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Extruded Bedding Nominal	Dia of Armour Wire Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Kg/Km	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight KG
Sqmm	Ohm/Km	mm	mm	mm	mm	mm	mm	Kg/Km	Metre +/- 5%		KG
35	0.524	7.1	5.5	1.2	1.6	1.9	30.0	1205	1000	D-18	1445
50	0.387	8.2	5.5	1.2	1.6	2.0	31.3	1380	1000	D-18	1620
70	0.268	9.8	5.5	1.2	2.0	2.0	33.7	1710	1000	D-18	1950
95	0.193	11.4	5.5	1.2	2.0	2.1	35.5	2030	1000	D-19	2350
120	0.153	12.8	5.5	1.2	2.0	2.1	36.9	2300	500	D-18	1390
150	0.124	14.2	5.5	1.2	2.0	2.2	38.6	2655	500	D-18	1565
185	0.0991	15.9	5.5	1.2	2.0	2.3	40.5	3080	500	D-18	1780
240	0.0754	18.5	5.5	1.2	2.0	2.3	43.1	3700	500	D-18	2090
300	0.0601	20.6	5.5	1.3	2.5	2.5	46.8	4550	500	D-19	2595
400	0.0470	23.3	5.5	1.3	2.5	2.6	49.9	5475	500	D-19	3060
500	0.0366	26.5	5.5	1.4	2.5	2.7	53.5	6655	500	D-19	3645
630	0.0283	30.0	5.5	1.5	2.5	2.8	57.4	8100	250	D-18	2265
800	0.0221	34.4	5.5	1.5	2.5	2.9	62.0	9915	250	D-18	2720
1000	0.0176	38.5	5.5	1.6	2.5	3.0	66.5	12060	250	D-18	3255

All conductors circular compacted.  
Equivalent voltage designation as per IEC 60502 - 2 : 12/20 KV.  
Cables conform to IEC 60502 - 2.

# MEDIUM VOLTAGE CABLES

We Build Cables For Life



□ 12.7 / 22 KV - SINGLE CORE  
(HIGHEST SYSTEM VOLTAGE - 24 KV)

COPPER CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
PVC SHEATHED CABLES

(CU / SC / XLPE / SC / CUT / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	Kg/Km			KG
35	0.524	7.1	5.5	1.7	24.0	780	1000	D-14	930
50	0.387	8.2	5.5	1.8	25.3	930	1000	D-16	1140
70	0.268	9.8	5.5	1.8	26.9	1155	1000	D-16	1365
95	0.193	11.4	5.5	1.9	28.7	1445	1000	D-18	1685
120	0.153	12.8	5.5	1.9	30.1	1690	1000	D-18	1930
150	0.124	14.2	5.5	2.0	31.8	2015	1000	D-18	2255
185	0.0991	15.9	5.5	2.0	33.5	2395	1000	D-18	2635
240	0.0754	18.5	5.5	2.1	36.3	2980	500	D-18	1730
300	0.0601	20.6	5.5	2.2	38.6	3605	500	D-18	2045
400	0.0470	23.3	5.5	2.3	41.7	4470	500	D-18	2475
500	0.0366	26.5	5.5	2.4	45.1	5540	500	D-19	3090
630	0.0283	30.0	5.5	2.5	48.8	6880	500	D-19	3760
800	0.0221	34.4	5.5	2.6	53.4	8585	500	D-19	4610
1000	0.0176	38.5	5.5	2.8	57.9	10625	250	D-18	2895

All conductors circular compacted.  
Equivalent voltage designation as per IEC 60502 - 2 : 12/20 KV.  
Cables conform to IEC 60502 - 2.



We Build Cables For Life

## MEDIUM VOLTAGE CABLES



□ 12.7 / 22 KV - THREE CORE  
(HIGHEST SYSTEM VOLTAGE - 24 KV)

COPPER CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
PVC SHEATHED CABLES

(CU / SC / XLPE / SC / CUT / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	Kg/Km			KG
35	0.524	7.1	5.5	2.6	50.0	2655	500	D-19	1645
50	0.387	8.2	5.5	2.7	52.6	3135	500	D-19	1885
70	0.268	9.8	5.5	2.8	56.2	3875	250	D-18	1210
95	0.193	11.4	5.5	2.9	59.9	4785	250	D-18	1435
120	0.153	12.8	5.5	3.0	63.1	5600	250	D-18	1640
150	0.124	14.2	5.5	3.2	66.7	6640	250	D-18	1900
185	0.0991	15.9	5.5	3.3	70.6	7890	250	D-21	2390
240	0.0754	18.5	5.5	3.5	76.6	9775	250	D-21	2865
300	0.0601	20.6	5.5	3.6	81.4	11750	250	D-21	3355
400	0.0470	23.3	5.5	3.8	88.0	14495	250	D-21	4045

All conductors circular compacted.  
Equivalent voltage designation as per IEC 60502 - 2 : 12/20 KV.  
Cables conform to IEC : 60502 - 2.

# MEDIUM VOLTAGE CABLES

We Build Cables For Life



□ 12.7 / 22 KV - THREE CORE  
(HIGHEST SYSTEM VOLTAGE - 24 KV)

COPPER CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
STEEL WIRE ARMOURED  
PVC SHEATHED CABLES

(CU / SC / XLPE / SC / CUT / PVC / SWA / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Extruded Bedding Nominal	Dia of Armour Wire Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	mm	mm	Kg/Km			KG
35	0.524	7.1	5.5	1.5	2.5	2.8	58.4	5290	500	D-22	3115
50	0.387	8.2	5.5	1.6	2.5	2.9	61.2	5935	500	D-22	3435
70	0.268	9.8	5.5	1.6	2.5	3.1	65.0	6895	500	D-23	3945
95	0.193	11.4	5.5	1.7	2.5	3.2	68.9	8020	500	D-23	4510
120	0.153	12.8	5.5	1.7	3.15	3.3	73.4	9730	250	D-21	2855
150	0.124	14.2	5.5	1.8	3.15	3.5	77.2	11095	250	D-21	3195
185	0.0991	15.9	5.5	1.9	3.15	3.6	81.3	12585	250	D-23	3645
240	0.0754	18.5	5.5	2.0	3.15	3.8	87.5	14890	250	D-23	4225
300	0.0601	20.6	5.5	2.1	3.15	3.9	92.5	17210	250	D-23	4800
400	0.0470	23.3	5.5	2.2	3.15	4.2	99.5	20440	250	D-23	5610

All conductors circular compacted.  
Equivalent voltage designation as per IEC 60502 - 2 : 12/20 KV.  
Cables conform to IEC : 60502 - 2.



We Build Cables For Life

## MEDIUM VOLTAGE CABLES



□ 12.7 / 22 KV - THREE CORE  
(HIGHEST SYSTEM VOLTAGE- 24 KV)

ALUMINIUM CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
STEEL WIRE ARMOURED  
PVC SHEATHED CABLES

(AL / SC / XLPE / SC / CUT / PVC / SWA / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Extruded Bedding Nominal	Dia of Armour Wire Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	mm	mm	Kg/Km			KG
35	0.868	7.1	5.5	1.5	2.5	2.8	58.4	4670	500	D-22	2805
50	0.641	8.2	5.5	1.6	2.5	2.9	61.2	5085	500	D-22	3015
70	0.443	10.0	5.5	1.6	2.5	3.1	65.5	5765	500	D-23	3380
95	0.320	11.8	5.5	1.7	2.5	3.2	69.7	6430	500	D-23	3715
120	0.253	13.2	5.5	1.7	3.15	3.3	74.3	7745	250	D-21	2355
150	0.206	14.6	5.5	1.8	3.15	3.5	78.1	8540	250	D-21	2555
185	0.164	16.25	5.5	1.9	3.15	3.6	82.2	9365	250	D-23	2840
240	0.125	18.8	5.5	2.0	3.15	3.8	88.2	10605	250	D-23	3150
300	0.100	20.5	5.5	2.1	3.15	3.9	92.3	11680	250	D-23	3420
400	0.0778	23.8	5.5	2.2	3.15	4.2	100.6	13555	250	D-23	3890

All conductors circular compacted.

Equivalent voltage designation as per IEC 60502 - 2 : 12/20 KV.

Cables conform to IEC 60502 - 2.

# MEDIUM VOLTAGE CABLES

We Build Cables For Life



**□ 19 / 33 KV - SINGLE CORE  
(HIGHEST SYSTEM VOLTAGE - 36 KV)**

COPPER CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
ALUMINIUM WIRE ARMOURED  
PVC SHEATHED CABLES

(CU / SC / XLPE / SC / CUT / PVC / AWA / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Extruded Bedding Nominal	Dia of Armour Wire Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	mm	mm	Kg/Km			KG
50	0.387	8.2	8.0	1.2	2.0	2.2	37.5	1800	500	D-18	1140
70	0.268	9.8	8.0	1.2	2.0	2.2	39.1	2070	500	D-18	1275
95	0.193	11.4	8.0	1.2	2.0	2.3	40.9	2405	500	D-18	1440
120	0.153	12.8	8.0	1.2	2.0	2.3	42.3	2690	500	D-18	1585
150	0.124	14.2	8.0	1.3	2.5	2.4	45.2	3205	500	D-19	1925
185	0.0991	15.9	8.0	1.3	2.5	2.5	47.1	3660	500	D-19	2150
240	0.0754	18.5	8.0	1.3	2.5	2.6	49.9	4330	500	D-19	2485
300	0.0601	20.6	8.0	1.4	2.5	2.6	52.2	5035	500	D-19	2840
400	0.0470	23.3	8.0	1.4	2.5	2.7	55.3	5990	250	D-18	1735
500	0.0366	26.5	8.0	1.5	2.5	2.8	58.9	7195	250	D-18	2040
630	0.0283	30.0	8.0	1.6	2.5	3.0	63.0	8705	250	D-18	2415
800	0.0221	34.4	8.0	1.6	2.5	3.1	67.6	10560	250	D-18	2880
1000	0.0176	38.5	8.0	1.7	2.5	3.2	72.1	12745	250	D-21	3605

All conductors circular compacted.

Equivalent voltage designation as per IEC 60502 - 2 : 18/30 KV.

Cables conform to IEC 60502 - 2.



We Build Cables For Life

## MEDIUM VOLTAGE CABLES



- 19 / 33 KV - THREE CORE  
(HIGHEST SYSTEM VOLTAGE - 36 KV)
  - COPPER CONDUCTOR XLPE INSULATED
  - COPPER TAPE SCREENED
  - STEEL WIRE ARMOURED
  - PVC SHEATHED CABLES
- (CU / SC / XLPE / SC / CUT / PVC / SWA / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Extruded Bedding Nominal	Dia of Armour Wire Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	mm	mm	Kg/Km			KG
50	0.387	8.2	8.0	1.8	3.15	3.4	74.7	8320	500	D-23	4660
70	0.268	9.8	8.0	1.8	3.15	3.5	78.3	9320	500	D-23	5160
95	0.193	11.4	8.0	1.9	3.15	3.6	82.2	10610	500	D-24	5905
120	0.153	12.8	8.0	2.0	3.15	3.7	85.6	11675	250	D-23	3420
150	0.124	14.2	8.0	2.0	3.15	3.9	89.2	13015	250	D-23	3755
185	0.0991	15.9	8.0	2.1	3.15	4.0	93.3	14595	250	D-23	4150
240	0.0754	18.5	8.0	2.2	3.15	4.2	99.5	17000	250	D-23	4750
300	0.0601	20.6	8.0	2.3	3.15	4.3	104.5	19470	250	D-25	5615

All conductors circular compacted.

Equivalent voltage designation as per IEC 60502 - 2 : 18/30 KV.

Cables conform to IEC 60502 - 2.

# MEDIUM VOLTAGE CABLES

We Build Cables For Life



□ 19/33 KV SINGLE CORE  
(HIGHEST SYSTEM VOLTAGE - 36 KV)

COPPER CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
PVC SHEATHED CABLES

(CU / SC / XLPE / SC / CUT / PVC)

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length	Drum Size	Gross Weight Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	Kg/Km	Metre +/- 5%		KG
50	0.387	8.2	8.0	1.9	30.5	1165	1000	D-18	1405
70	0.268	9.8	8.0	2.0	32.3	1420	1000	D-18	1660
95	0.193	11.4	8.0	2.1	34.1	1720	1000	D-19	2040
120	0.153	12.8	8.0	2.1	35.5	1980	1000	D-19	2300
150	0.124	14.2	8.0	2.2	37.2	2320	500	D-18	1400
185	0.0991	15.9	8.0	2.2	38.9	2715	500	D-18	1595
240	0.0754	18.5	8.0	2.3	41.7	3320	500	D-18	1900
300	0.0601	20.6	8.0	2.4	44.0	3970	500	D-18	2225
400	0.0470	23.3	8.0	2.5	47.1	4855	500	D-19	2750
500	0.0366	26.5	8.0	2.6	50.5	5955	500	D-19	3300
630	0.0283	30.0	8.0	2.7	54.2	7325	250	D-18	2070
800	0.0221	34.4	8.0	2.8	58.8	9070	250	D-18	2510
1000	0.0176	38.5	8.0	2.9	63.1	11120	250	D-18	3020

All conductors circular compacted.  
Equivalent voltage designation as per IEC 60502 - 2 : 18/30 KV.  
Cables conform to IEC 60502 - 2.



We Build Cables For Life

# MEDIUM VOLTAGE CABLES



**□ 19 / 33 KV - THREE CORE  
(HIGHEST SYSTEM VOLTAGE - 36 KV)**

ALUMINIUM CONDUCTOR XLPE INSULATED  
COPPER TAPE SCREENED  
STEEL WIRE ARMOURED  
PVC SHEATHED CABLES

(AL / SC / XLPE / SC / CUT / PVC / SWA / PVC )

Area of Conductor Nominal	DC Conductor Resistance at 20°C Maximum	Conductor Diameter Approx	Thickness of XLPE Insulation Nominal	Thickness of Extruded Bedding Nominal	Dia of Armour Wire Nominal	Thickness of Outer Sheath Nominal	Overall Diameter Approx	Cable Weight Approx	Standard Packing Length Metre +/- 5%	Drum Size	Gross Weight Approx
Sq.mm	Ohm/Km	mm	mm	mm	mm	mm	mm	Kg/Km			KG
50	0.641	8.2	8.0	1.8	3.15	3.4	74.7	7475	500	D-23	4235
70	0.443	10.0	8.0	1.8	3.15	3.5	78.8	8225	500	D-23	4610
95	0.320	11.8	8.0	1.9	3.15	3.6	83.0	8995	250	D-23	2750
120	0.253	13.2	8.0	2.0	3.15	3.7	86.5	9700	250	D-23	2925
150	0.206	14.6	8.0	2.0	3.15	3.9	90.1	10540	250	D-23	3135
185	0.164	16.25	8.0	2.1	3.15	4.0	94.2	11390	250	D-23	3345
240	0.125	18.8	8.0	2.2	3.15	4.2	100.2	12795	250	D-25	3950
300	0.100	20.5	8.0	2.3	3.15	4.3	104.3	13875	250	D-25	4220

All conductors circular compacted.

Equivalent voltage designation as per IEC 60502 - 2 : 18/30 KV.  
Cables conform to IEC 60502 - 2.



## □ PILOT CABLE

### COPPER CONDUCTOR PE INSULATED STEEL WIRE ARMOURED PVC SHEATHED CABLES

Total Number of Cores	To Withstand Max. Induced Voltage Level	CONDUCTOR						Thickness of Insulation (Min.)	Thickness of Screening Tape (Approx)	Thickness of PE Bedding (Min)	Thickness of PE Inner Sheath (Min)	Diameter of Armour Wire (Nom)	Thickness of Outer Sheath (Min.)	Approx. Overall Diameter	Approx. Cable Weight	Standard Packing Length	Drum Size	Approx. Gross Weight	
		Nominal Area of Conductor	Number of Cores	Maximum DC Resistance at 20°C	Screened Pair		Unscreened Pair												
No.	KV	Sqmm	No.	Ohm/km	No.	mm	No.	mm	mm	mm	mm	mm	mm	mm	mm	Kg/Km	Metre +/- 5%		Kg
16	5	2.5 & 0.635	6	7.41	1	1.78	2	1.78	0.5	0.09	-	1.0	1.25	1.7	24.0	970	1000	D-14	1120
34	15	2.5 & 0.635	6	7.41	3	1.78	-	-	0.8	0.075	1.8	0.5	2.0	1.9	44.0	2900	750	D-21	2595
28	28.48	-	-	14	0.90														

All conductors circular solid (Class 1).

In 16 core Pilot Cable polyester laminated aluminium screen is provided over pairs for Solkor protection and Telephone System.

In 34 core Pilot Cable individual pairs for Solkor protection system and intertripping and interlocking system are screened with plain copper tape. Also an overall screen of plain copper tape is provided over PE bedding.

Cables conform to MEW Kuwait and ESI 09-6 specification.



We Build Cables For Life

# MEDIUM VOLTAGE CABLES

## □ A.C. RESISTANCE, REACTANCE AND CAPACITANCE VALUES

### 3.8/6.6 KV CABLES

Conductor size Sq.mm	* Single Core Cables					3-Core Cables				
	A.C. Resistance at 90°C		Reactance ( 50 Hz)		Capacitance (μF/km)	A.C. Resistance at 90°C		Reactance ( 50 Hz) (Ω/km)	Capacitance (μF/km)	
	Copper (Ω/km)	Aluminium (Ω/km)	Trefoil (Ω/km)	Flat* (Ω/km)		Copper (Ω/km)	Aluminium (Ω/km)			
35	0.668	1.11	0.140	0.198	0.29	0.668	1.11	0.108	0.30	
50	0.494	0.822	0.131	0.189	0.33	0.494	0.822	0.103	0.33	
70	0.342	0.568	0.123	0.181	0.37	0.342	0.568	0.098	0.38	
95	0.247	0.411	0.117	0.175	0.42	0.247	0.411	0.094	0.43	
120	0.196	0.325	0.112	0.170	0.47	0.196	0.325	0.090	0.48	
150	0.159	0.265	0.109	0.167	0.51	0.159	0.265	0.088	0.52	
185	0.127	0.211	0.107	0.165	0.55	0.127	0.211	0.086	0.56	
240	0.0974	0.161	0.103	0.161	0.60	0.0971	0.162	0.083	0.61	
300	0.0782	0.129	0.101	0.159	0.61	0.0778	0.130	0.082	0.62	
400	0.0621	0.101	0.097	0.156	0.64	0.0614	0.102	0.080	0.65	
500	0.0495	0.0792	0.097	0.155	0.67	-	-	-	-	
630	0.0398	0.0623	0.094	0.152	0.75	-	-	-	-	

\*Twice Cable diameter spacing between centers.

## □ A.C. RESISTANCE, REACTANCE AND CAPACITANCE VALUES

### 6.35/11 KV CABLES

Conductor size Sq.mm	* Single Core Cables					3-Core Cables			
	A.C. Resistance at 90°C		Reactance ( 50 Hz)		Capacitance ( $\mu$ F/km)	A.C. Resistance at 90°C		Reactance ( 50 Hz) ( $\Omega$ /km)	Capacitance ( $\mu$ F/km)
	Copper ( $\Omega$ /km)	Aluminium ( $\Omega$ /km)	Trefoil ( $\Omega$ /km)	Flat* ( $\Omega$ /km)		Copper ( $\Omega$ /km)	Aluminium ( $\Omega$ /km)		
35	0.668	1.11	0.142	0.20	0.23	0.668	1.11	0.116	0.24
50	0.494	0.822	0.135	0.194	0.26	0.494	0.822	0.111	0.26
70	0.342	0.568	0.128	0.186	0.29	0.342	0.568	0.105	0.29
95	0.247	0.411	0.121	0.179	0.33	0.247	0.411	0.100	0.34
120	0.196	0.325	0.116	0.174	0.36	0.196	0.325	0.097	0.37
150	0.159	0.265	0.114	0.173	0.39	0.159	0.265	0.093	0.40
185	0.127	0.211	0.111	0.169	0.42	0.128	0.211	0.091	0.43
240	0.0973	0.161	0.106	0.164	0.47	0.0970	0.161	0.087	0.48
300	0.0782	0.129	0.102	0.161	0.51	0.0778	0.129	0.085	0.52
400	0.0620	0.101	0.099	0.157	0.57	0.0614	0.101	0.082	0.59
500	0.0494	0.0792	0.098	0.156	0.63	-	-	-	-
630	0.0396	0.0623	0.094	0.152	0.71	-	-	-	-

\*Twice Cable diameter spacing between centers.



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# MEDIUM VOLTAGE CABLES

## □ A.C. RESISTANCE, REACTANCE AND CAPACITANCE VALUES

### 8.7/15 KV CABLES

Conductor size Sq.mm	* Single Core Cables					3-Core Cables				
	A.C. Resistance at 90°C		Reactance ( 50 Hz)		Capacitance ( $\mu\text{F}/\text{km}$ )	A.C. Resistance at 90°C		Reactance ( 50 Hz) ( $\Omega/\text{km}$ )	Capacitance ( $\mu\text{F}/\text{km}$ )	
	Copper ( $\Omega/\text{km}$ )	Aluminium ( $\Omega/\text{km}$ )	Trefoil ( $\Omega/\text{km}$ )	Flat* ( $\Omega/\text{km}$ )		Copper ( $\Omega/\text{km}$ )	Aluminium ( $\Omega/\text{km}$ )			
35	0.668	1.11	0.147	0.206	0.19	0.668	1.11	0.124	0.19	
50	0.494	0.822	0.141	0.199	0.21	0.494	0.822	0.119	0.21	
70	0.342	0.568	0.133	0.191	0.23	0.342	0.568	0.112	0.24	
95	0.247	0.411	0.128	0.185	0.26	0.247	0.411	0.106	0.27	
120	0.196	0.325	0.122	0.180	0.29	0.196	0.325	0.102	0.29	
150	0.159	0.265	0.118	0.176	0.31	0.159	0.265	0.099	0.31	
185	0.127	0.211	0.115	0.173	0.33	0.127	0.211	0.096	0.34	
240	0.0973	0.161	0.109	0.167	0.37	0.0970	0.161	0.092	0.38	
300	0.0780	0.129	0.106	0.164	0.40	0.0778	0.129	0.090	0.41	
400	0.0619	0.101	0.104	0.162	0.45	0.0614	0.101	0.086	0.46	
500	0.0493	0.0792	0.101	0.159	0.50	-	-	-	-	
630	0.0395	0.0622	0.097	0.155	0.55	-	-	-	-	

\*Twice Cable diameter spacing between centers.

## ■ A.C. RESISTANCE, REACTANCE AND CAPACITANCE VALUES

### 12.7/22 KV CABLES

Conductor size Sq.mm	* Single Core Cables					3-Core Cables			
	A.C. Resistance at 90°C		Reactance ( 50 Hz)		Capacitance (μF/km)	A.C. Resistance at 90°C		Reactance ( 50 Hz) (Ω/km)	Capacitance (μF/km)
	Copper (Ω/km)	Aluminium (Ω/km)	Trefoil (Ω/km)	Flat* (Ω/km)		Copper (Ω/km)	Aluminium (Ω/km)		
35	0.668	1.11	0.138	0.196	-	0.668	1.11	0.131	0.17
50	0.494	0.822	0.132	0.190	0.19	0.494	0.822	0.125	0.18
70	0.342	0.568	0.125	0.183	0.22	0.342	0.568	0.118	0.20
95	0.247	0.411	0.118	0.176	0.24	0.247	0.411	0.112	0.23
120	0.196	0.325	0.113	0.171	0.26	0.196	0.325	0.107	0.25
150	0.159	0.265	0.110	0.168	0.28	0.159	0.265	0.104	0.27
185	0.127	0.211	0.107	0.164	0.30	0.127	0.211	0.101	0.29
240	0.0974	0.161	0.102	0.160	0.34	0.0970	0.161	0.096	0.32
300	0.0782	0.129	0.099	0.157	0.37	0.0778	0.129	0.093	0.35
400	0.0621	0.101	0.096	0.154	0.40	0.0614	0.101	0.090	0.39
500	0.0495	0.0791	0.093	0.151	0.44	-	-	-	-
630	0.0398	0.0621	0.090	0.148	0.49	-	-	-	-

\*Twice Cable diameter spacing between centers.



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# MEDIUM VOLTAGE CABLES

## □ A.C. RESISTANCE, REACTANCE AND CAPACITANCE VALUES

### 19/33 KV CABLES

Conductor size Sq.mm	* Single Core Cables					3-Core Cables			
	A.C. Resistance at 90°C		Reactance ( 50 Hz)		Capacitance ( $\mu\text{F}/\text{km}$ )	A.C. Resistance at 90°C		Reactance ( 50 Hz) ( $\Omega/\text{km}$ )	Capacitance ( $\mu\text{F}/\text{km}$ )
	Copper ( $\Omega/\text{km}$ )	Aluminium ( $\Omega/\text{km}$ )	Trefoil ( $\Omega/\text{km}$ )	Flat* ( $\Omega/\text{km}$ )		Copper ( $\Omega/\text{km}$ )	Aluminium ( $\Omega/\text{km}$ )		
50	0.494	0.822	0.157	0.215	0.14	0.494	0.817	0.138	0.14
70	0.342	0.568	0.148	0.206	0.15	0.342	0.568	0.130	0.16
95	0.247	0.411	0.140	0.198	0.17	0.246	0.411	0.123	0.18
120	0.196	0.325	0.134	0.192	0.19	0.196	0.325	0.118	0.19
150	0.159	0.265	0.132	0.190	0.20	0.159	0.264	0.114	0.20
185	0.127	0.211	0.128	0.186	0.21	0.127	0.211	0.110	0.22
240	0.0972	0.161	0.121	0.179	0.24	0.0970	0.161	0.105	0.24
300	0.0780	0.129	0.118	0.176	0.25	0.0777	0.129	0.102	0.26
400	0.0617	0.101	0.113	0.172	0.28	-	-	-	-
500	0.0491	0.0793	0.110	0.168	0.31	-	-	-	-

\*Twice Cable diameter spacing between centers.

## □ CURRENT RATINGS (AC)

Single core cables 3.6/6.0 KV TO 18/30 KV  
 Copper or Aluminium conductors,  
 XLPE insulated Armoured Cables

Nominal Area of Conductor	In Air		In Ground		In Duct	
	Single core in Trefoil		Single core in Trefoil		Laid Singly	
	Copper	Aluminium	Copper	Aluminium	Copper	Aluminium
Sqmm	A		A		A	
50	239	186	212	163	212	163
70	296	230	259	202	249	202
95	359	282	308	241	293	235
120	412	340	346	269	327	265
150	469	364	394	302	361	288
185	526	416	437	341	394	322
240	622	488	500	389	449	365
300	708	555	557	437	481	404
400	804	641	625	490	510	437
500	890	736	683	548	548	481
630	995	842	730	616	596	529

Operating conditions:

Ambient air temperature: 30°C  
 Ground temperature: 20°C  
 Depth of laying : 0.8 m  
 Thermal resistivity of soil: 1.2 K.m/W

Above values can be applied safely for Unarmoured cables also.



## □ CURRENT RATINGS (AC)

Three core cables 3.6/6.0 KV TO 18/30 KV  
 Copper or Aluminium conductors,  
 XLPE insulated Armoured Cables

Nominal Area of Conductor	In Air		In Ground		In Duct	
	Laid singly		Laid singly		Laid singly	
	Copper	Aluminium	Copper	Aluminium	Copper	Aluminium
Sqmm	A		A		A	
50	218	162	214	153	184	130
70	263	201	260	188	218	159
95	329	239	306	221	260	192
120	373	282	347	255	295	216
150	428	316	387	288	337	245
185	488	368	438	322	377	279
240	567	431	499	365	433	322
300	647	488	551	418	478	361
400	736	565	611	471	540	414

Operating conditions:

Ambient air temperature: 30°C  
 Ground temperature: 20°C  
 Depth of laying : 0.8 m  
 Thermal resistivity of soil: 1.2 K.m/W

Above values can be applied safely for Unarmoured cables also.

## □ Current Rating Factors

Rating Factors for variation in Ambient temperature for cables laid in Air ONLY

Ambient temperature°C	20	25	30	35	40	45	50	55
XLPE insulated cables	1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76

Rating Factors for variation in Ground temperature for cables laid Direct in Ground or in Ducts ONLY:

Ground temperature°C	15	20	25	30	35	40	45	50
XLPE insulated cables	1.04	1.00	0.96	0.93	0.89	0.85	0.80	0.76



- Correction Factor for depths of Laying other than 0.8m for Direct buried Cables.

Depth of laying m	Single-core cables		Three-core cables
	Nominal conductor size mm <sup>2</sup>		
	≤ 185 mm <sup>2</sup>	> 185 mm <sup>2</sup>	
0.5	1.04	1.06	1.04
0.6	1.02	1.04	1.03
1	0.98	0.97	0.98
1.25	0.96	0.95	0.96
1.5	0.95	0.93	0.95
1.75	0.94	0.91	0.94
2	0.93	0.90	0.93
2.5	0.91	0.88	0.91
3	0.90	0.86	0.90

- Correction Factor for depths of Laying other than 0.8m for Cables in Ducts.

Depth of laying m	Single-core cables		Three-core cables
	Nominal conductor size mm <sup>2</sup>		
	≤ 185 mm <sup>2</sup>	> 185 mm <sup>2</sup>	
0.5	1.04	1.05	1.03
0.6	1.02	1.03	1.02
1	0.98	0.97	0.99
1.25	0.96	0.95	0.97
1.5	0.95	0.93	0.96
1.75	0.94	0.92	0.95
2	0.93	0.91	0.94
2.5	0.91	0.89	0.93
3	0.90	0.88	0.92

# MEDIUM VOLTAGE CABLES

We Build Cables For Life 

## □ Cables laid direct in Ground

Rating Factors for variation in Thermal resistivity of Soil (Average Values)

Size of cables sqmm	Soil thermal resistivity in K.m/W						
	0.8	0.9	1.0	1.5	2.0	2.5	3.0
Single core							
50	1.15	1.11	1.07	0.91	0.81	0.73	0.68
70	1.16	1.12	1.07	0.91	0.81	0.73	0.68
95	1.16	1.12	1.07	0.91	0.81	0.73	0.68
120	1.16	1.12	1.07	0.91	0.81	0.73	0.68
150	1.17	1.12	1.07	0.91	0.81	0.73	0.68
185	1.17	1.12	1.07	0.91	0.81	0.73	0.68
240	1.17	1.12	1.07	0.91	0.80	0.73	0.68
300	1.18	1.12	1.07	0.91	0.80	0.73	0.68
400	1.18	1.12	1.07	0.91	0.80	0.73	0.67
500	1.18	1.12	1.07	0.91	0.80	0.73	0.67
630	1.18	1.12	1.07	0.91	0.80	0.73	0.67
Multi core							
50	1.13	1.09	1.06	0.92	0.83	0.76	0.71
70	1.14	1.09	1.06	0.92	0.83	0.75	0.70
95	1.14	1.09	1.06	0.92	0.83	0.75	0.70
120	1.14	1.10	1.06	0.92	0.82	0.75	0.69
150	1.14	1.10	1.06	0.92	0.82	0.75	0.69
185	1.14	1.10	1.06	0.92	0.82	0.74	0.69
240	1.15	1.10	1.07	0.92	0.81	0.74	0.69
300	1.15	1.10	1.07	0.92	0.81	0.74	0.69
400	1.15	1.10	1.07	0.92	0.81	0.74	0.69

## □ Group Rating Factors

Group rating factors for circuits of three single core cables in Trefoil and laid flat touching, horizontal formation (average value)

Number Of Circuits		Diagram illustrating cable arrangements:					
		Trefoil			Laid flat		
		Touching	SPACING	Touching	SPACING	Touching	SPACING
12/20kV	2	0.78		0.81	0.81	0.85	0.88
	3	0.66		0.68	0.71	0.76	0.80
	4	0.59		0.62	0.65	0.72	0.76
	5	0.55		0.58	0.61	0.68	0.73
	6	0.52		0.55	0.58	0.66	0.72
18/30kV	2	0.79		0.81	0.81	0.85	0.88
	3	0.67		0.70	0.71	0.76	0.80
	4	0.62		0.65	0.65	0.72	0.76
	5	0.57		0.60	0.60	0.68	0.73
	6	0.54		0.57	0.57	0.66	0.72

\*This configuration, at 0.15m spacing, may not be practical for the larger size cables

# MEDIUM VOLTAGE CABLES

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- Group Rating Factor for multicore cables in Horizontal Formation

		Spacing				
		Touching	0.15m	0.30m	0.45m	0.60m
3.6/6 to 12/20kV cables	2	0.80	0.85	0.89	0.90	0.92
	3	0.68	0.75	0.80	0.84	0.86
	4	0.62	0.70	0.77	0.80	0.84
	5	0.57	0.66	0.73	0.78	0.81
	6	0.55	0.63	0.71	0.76	0.80
18/30kV cables	2	0.80	0.83	0.87	0.89	0.91
	3	0.70	0.73	0.78	0.82	0.85
	4	0.64	0.68	0.74	0.78	0.82
	5	0.59	0.63	0.70	0.75	0.79
	6	0.56	0.60	0.68	0.74	0.78



- Cables installed in single way ducts

Rating factors for variation in thermal resistivity of Soil (average values)

Size of cables sqmm	Soil thermal resistivity in K.m/W						
	0.8	0.9	1.0	1.5	2.0	2.5	3.0
Single core							
50	1.08	1.06	1.04	0.94	0.87	0.82	0.77
70	1.09	1.06	1.04	0.94	0.87	0.81	0.76
95	1.09	1.06	1.04	0.94	0.87	0.81	0.76
120	1.10	1.07	1.04	0.94	0.86	0.80	0.75
150	1.10	1.07	1.04	0.94	0.86	0.80	0.75
185	1.10	1.07	1.04	0.93	0.86	0.79	0.75
240	1.11	1.07	1.04	0.93	0.86	0.79	0.74
300	1.11	1.08	1.05	0.93	0.85	0.79	0.74
400	1.11	1.08	1.05	0.93	0.85	0.78	0.73
500	1.11	1.08	1.05	0.93	0.85	0.78	0.73
630	1.12	1.08	1.05	0.93	0.84	0.78	0.72
Mulicore							
50	1.05	1.03	1.02	0.96	0.91	0.87	0.83
70	1.05	1.04	1.02	0.96	0.91	0.86	0.82
95	1.06	1.04	1.02	0.96	0.91	0.86	0.82
120	1.06	1.04	1.03	0.95	0.90	0.85	0.81
150	1.06	1.04	1.03	0.95	0.90	0.85	0.80
185	1.07	1.05	1.03	0.95	0.89	0.84	0.80
240	1.07	1.05	1.03	0.95	0.89	0.84	0.79
300	1.07	1.05	1.03	0.95	0.88	0.83	0.78
400	1.07	1.05	1.03	0.95	0.88	0.83	0.78

## □ Group rating factors

Group rating factors for single core cables in trefoil single way ducts, horizontal formation (average value)



		Spacing			
		Number Of Circuits	Touching	0.45m	0.60m
3.6/6 to 12/20kV cables	2	0.85	0.88	0.90	
	3	0.75	0.80	0.83	
	4	0.70	0.76	0.80	
	5	0.67	0.73	0.77	
	6	0.64	0.71	0.76	
18/30kV cables	2	0.85	0.88	0.90	
	3	0.76	0.80	0.83	
	4	0.71	0.76	0.80	
	5	0.67	0.73	0.77	
	6	0.65	0.71	0.76	

**□ Cables installed in single way ducts**

Group rating factors for multicore cables in single way ducts,  
horizontal formation (average value)



		Spacing				
		Number of Ducts In Ground	Touching	0.30m	0.45m	0.60m
3.6/6 to 12/20kV cables	2	0.88	0.91	0.93	0.94	
	3	0.80	0.84	0.87	0.89	
	4	0.75	0.81	0.84	0.87	
	5	0.71	0.77	0.82	0.85	
	6	0.69	0.75	0.80	0.84	
18/30kV cables	2	0.87	0.89	0.92	0.93	
	3	0.78	0.82	0.85	0.87	
	4	0.73	0.78	0.82	0.85	
	5	0.69	0.75	0.79	0.83	
	6	0.67	0.73	0.78	0.82	

□ Short Circuit curves for Copper Conductor XLPE Insulated Cable

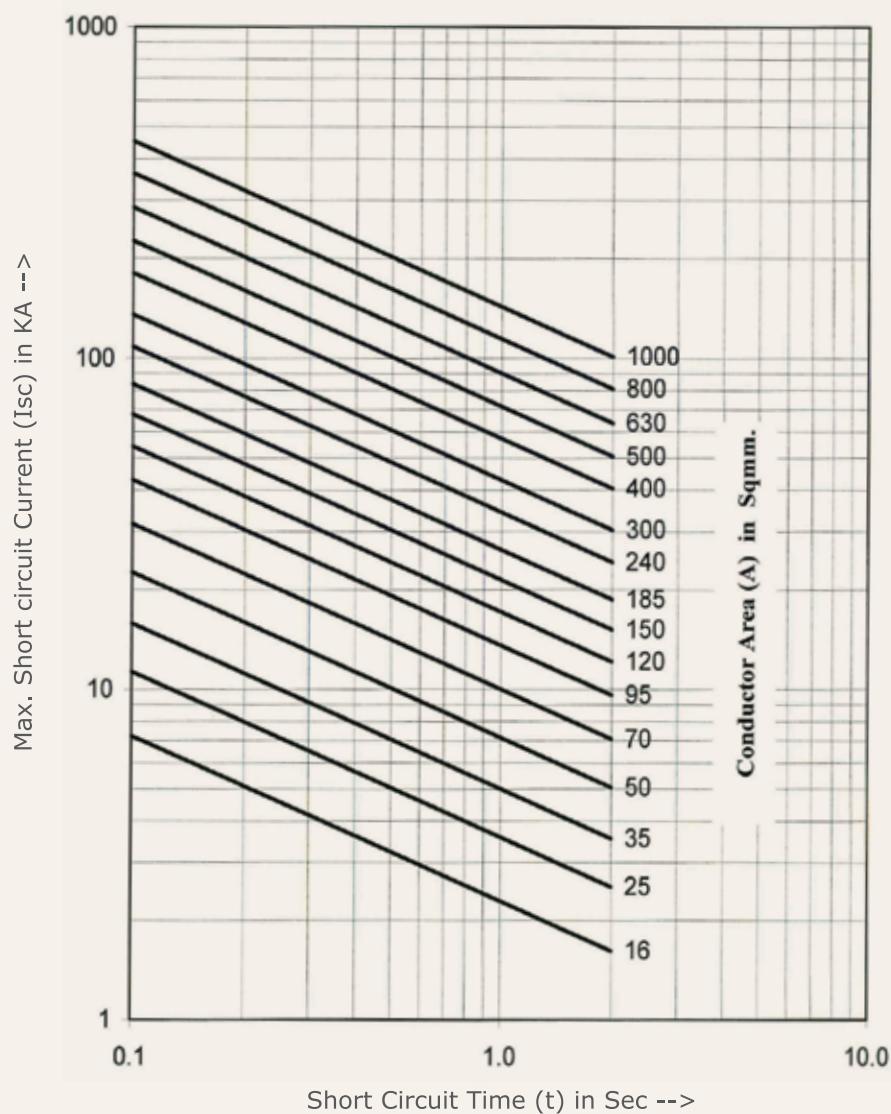
$$I_{sc} = 0.143 \frac{A}{\sqrt{t}}$$

Isc - 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





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## MEDIUM VOLTAGE CABLES

- Short Circuit for Aluminium Conductor XLPE Insulated Cable

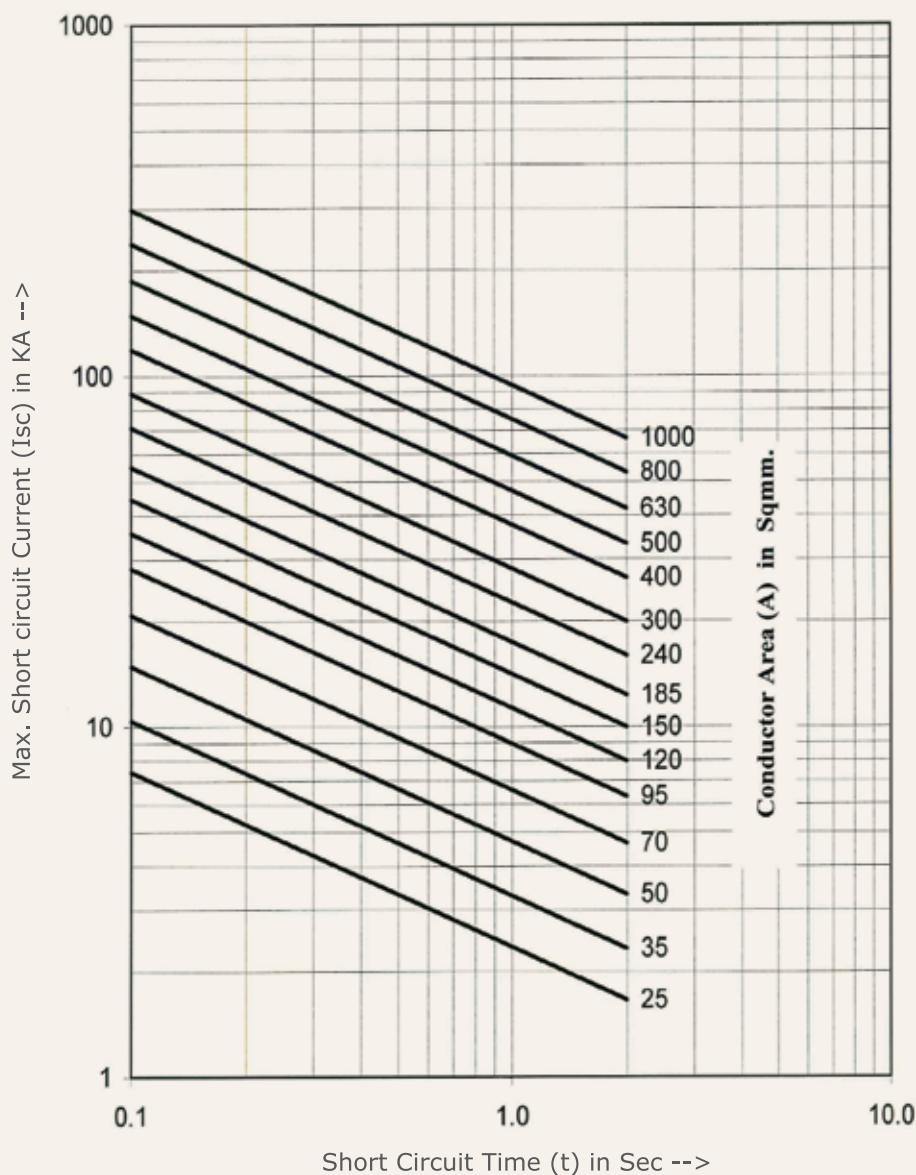
$$I_{sc} = 0.094 \frac{A}{\sqrt{t}}$$

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

A - Conductor Area in Sqmm

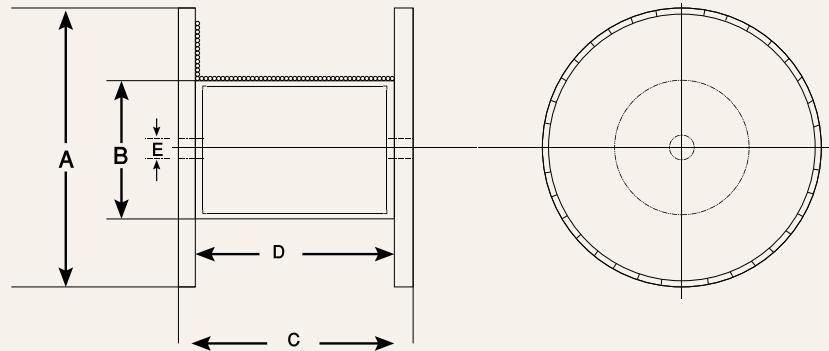
t - Short Circuit Time in Sec.

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



## □ DRUM SIZES AND DIMENSIONS

- A-** Flange diameter (Excluding Lagging), mm
- B-** Barrel diameter, mm
- C-** Overall width, mm
- D-** Traverse width, mm
- E-** Minimum spindle hole diameter, mm



DIMENSIONS

Drum size D-No	A	B	C	D	E
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.

# NOTES

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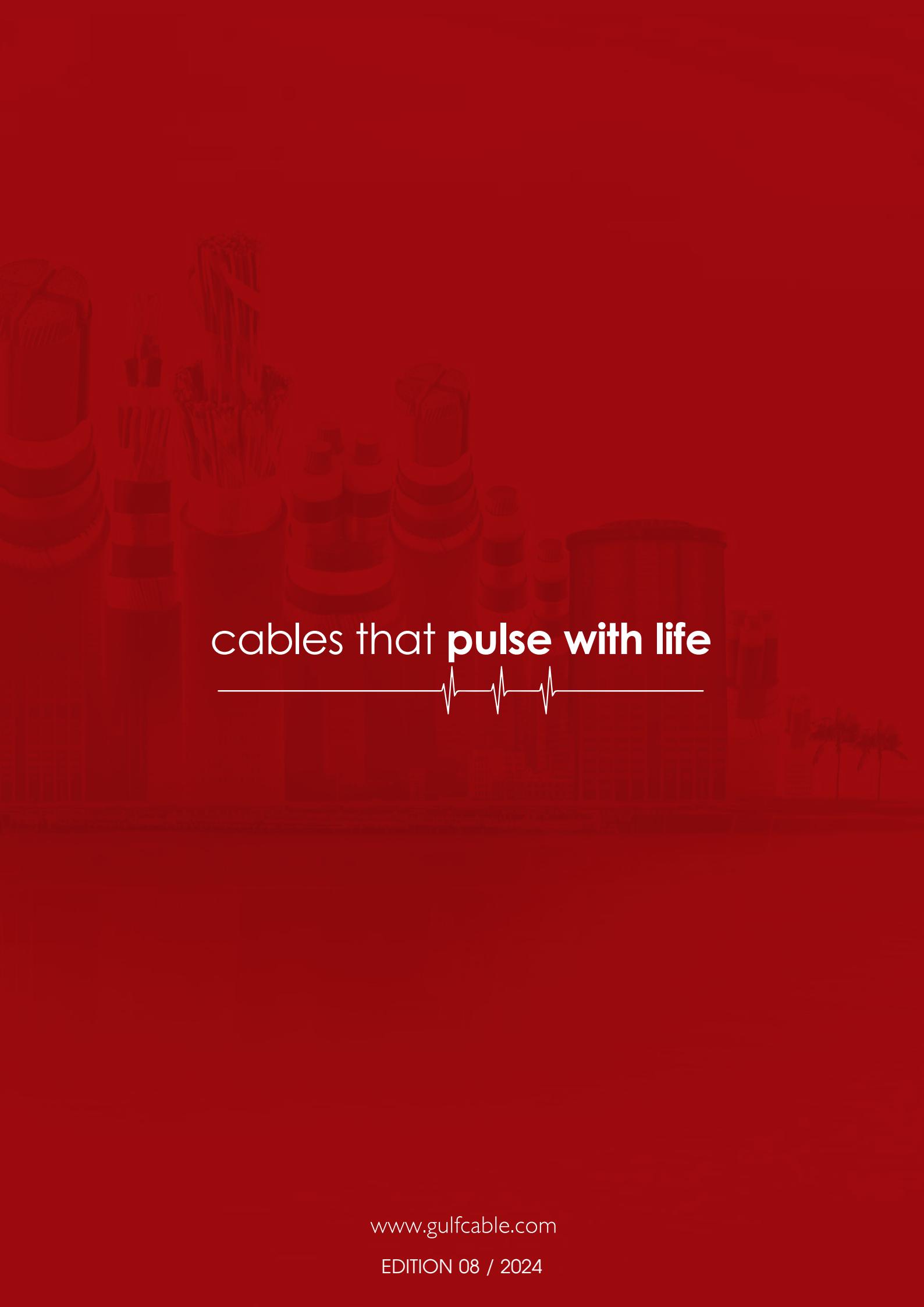
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**KUWAIT**

SULAIBIYA INDUSTRIAL ZONE AREA 1, STREET NO.5  
P.O.BOX: 1196 SAFAT 13012 KUWAIT

Tel: +965 24645500 - 24675244 - Fax: +965 24675305 - 24675850  
E-mail: info@gulfcable.com - Website: [www.gulfcable.com](http://www.gulfcable.com)

**JORDAN**

AMMAN - MECCA ST.-AL-HUSSEINI COMPLEX NO. 152  
P.O.BOX: 17938 AMMAN 11195 JORDAN

Tel: +962 65524143 - 65524144 - Fax: +962 65524145  
E-mail: infojo@gulfcable.com - Website: [www.gulfcable.com](http://www.gulfcable.com)

