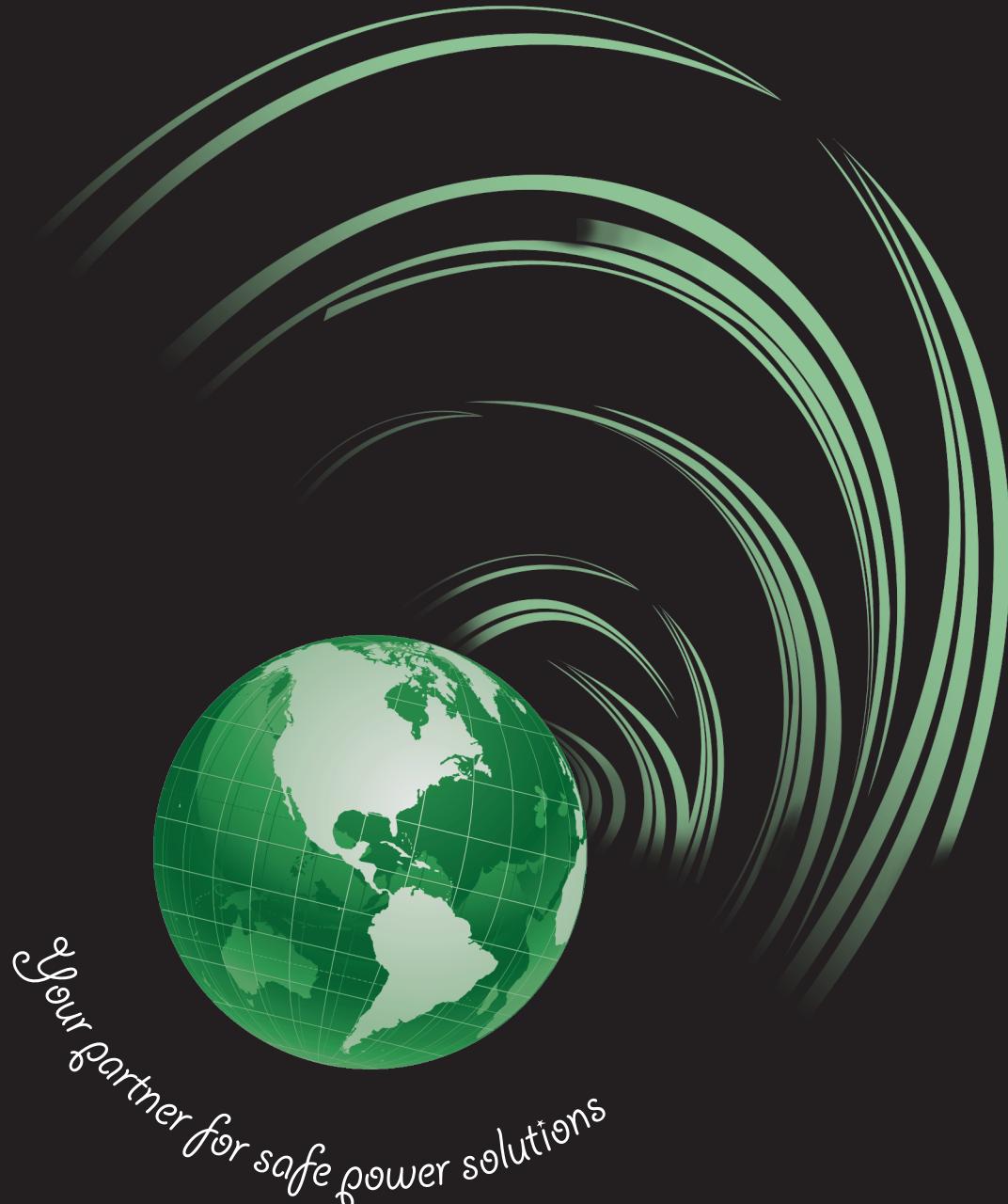




شركة كابلات البحر الأحمر



Your partner for safe power solutions

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Medium Voltage Cables



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About RESCAB- Red Sea Cables Company

Red Sea Cables Company (**RESCAB**) was established in 2008, as a closed joint stock company in the Kingdom of Saudi Arabia with a capital of 370 million SAR. **RESCAB** is a Member of Al-Abdullatif group of companies. The largest two shareholders of RESCAB are Al-Abdullatif Group Holding Company and Al-Abdullatif Industrial Investment Company.

RESCAB manufactures and distributes LV and MV Power Cables and Wires of all types and sizes to meet the growing demand of the local markets, and as well as the other markets in neighboring countries.

RESCAB plant is located in Yanbu city spreading over 100,000 square meters, in the Industrial Area of Royal Commission for Jubail and Yanbu. Our plant is built with state-of-the-art international Technologies based on best European know-how in the field of Wire and Cable production, conforming to the international standards of manufacturing cable products of highest quality.

RESCAB offers its products to various Power sectors, Oil & Gas companies, Infrastructure, utilities and Industries and residential sectors. The company is technically well equipped to adapt to special requirements in line with the progress in the field of wire and cable manufacturing technologies.

RESCAB complies with ISO: 9001:2015 Quality Management Systems.

RESCAB Vision is to supply Safe and Reliable cable products and provide efficient aftersales service, complying with best quality standards and continually enhance product quality through effective Quality management systems.

Introduction

Today, XLPE (Cross-Linked Polyethylene) insulated cables are the most common cables used for power transmission and distribution by the power and energy utilities. XLPE Insulation is a thermo-set material, with an operating temperature of 90°C at normal conditions. Cross-linking is a term to describe the process where individual polymer molecules (in PE) are tied together to form a network structure. This is done using curing techniques, such as Nitrogen curing (Dry-curing). The effects of such cross-linking on the properties of polyethylene include:

- Excellent electrical properties
- Higher operating temperature, therefore higher current capacity of the insulated conductors
- Certain mechanical properties are also improved

The State-of-the-art CCV (Continuous Catenary vulcanization) Line in Red Sea Cables Company is used for triple extrusion of the inner semi-conductor, XLPE Insulation, and the outer semi-conductor; the three layers are extruded simultaneously.



Medium Voltage Cables Design

Single-core or Three-core cables consist of the following:

■ Conductor

Conductors are made of Copper or Aluminum, Conductor design is circular stranded, and compacted. Our Conductor design is in compliance with requirements of IEC 60228 (Class 2).

■ Insulation

Triple extrusion of inner semi-conductor (conductor screen), XLPE Insulation, and outer semi-conductor (insulation screen) is applied. XLPE Insulation is dry cured. XLPE Insulation material is as per the requirements of IEC 60502-2 and BS 6622. Upon customer request, TR-XLPE Insulation is used.

■ Metallic Screen

The metallic screen is made of copper wires, copper tape or both. Radial water sealing such as AL-PE laminate and longitudinal water sealing may be applied upon customer's request. The Nominal cross-sectional areas of the screens are as given below:

Nominal area of conductor, mm ²	35	50	70	95	120	150	185	240	300	400	500	630
CSA of Screen, mm ²	16	16	16	16	16	25	25	25	25	35	35	35

■ Assembly

All Cable cores are laid-up together with the usage of non-hygroscopic filler material. These fillers are temperature compatible with all different cable layers such as Insulation, bedding, and sheath. The Cores will have identification tape (Red, Yellow & Blue) under the metallic screen.

■ Armoring

Armor material can be either Aluminum for single core cables or Steel for multi-core cables. Armor can be either wires or tapes. Our cable armoring is in compliance with the requirements of IEC 60502-2 and BS 6622.

■ Outer Sheath

The outer sheath is made of an extruded layer of PVC or PE material and are in compliance with the requirements of IEC 60502-2 and BS 6622. We are also capable of providing cable sheaths with special requirements to be:

- Termite resistant
- Oil resistant
- Flame retardant (in compliance with requirements of IEC 60332-1 and IEC 60332-3)
- Low Smoke Halogen Free (in Compliance with requirements of BS 7835)

Medium Voltage Cables Design

■ Testing of Medium voltage Power Cables

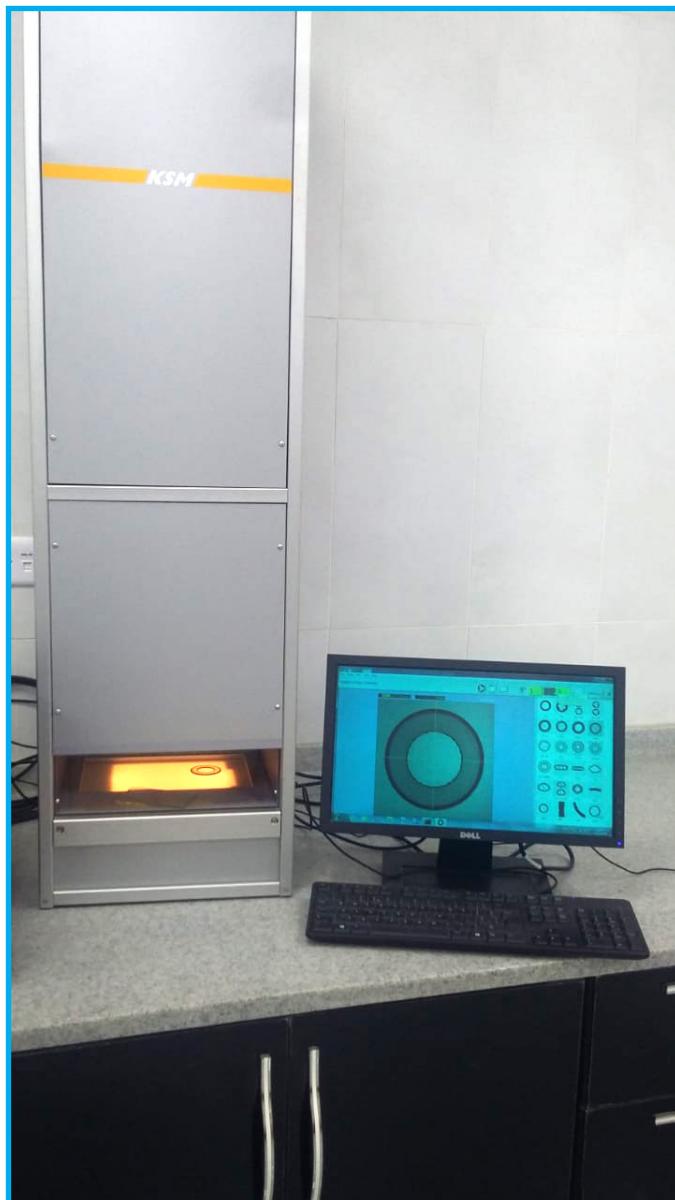
We, Red Sea Cables Company, are capable of performing all standard routine tests and sample tests that are normally carried out in accordance to IEC 60502-2. We have all necessary equipments for such tests, such as High voltage Labs and special ovens. We are also capable of performing tests in accordance with international or national requirements as agreed upon with our customers.

■ Routine Tests

- Measurement of the electrical Resistance of Conductors
- Partial Discharge Test
- High Voltage Test

■ Sample Tests

- Conductor Examination
- Check of Dimensions
- Hot Set Test for XLPE Insulations



General Information

■ Selecting MV power cable

The following factors are important when selecting a MV cable:

- Voltage designation.
- Required load.
- Environmental conditions.
- Load factor.
- Short circuit current (KA) and duration (Sec).
- Laying conditions.

■ Standards:

- The cable described in this catalogue are standard types and in accordance with IEC standard where applicable.
- Power cables in accordance to other standards (e.g. BS, HD, VDE) can be manufactured upon request.

■ Voltage:

Cables are designed by U_0/U (U_m) where :

U_0 : The rated r.m.s. power frequency voltage between conductor and earth or metallic screen.

U : The rated r.m.s. power frequency voltage between conductors.

U_m : The maximum r.m.s. power frequency voltage between conductors.

It is the highest voltage that can be sustained under normal operating conditions at any time and in any point in a system.

Rated Voltage of cable U_0 kV	Nominal system voltage U kV	Highest voltage for equipment 3-phase a.c. U_m kV
3.6	6	7.2
6	10	12
8.7	15	17.5
12	20	24

■ Laying Information:

During laying, the bending radius should not be smaller than values given below.

The Radius depends on the outer diameter (D) of the cable.

Type of Cable	Minimum Bending Radius (mm)	
	During Laying	Adjacent to joints or terminations
Single core	15 D	12 D
Three Core		
Unarmoured	15 D	12 D
Armoured	12 D	10 D

Cables Electrical Parameters:

■ Conductor DC Resistance:

The Maximum conductor DC resistance values at 20°C are as per IEC 60228 standard.

For DC resistance per unit length at different conductor temperature, the following formula shall be used:

R_t = R₂₀ [1+α(t-20)]	Ω/Km
R_t: Conductor DC resistance at t °C	Ω/Km
R₂₀: Conductor DC resistance at 20°C	Ω/Km
t: Conductor operating temperature	°C
α: temperature coefficient at 20 °C	1/°C
= 0.00393 for Copper	
= 0.00403 for Aluminum	

■ Conductor a.c. Resistance:

a.c. resistance of the conductor at maximum operating temperature per unit length is given in the relative tables for each type of cable.

R_{a.c.} = R_t (1 + Y_p + Y_s)	Ω/Km
Y _p and Y _s are proximity and skin effect factors respectively.	

■ Inductance:

The value of inductance is formulated as following:

L=K+0.2 ln(2S/d)	mh/Km
K: Constant (related to conductor formation)	
d: Conductor diameter	mm
S: Axial spacing between cables in trefoil and in case of flat formation	mm
multiply the spacing by 1.26	

The values for inductance of single core cables have been calculated based on one cable diameter between cables in flat formation.

■ Capacitance:

The value of capacitance is formulated as following:

$$C = \epsilon r / [18 \ln(D/d)] \text{ } \mu\text{f/Km}$$

C: Capacitance	μf/Km
εr: relative permittivity of Insulation	
D: Diameter over the Insulation	mm
d: Diameter under the Insulation	mm

■ Dielectric Losses

The dielectric losses of an AC cable are proportional to the capacitance, the frequency, the phase voltage and dielectric power factor. The value can be derived from the following equation:

$$D = 2\pi f C U_0^2 \tan\delta \cdot 10^{-6} \text{ watt/Km/phase}$$

f: Frequency	Hz
C: Capacitance to neutral	μf/Km
U₀: Phase voltage	V
tanδ: Dielectric power factor	

Cables Electrical Parameters:

■ Charging Current:

The charging current is the capacitive current which flows through the dielectric layers when AC voltage is applied. The value can be calculated from the following equation:

$$I_c = U_0 \omega C 10^{-6} \text{ A/Km}$$

U ₀ : Phase voltage	V
ω: Angular of velocity ($2\pi f$)	rad/s
f: Frequency	Hz
C: Capacitance to neutral	μF/Km

■ Voltage Drop:

When current flows in a cable there is a voltage drop between the ends of the cable which is the product of the current and the impedance. The following equations should be used to calculate the voltage drop:

A. Single phase circuit

$$V_d = 2(R \cos\varphi + X \sin\varphi) \text{ V/amp/meter}$$

B. Three phase circuit

$$V_d = \sqrt{3}(R \cos\varphi + X \sin\varphi) \text{ V/amp/meter}$$

R: AC resistance at maximum conductor temperature	Ω/Km
X: Inductive Reactance	Ω/Km
Cosφ: Load Power factor	

$$X = \omega L 10^{-3} \text{ Ω/Km}$$

L: Inductance	mh/Km
---------------	-------

■ Cable Short Circuit Current capacity:

Tables 7-8 give the short circuit current for both copper and aluminium conductor insulated by XLPE

Short circuits starts from the maximum operating temperature. Maximum temperature during short circuit is 250 °C for XLPE

$$I_{s.c.t} = \frac{I_{s.c.1}}{\sqrt{t}}$$

where

I _{s.c.t} : short circuit current for t second	KA
I _{s.c.1} : short circuit current for 1 second	KA
t: duration	Sec

Current Ratings:

■ Current Ratings:

Cable current carrying capacity is defined as the continuous maximum current that cable can carry at its maximum operating temperature.

The values given in the tables are valid for one circuit on three phase system under below basic assumptions and conditions of installation:

For grouping cables de-rating factors must be used

- Ambient air temperature (shaded)	30 °C
- Ground temperature	20 °C
- Thermal resistivity of soil	1.2 °C.m/W
- Depth of laying	1 m
-Maximum conductor temperature	90 °C
-Screens bonded at both ends.	
- Drying out of the soil is ignored.	

To obtain the maximum current carrying capacity of a cable operating at different conditions from the standards, you have to multiply the value of current given in the technical information for the corresponding cable by de-rating factors mentioned in the tables from 1 to 6 as follows:

$I_a = K_t I_s$ in amperes

I_a : Current rating at actual operating conditions (amperes)

I_s : Current rating at standard operating conditions, from tables (amperes)

K_t : De-rating factors given in the tables 1 to 6

It has to be noted that K_t is the total de-rating factors $K_t = K_1 * K_2 * \dots * K_n$.

■ Frequency:

Values in this catalogue are based on 60 HZ frequency.



De-rating Factors:

Table 1

- Air temperature de-rating factors

Air temperature °C	20	25	30	35	40	45	50	55
XLPE cables rated 90 °C	1.08	1.04	1	0.96	0.91	0.87	0.82	0.76

Table 2

- Ground temperature de-rating factors

Ground temperature °C	15	20	25	30	35	40	45	50	55
XLPE cables rated 90 °C	1.04	1	0.96	0.93	0.89	0.85	0.8	0.76	0.71

Table 3

- Depth of laying de-rating factors

Depth of Laying	Direct buried		
	Single core		three cores
	<= 185 mm ²	> 185 mm ²	
0.5	1.06	1.09	1.06
0.6	1.04	1.07	1.05
1	1	1	1
1.25	0.98	0.98	0.98
1.5	0.97	0.96	0.97
1.75	0.96	0.94	0.96
2	0.95	0.93	0.95
2.5	0.93	0.91	0.93
3	0.92	0.89	0.92

Table 4

- Soil thermal resistivity de-rating factors

soil thermal resistivity °C.m/W	0.8	0.9	1	1.2	1.5	2	2.5
de-rating factors	1.17	1.12	1.07	1	0.91	0.8	0.73

De-rating Factors:

■ **Table 5**

- Trefoil or flat formation de-rating factors for three single core cables laid direct in ground

Number of circuits	Trefoil Formation			Flat Formation		
	Touching		Spacing = 0.15 m	Spacing = 0.30 m		
	Trefoil	Flat	Trefoil	Flat	Trefoil	Flat
2	0.77	0.80	0.82	0.85	0.88	0.91
3	0.66	0.69	0.73	0.76	0.80	0.83
4	0.60	0.63	0.68	0.71	0.74	0.77
5	0.56	0.59	0.64	0.67	0.72	0.75
6	0.53	0.57	0.61	0.64	0.70	0.73

L = Spacing

■ **Table 6**

- Trefoil or flat formation de-rating factors for three single core cables laid direct in ground

Number of circuits	Trefoil Formation			Flat Formation		
	Touching		Spacing = 0.15 m	Spacing = 0.30 m		
	Trefoil	Flat	Trefoil	Flat	Trefoil	Flat
2	0.81	0.81	0.87	0.87	0.91	0.91
3	0.69	0.70	0.76	0.76	0.82	0.84
4	0.62	0.63	0.72	0.74	0.77	0.81
5	0.58	0.60	0.66	0.70	0.73	0.78
6	0.54	0.56	0.63	0.67	0.70	0.76

L = Spacing

Short Circuit Currents:

Table 7

- Short Circuit current for Copper Conductors XLPE insulated (KA) (90 / 250 °C)

CSA mm ²	Duration in second									
	0.1	0.2	0.3	0.4	0.5	1	2	3	4	5
35	15.80	11.20	9.10	7.90	7.08	5.00	3.50	2.89	2.50	2.20
50	22.60	16.00	13.06	11.30	10.10	7.15	5.06	4.10	3.58	3.20
70	31.67	22.40	18.29	15.80	14.16	10.00	7.08	5.78	5.00	4.48
95	42.98	30.39	24.80	21.50	19.20	13.59	9.60	7.80	6.80	6.08
120	54.30	38.39	31.30	27.10	24.28	17.17	12.10	9.90	8.59	7.68
150	67.87	47.99	39.20	33.90	30.35	21.46	15.18	12.39	10.70	9.60
185	83.70	59.19	48.30	41.85	37.40	26.47	18.70	15.28	13.20	11.80
240	108.59	76.79	62.70	54.30	48.56	34.30	24.28	19.80	17.17	15.36
300	135.70	95.98	78.37	67.87	60.70	42.90	30.35	24.78	21.46	19.20
400	181.00	128.00	104.50	90.50	80.90	57.20	40.50	33.00	28.60	25.60
500	226.20	160.00	130.60	113.10	101.20	71.50	50.60	41.30	35.80	32.00
630	285.10	201.60	164.60	142.50	127.50	90.10	63.70	52.00	45.10	40.30

Table 8

- Short Circuit current for Aluminium Conductors XLPE insulated (KA) (90 / 250 °C)

CSA mm ²	Duration in second									
	0.1	0.2	0.3	0.4	0.5	1	2	3	4	5
50	14.9	10.56	8.6	7.47	6.68	4.7	3.3	2.7	2.36	2.1
70	20.9	14.79	12.08	10.46	9.35	6.6	4.68	3.8	3.3	2.96
95	28.38	20.07	16.39	14.19	12.69	8.98	6.3	5.18	4.49	4
120	35.85	25.35	20.7	17.9	16	11.3	8	6.5	5.67	5.07
150	44.8	31.69	25.88	22.4	20	14.17	10	8.18	7.09	6.3
185	55.28	39.09	31.9	27.6	24.7	17.48	12.36	10.09	8.7	7.8
240	71.7	50.7	41.4	35.85	32.07	22.68	16	13.09	11.3	10.1
300	89.6	63.38	51.75	44.8	40.09	28.3	20	16.37	14.17	12.68
400	119.5	84.5	69	59.76	53.4	37.79	26.7	21.8	18.9	16.9
500	149.39	105.6	86.25	74.7	66.8	47.2	33.4	27.28	23.6	21.1
630	188.2	133.1	108.68	94.1	84.18	59.5	42.09	34.37	29.76	26.6

Table 9

- Short Circuit current for Copper Screen (KA) (90 / 250 °C)

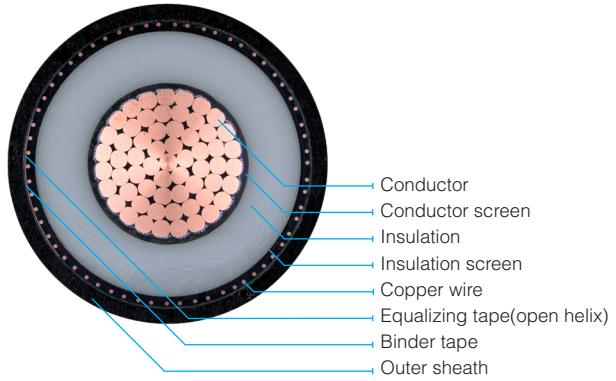
CSA mm ²	Duration in second									
	0.1	0.2	0.3	0.4	0.5	1	2	3	4	5
16	7.20	5.10	4.18	3.60	3.20	2.29	1.60	1.30	1.10	1.00
25	11.30	8.00	6.50	5.66	5.06	3.58	2.50	2.07	1.79	1.60
35	15.80	11.20	9.10	7.90	7.08	5.00	3.50	2.89	2.5	2.20

DIMENSION DATA OF XLPE CABLES



3.6/6 (7.2) kV - Single Core Cable

Copper or Aluminium
Circular Compacted Conductor
SC/XLPE/SC Insulation
Copper Wires Screen
PVC Jacket



Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminium	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
35	ANX11C01SUV	2.5	1.6	19.7	725	-
50	ANX12C01SUV	2.5	1.6	20.3	840	555
70	ANX13C01SUV	2.5	1.7	22.1	1065	650
95	ANX14C01SUV	2.5	1.7	23.8	1330	755
120	ANX15C01SUV	2.5	1.8	25.5	1580	855
150	ANX16C01SUV	2.5	1.8	26.9	1935	1045
185	ANX17C01SUV	2.5	1.9	29.0	2310	1190
240	ANX18C01SUV	2.6	1.9	31.4	2860	1390
300	ANX19C01SUV	2.8	2.0	34.5	3490	1650
400	ANX20C01SUV	3.0	2.2	38.2	4450	2085
500	ANX21C01SUV	3.2	2.3	42.5	5570	2490
630	ANX22C01SUV	3.2	2.4	46.2	6900	3015

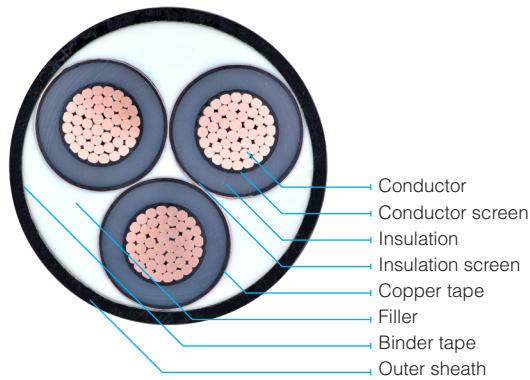
Electrical Data

Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance Trefoil (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
35	0.524	0.6684	-	-	0.300	0.153		
50	0.387	0.4939	0.641	0.8221	0.317	0.142		
70	0.268	0.3424	0.443	0.5684	0.362	0.135		
95	0.193	0.2471	0.320	0.4109	0.410	0.129		
120	0.153	0.1964	0.253	0.3251	0.452	0.124		
150	0.124	0.1598	0.206	0.2651	0.486	0.121		
185	0.0991	0.1285	0.164	0.2116	0.539	0.117		
240	0.0754	0.0991	0.125	0.1621	0.579	0.113		
300	0.0601	0.0804	0.100	0.1305	0.605	0.111		
400	0.0470	0.0647	0.0778	0.1028	0.632	0.109		
500	0.0366	0.0527	0.0605	0.0816	0.677	0.107		
630	0.0283	0.0437	0.0469	0.0654	0.753	0.104		

The above data is approximate and subjected to manufacturing tolerance
This data is applicable also for 3.8/6.6 kV

3.6/6 (7.2) kV - Multi Core Cable

Copper or Aluminium
Circular Compacted Conductor
SC/XLPE/SC Insulation
Copper Tape Screen
PVC Jacket



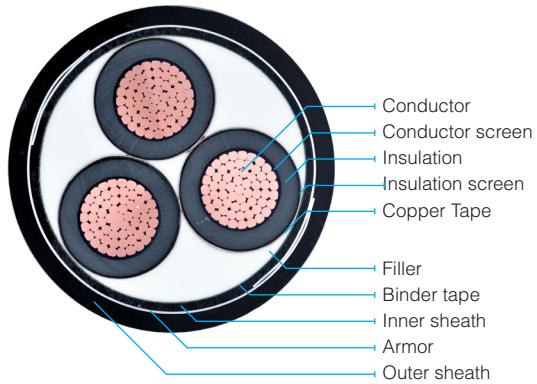
Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminium	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
35	ANX11C03SUV	2.5	2.2	37.5	1960	-
50	ANX12C03SUV	2.5	2.3	39.0	2325	1465
70	ANX13C03SUV	2.5	2.4	42.7	3095	1840
95	ANX14C03SUV	2.5	2.5	46.1	3920	2195
120	ANX15C03SUV	2.5	2.6	49.5	4740	2555
150	ANX16C03SUV	2.5	2.7	52.8	5700	3015
185	ANX17C03SUV	2.5	2.8	57.1	6875	3495
240	ANX18C03SUV	2.6	3.0	62.7	8680	4270
300	ANX19C03SUV	2.8	3.2	69.3	10740	5205
400	ANX20C03SUV	3.0	3.5	76.6	13625	6500
500	ANX21C03SUV	3.2	3.7	85.9	17185	7920

Electrical Data								
Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
35	0.524	0.6685	-	-	0.300	0.136		
50	0.387	0.4940	0.641	0.8221	0.317	0.126		
70	0.268	0.3426	0.443	0.5685	0.362	0.119		
95	0.193	0.2474	0.320	0.4110	0.410	0.113		
120	0.153	0.1968	0.253	0.3254	0.452	0.108		
150	0.124	0.1603	0.206	0.2654	0.486	0.107		
185	0.0991	0.1292	0.164	0.2120	0.539	0.104		
240	0.0754	0.1000	0.125	0.1626	0.579	0.101		
300	0.0601	0.0814	0.100	0.1312	0.605	0.099		
400	0.0470	0.0660	0.0778	0.1037	0.632	0.098		
500	0.0366	0.0542	0.0605	0.0826	0.677	0.096		

The above data is approximate and subjected to manufacturing tolerance
This data is applicable also for 3.8/6.6 kV

3.6/6 (7.2) kV - Multi Core Cable

Copper or Aluminium
 Circular Compacted Conductor
 SC/XLPE/SC Insulation
 Copper Tape Screen
 Double Steel Tape Armouring
 PVC Jacket



Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Steel Tape Thickness	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminium	mm	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
35	ANX11C03SSTV	2.5	0.5	2.3	42.3	2825	-
50	ANX12C03SSTV	2.5	0.5	2.4	43.8	3215	2355
70	ANX13C03SSTV	2.5	0.5	2.5	47.7	4090	2835
95	ANX14C03SSTV	2.5	0.5	2.6	51.1	5000	3265
120	ANX15C03SSTV	2.5	0.5	2.8	54.9	5940	3755
150	ANX16C03SSTV	2.5	0.5	2.9	58.4	7000	4320
185	ANX17C03SSTV	2.5	0.5	3.0	62.7	8285	4905
240	ANX18C03SSTV	2.6	0.5	3.2	68.5	10255	5850
300	ANX19C03SSTV	2.8	0.5	3.4	75.3	12515	6980
400	ANX20C03SSTV	3.0	0.8	3.7	84.2	16405	9280
500	ANX21C03SSTV	3.2	0.8	3.9	93.7	20335	11070

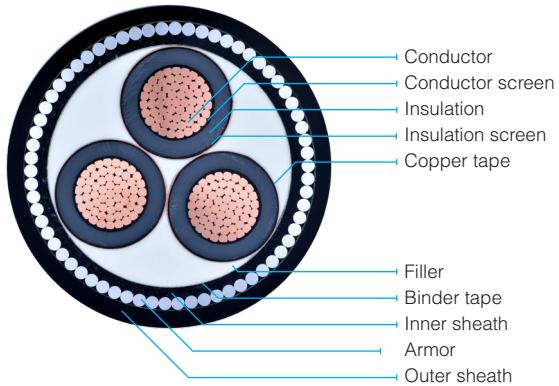
Electrical Data

Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
35	0.524	0.6685	-	-	0.300	0.136		
50	0.387	0.4940	0.641	0.8221	0.317	0.126		
70	0.268	0.3426	0.443	0.5685	0.362	0.119		
95	0.193	0.2474	0.320	0.4110	0.410	0.113		
120	0.153	0.1968	0.253	0.3254	0.452	0.108		
150	0.124	0.1603	0.206	0.2654	0.486	0.107		
185	0.0991	0.1292	0.164	0.2120	0.539	0.104		
240	0.0754	0.1000	0.125	0.1626	0.579	0.101		
300	0.0601	0.0814	0.100	0.1312	0.605	0.099		
400	0.0470	0.0660	0.0778	0.1037	0.632	0.098		
500	0.0366	0.0542	0.0605	0.0826	0.677	0.096		

The above data is approximate and subjected to manufacturing tolerance
 This data is applicable also for 3.8/6.6 kV

3.6/6 (7.2) kV - Multi Core Cable

Copper or Aluminium
 Circular Compacted Conductor
 SC/XLPE/SC Insulation
 Copper Tape Screen
 Steel Wire Armoring
 PVC Jacket



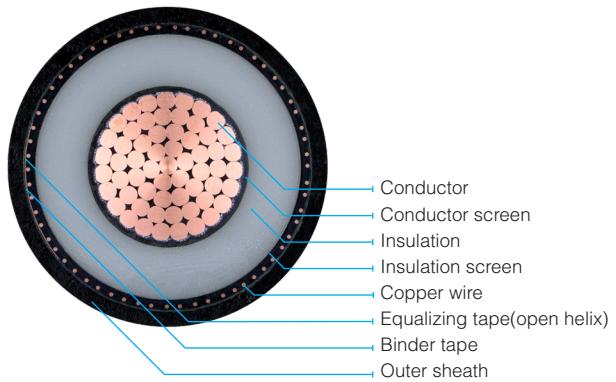
Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Steel Wire Diameter	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminum	mm	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
35	ANX11C03SSWV	2.5	2.5	2.4	45.5	4060	-
50	ANX12C03SSWV	2.5	2.5	2.5	47.0	4480	3620
70	ANX13C03SSWV	2.5	2.5	2.6	50.9	5460	4205
95	ANX14C03SSWV	2.5	2.5	2.7	54.3	6480	4755
120	ANX15C03SSWV	2.5	2.5	2.9	58.1	7540	5355
150	ANX16C03SSWV	2.5	2.5	3.0	61.6	8725	6035
185	ANX17C03SSWV	2.5	2.5	3.1	65.9	10100	6725
240	ANX18C03SSWV	2.6	3.15	3.3	72.9	12905	8500
300	ANX19C03SSWV	2.8	3.15	3.5	79.7	15445	9905
400	ANX20C03SSWV	3.0	3.15	3.8	88.0	18840	11715
500	ANX21C03SSWV	3.2	3.15	4.0	97.5	23105	13840

Electrical Data								
Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
35	0.524	0.6685	-	-	0.300	0.136		
50	0.387	0.4940	0.641	0.8221	0.317	0.126		
70	0.268	0.3426	0.443	0.5685	0.362	0.119		
95	0.193	0.2474	0.320	0.4110	0.410	0.113		
120	0.153	0.1968	0.253	0.3254	0.452	0.108		
150	0.124	0.1603	0.206	0.2654	0.486	0.107		
185	0.0991	0.1292	0.164	0.2120	0.539	0.104		
240	0.0754	0.1000	0.125	0.1626	0.579	0.101		
300	0.0601	0.0814	0.100	0.1312	0.605	0.099		
400	0.0470	0.0660	0.0778	0.1037	0.632	0.098		
500	0.0366	0.0542	0.0605	0.0826	0.677	0.096		

The above data is approximate and subjected to manufacturing tolerance
 this data is applicable also for 3.8/6.6 kV

6/10 (12) kV - Single Core Cable

Copper or Aluminium
 Circular Compacted Conductor
 SC/XLPE/SC Insulation
 Copper Wires Screen
 PVC Jacket



Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminium	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
35	BNX11C01SUV	3.4	1.6	21.5	780	-
50	BNX12C01SUV	3.4	1.7	22.3	910	625
70	BNX13C01SUV	3.4	1.7	23.9	1130	710
95	BNX14C01SUV	3.4	1.8	25.8	1405	835
120	BNX15C01SUV	3.4	1.8	27.3	1655	930
150	BNX16C01SUV	3.4	1.9	28.9	2025	1130
185	BNX17C01SUV	3.4	1.9	30.8	2390	1270
240	BNX18C01SUV	3.4	2.0	33.2	2950	1485
300	BNX19C01SUV	3.4	2.1	35.9	3570	1730
400	BNX20C01SUV	3.4	2.2	39.0	4500	2130
500	BNX21C01SUV	3.4	2.3	42.9	5590	2515
630	BNX22C01SUV	3.4	2.4	46.6	6925	3045

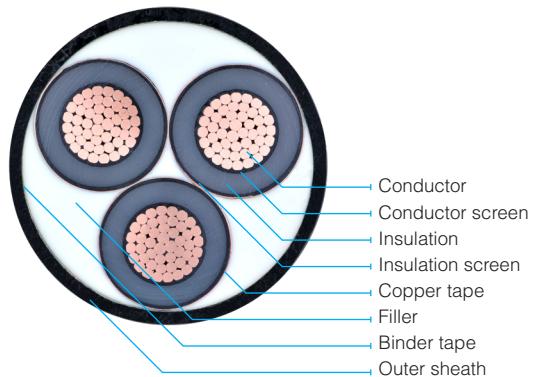
Electrical Data

Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance Trefoil (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
35	0.524	0.6684	-	-	0.236	0.160		
50	0.387	0.4938	0.641	0.8221	0.249	0.150		
70	0.268	0.3423	0.443	0.5683	0.282	0.141		
95	0.193	0.2470	0.320	0.4108	0.318	0.135		
120	0.153	0.1963	0.253	0.3251	0.349	0.129		
150	0.124	0.1596	0.206	0.2650	0.374	0.126		
185	0.0991	0.1284	0.164	0.2115	0.413	0.122		
240	0.0754	0.0989	0.125	0.1620	0.458	0.117		
300	0.0601	0.0802	0.100	0.1304	0.510	0.114		
400	0.0470	0.0646	0.0778	0.1027	0.565	0.111		
500	0.0366	0.0527	0.0605	0.0815	0.641	0.107		
630	0.0283	0.0436	0.0469	0.0653	0.713	0.104		

The above data is approximate and subjected to manufacturing tolerance
 this data is applicable also for 6.35/11 kV

6/10 (12) kV - Multi Core Cable

Copper or Aluminium
 Circular Compacted Conductor
 SC/XLPE/SC Insulation
 Copper Tape Screen
 PVC Jacket



Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminium	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
35	BNX11C03SUV	3.4	2.3	41.6	2245	-
50	BNX12C03SUV	3.4	2.4	43.1	2625	1765
70	BNX13C03SUV	3.4	2.5	46.3	3320	2065
95	BNX14C03SUV	3.4	2.7	50.4	4230	2505
120	BNX15C03SUV	3.4	2.8	53.8	4985	2800
150	BNX16C03SUV	3.4	2.9	57.1	6035	3350
185	BNX17C03SUV	3.4	3.0	61.4	7270	3890
240	BNX18C03SUV	3.4	3.2	66.5	9000	4595
300	BNX19C03SUV	3.4	3.3	71.7	11050	5510
400	BNX20C03SUV	3.4	3.6	78.5	13785	6665
500	BNX21C03SUV	3.4	3.7	86.7	17270	8000

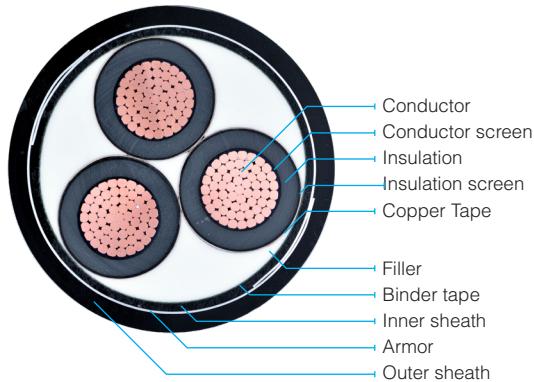
Electrical Data

Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
35	0.524	0.6685	-	-	0.236	0.145		
50	0.387	0.4939	0.641	0.8221	0.249	0.134		
70	0.268	0.3425	0.443	0.5684	0.282	0.126		
95	0.193	0.2472	0.320	0.4110	0.318	0.120		
120	0.153	0.1966	0.253	0.3253	0.349	0.115		
150	0.124	0.1600	0.206	0.2653	0.374	0.113		
185	0.0991	0.1289	0.164	0.2118	0.413	0.109		
240	0.0754	0.0997	0.125	0.1624	0.458	0.105		
300	0.0601	0.0812	0.100	0.1311	0.510	0.102		
400	0.0470	0.0658	0.0778	0.1036	0.565	0.100		
500	0.0366	0.0541	0.0605	0.0825	0.641	0.097		

The above data is approximate and subjected to manufacturing tolerance
 this data is applicable also for 6.35/11 kV

6/10 (12) kV - Multi Core Cable

Copper or Aluminium
 Circular Compacted Conductor
 SC/XLPE/SC Insulation
 Copper Tape Screen
 Double Steel Tape Armoring
 PVC Jacket



Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Steel Tape Thickness	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminum	mm	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
35	BNX11C03SSTV	3.4	0.5	2.5	46.6	3215	-
50	BNX12C03SSTV	3.4	0.5	2.6	48.3	3650	2795
70	BNX13C03SSTV	3.4	0.5	2.7	51.7	4445	3190
95	BNX14C03SSTV	3.4	0.5	2.8	55.6	5425	3700
120	BNX15C03SSTV	3.4	0.5	2.9	59.2	6285	4100
150	BNX16C03SSTV	3.4	0.5	3.0	62.5	7415	4725
185	BNX17C03SSTV	3.4	0.5	3.1	67.0	8780	5400
240	BNX18C03SSTV	3.4	0.5	3.3	72.3	10670	6260
300	BNX19C03SSTV	3.4	0.5	3.5	77.9	12920	7380
400	BNX20C03SSTV	3.4	0.8	3.8	86.1	16630	9505
500	BNX21C03SSTV	3.4	0.8	4.0	94.7	20495	11230

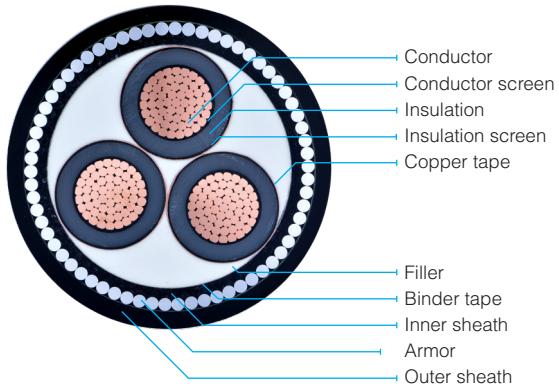
Electrical Data

Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
35	0.524	0.6685	-	-	0.236	0.145		
50	0.387	0.4939	0.641	0.8221	0.249	0.134		
70	0.268	0.3425	0.443	0.5684	0.282	0.126		
95	0.193	0.2472	0.320	0.4110	0.318	0.120		
120	0.153	0.1966	0.253	0.3253	0.349	0.115		
150	0.124	0.1600	0.206	0.2653	0.374	0.113		
185	0.0991	0.1289	0.164	0.2118	0.413	0.109		
240	0.0754	0.0997	0.125	0.1624	0.458	0.105		
300	0.0601	0.0812	0.100	0.1311	0.510	0.102		
400	0.0470	0.0658	0.0778	0.1036	0.565	0.100		
500	0.0366	0.0541	0.0605	0.0825	0.641	0.097		

The above data is approximate and subjected to manufacturing tolerance
 this data is applicable also for 6.35/11 kV

6/10 (12) kV - Multi Core Cable

Copper or Aluminium
 Circular Compacted Conductor
 SC/XLPE/SC Insulation
 Copper Tape Screen
 Steel Wire Armouring
 PVC Jacket



Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Steel Wire Diameter	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminium	mm	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
35	BNX11C03SSWV	3.4	2.5	2.6	49.8	4565	-
50	BNX12C03SSWV	3.4	2.5	2.7	51.5	5060	4200
70	BNX13C03SSWV	3.4	2.5	2.8	54.9	5930	4675
95	BNX14C03SSWV	3.4	2.5	2.9	58.8	7055	5330
120	BNX15C03SSWV	3.4	2.5	3.0	62.4	8000	5810
150	BNX16C03SSWV	3.4	2.5	3.1	65.7	9235	6545
185	BNX17C03SSWV	3.4	2.5	3.2	70.2	10740	7360
240	BNX18C03SSWV	3.4	3.15	3.5	76.9	13550	9140
300	BNX19C03SSWV	3.4	3.15	3.6	82.3	15940	10400
400	BNX20C03SSWV	3.4	3.15	3.9	89.9	19145	12020
500	BNX21C03SSWV	3.4	3.15	4.1	98.5	23245	13980

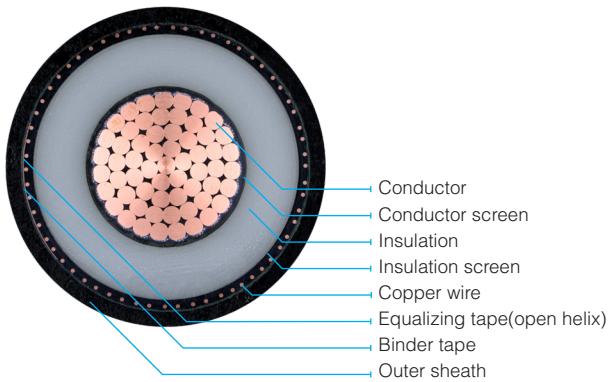
Electrical Data

Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
35	0.524	0.6685	-	-	0.236	0.145		
50	0.387	0.4939	0.641	0.8221	0.249	0.134		
70	0.268	0.3425	0.443	0.5684	0.282	0.126		
95	0.193	0.2472	0.320	0.4110	0.318	0.120		
120	0.153	0.1966	0.253	0.3253	0.349	0.115		
150	0.124	0.1600	0.206	0.2653	0.374	0.113		
185	0.0991	0.1289	0.164	0.2118	0.413	0.109		
240	0.0754	0.0997	0.125	0.1624	0.458	0.105		
300	0.0601	0.0812	0.100	0.1311	0.510	0.102		
400	0.0470	0.0658	0.0778	0.1036	0.565	0.100		
500	0.0366	0.0541	0.0605	0.0825	0.641	0.097		

The above data is approximate and subjected to manufacturing tolerance
 this data is applicable also for 6.35/11 kV

8.7/15 (17.5) kV - Single Core Cable

Copper or Aluminium
 Circular Compacted Conductor
 SC/XLPE/SC Insulation
 Copper Wires Screen
 PVC Jacket



Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminium	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
35	CNX11C01SUV	4.5	1.7	23.9	870	-
50	CNX12C01SUV	4.5	1.7	24.5	985	700
70	CNX13C01SUV	4.5	1.8	26.3	1220	805
95	CNX14C01SUV	4.5	1.8	28.0	1495	920
120	CNX15C01SUV	4.5	1.9	29.7	1760	1035
150	CNX16C01SUV	4.5	2.0	31.3	2135	1245
185	CNX17C01SUV	4.5	2.0	33.2	2510	1390
240	CNX18C01SUV	4.5	2.1	35.6	3080	1615
300	CNX19C01SUV	4.5	2.2	38.3	3710	1870
400	CNX20C01SUV	4.5	2.3	41.4	4650	2285
500	CNX21C01SUV	4.5	2.4	45.3	5760	2680
630	CNX22C01SUV	4.5	2.5	49.0	7105	3225

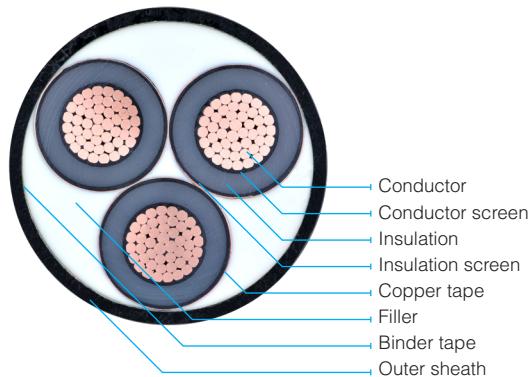
Electrical Data

Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance Trefoil (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
35	0.524	0.6684	-	-	0.192	0.168		
50	0.387	0.4938	0.641	0.8220	0.202	0.157		
70	0.268	0.3423	0.443	0.5683	0.228	0.148		
95	0.193	0.2469	0.320	0.4108	0.255	0.141		
120	0.153	0.1962	0.253	0.3250	0.278	0.135		
150	0.124	0.1595	0.206	0.2650	0.297	0.132		
185	0.0991	0.1282	0.164	0.2114	0.327	0.127		
240	0.0754	0.0987	0.125	0.1618	0.361	0.122		
300	0.0601	0.0800	0.100	0.1303	0.400	0.119		
400	0.0470	0.0643	0.0778	0.1025	0.442	0.115		
500	0.0366	0.0523	0.0605	0.0813	0.500	0.111		
630	0.0283	0.0431	0.0469	0.0650	0.554	0.108		

The above data is approximate and subjected to manufacturing tolerance

8.7/15 (17.5) kV - Multi Core Cable

Copper or Aluminium
Circular Compacted Conductor
SC/XLPE/SC Insulation
Copper Tape Screen
PVC Jacket



Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminium	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
35	CNX11C03SUV	4.5	2.5	46.3	2535	-
50	CNX12C03SUV	4.5	2.6	47.8	2905	2050
70	CNX13C03SUV	4.5	2.7	51.5	3670	2415
95	CNX14C03SUV	4.5	2.8	55.3	4590	2860
120	CNX15C03SUV	4.5	2.9	58.8	5385	3200
150	CNX16C03SUV	4.5	3.0	62.0	6465	3775
185	CNX17C03SUV	4.5	3.2	66.5	7685	4305
240	CNX18C03SUV	4.5	3.3	71.0	9480	5070
300	CNX19C03SUV	4.5	3.5	76.8	11545	6010
400	CNX20C03SUV	4.5	3.7	83.5	14325	7200
500	CNX21C03SUV	4.5	3.9	91.9	17915	8650

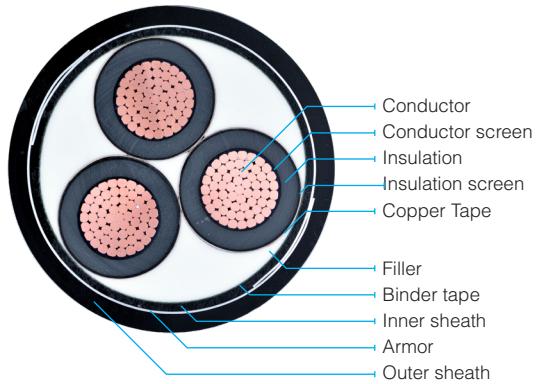
Electrical Data

Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
35	0.524	0.6684	-	-	0.192	0.153		
50	0.387	0.4939	0.641	0.8221	0.202	0.142		
70	0.268	0.3424	0.443	0.5684	0.228	0.134		
95	0.193	0.2471	0.320	0.4109	0.255	0.128		
120	0.153	0.1964	0.253	0.3252	0.278	0.122		
150	0.124	0.1598	0.206	0.2652	0.297	0.120		
185	0.0991	0.1287	0.164	0.2117	0.327	0.116		
240	0.0754	0.0993	0.125	0.1622	0.361	0.110		
300	0.0601	0.0808	0.100	0.1308	0.400	0.108		
400	0.0470	0.0653	0.0778	0.1032	0.442	0.105		
500	0.0366	0.0535	0.0605	0.0821	0.500	0.102		

The above data is approximate and subjected to manufacturing tolerance

8.7/15 (17.5) kV - Multi Core Cable

Copper or Aluminium
 Circular Compacted Conductor
 SC/XLPE/SC Insulation
 Copper Tape Screen
 Double Steel Tape Armouring
 PVC Jacket



Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Steel Tape Thickness	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminium	mm	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
35	CNX11C03SSTV	4.5	0.5	2.6	51.3	3615	-
50	CNX12C03SSTV	4.5	0.5	2.7	53.0	4040	3185
70	CNX13C03SSTV	4.5	0.5	2.8	56.7	4890	3635
95	CNX14C03SSTV	4.5	0.5	3.0	60.9	5955	4230
120	CNX15C03SSTV	4.5	0.5	3.1	64.6	6870	4680
150	CNX16C03SSTV	4.5	0.5	3.2	67.8	8020	5335
185	CNX17C03SSTV	4.5	0.5	3.3	72.3	9350	5970
240	CNX18C03SSTV	4.5	0.5	3.5	77.2	11335	6925
300	CNX19C03SSTV	4.5	0.8	3.7	84.4	14330	8795
400	CNX20C03SSTV	4.5	0.8	3.9	91.3	17390	10265
500	CNX21C03SSTV	4.5	0.8	4.1	99.9	21325	12060

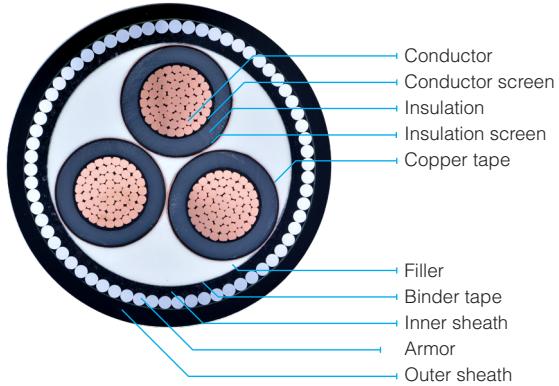
Electrical Data

Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
35	0.524	0.6684	-	-	0.192	0.153		
50	0.387	0.4939	0.641	0.8221	0.202	0.142		
70	0.268	0.3424	0.443	0.5684	0.228	0.134		
95	0.193	0.2471	0.320	0.4109	0.255	0.128		
120	0.153	0.1964	0.253	0.3252	0.278	0.122		
150	0.124	0.1598	0.206	0.2652	0.297	0.120		
185	0.0991	0.1287	0.164	0.2117	0.327	0.116		
240	0.0754	0.0993	0.125	0.1622	0.361	0.110		
300	0.0601	0.0808	0.100	0.1308	0.400	0.108		
400	0.0470	0.0653	0.0778	0.1032	0.442	0.105		
500	0.0366	0.0535	0.0605	0.0821	0.500	0.102		

The above data is approximate and subjected to manufacturing tolerance

8.7/15 (17.5) kV - Multi Core Cable

Copper or Aluminium
 Circular Compacted Conductor
 SC/XLPE/SC Insulation
 Copper Tape Screen
 Steel Wire Armouring
 PVC Jacket



Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Steel Wire Diameter	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminium	mm	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
35	CNX11C03SSWV	4.5	2.5	2.7	54.6	5095	-
50	CNX12C03SSWV	4.5	2.5	2.8	56.2	5585	4730
70	CNX13C03SSWV	4.5	2.5	2.9	59.9	6545	5290
95	CNX14C03SSWV	4.5	2.5	3.1	64.1	7720	5990
120	CNX15C03SSWV	4.5	2.5	3.2	67.8	8745	6560
150	CNX16C03SSWV	4.5	3.15	3.3	72.2	10680	7990
185	CNX17C03SSWV	4.5	3.15	3.5	76.9	12230	8850
240	CNX18C03SSWV	4.5	3.15	3.6	81.6	14360	9950
300	CNX19C03SSWV	4.5	3.15	3.8	87.6	16840	11300
400	CNX20C03SSWV	4.5	3.15	4.0	95.1	20035	12910
500	CNX21C03SSWV	4.5	3.15	4.2	103.7	24265	15000

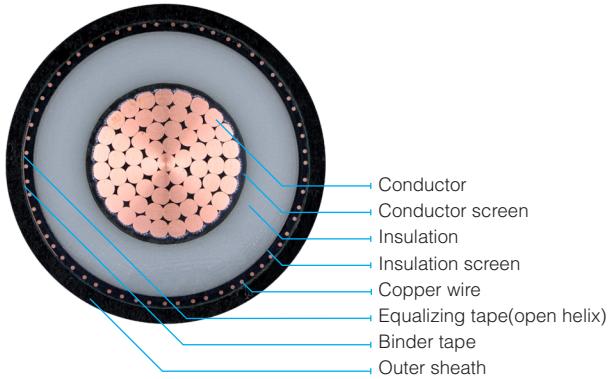
Electrical Data

Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
35	0.524	0.6684	-	-	0.192	0.153		
50	0.387	0.4939	0.641	0.8221	0.202	0.142		
70	0.268	0.3424	0.443	0.5684	0.228	0.134		
95	0.193	0.2471	0.320	0.4109	0.255	0.128		
120	0.153	0.1964	0.253	0.3252	0.278	0.122		
150	0.124	0.1598	0.206	0.2652	0.297	0.120		
185	0.0991	0.1287	0.164	0.2117	0.327	0.116		
240	0.0754	0.0993	0.125	0.1622	0.361	0.110		
300	0.0601	0.0808	0.100	0.1308	0.400	0.108		
400	0.0470	0.0653	0.0778	0.1032	0.442	0.105		
500	0.0366	0.0535	0.0605	0.0821	0.500	0.102		

The above data is approximate and subjected to manufacturing tolerance

12/20 (24) kV - Single Core Cable

Copper or Aluminium
Circular Compacted Conductor
SC/XLPE/SC Insulation
Copper Wires Screen
PVC Jacket



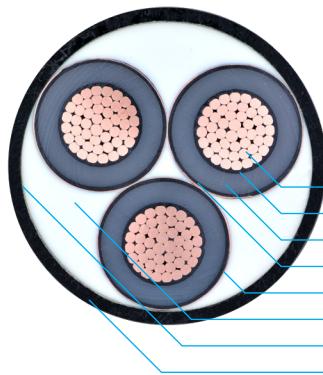
Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm²	N: Copper A: Aluminium	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
35	ENX11C01SUV	5.5	1.8	26.1	955	-
50	ENX12C01SUV	5.5	1.8	26.7	1075	790
70	ENX13C01SUV	5.5	1.9	28.5	1315	900
95	ENX14C01SUV	5.5	1.9	30.2	1595	1020
120	ENX15C01SUV	5.5	2.0	31.9	1870	1140
150	ENX16C01SUV	5.5	2.0	33.3	2235	1340
185	ENX17C01SUV	5.5	2.1	35.4	2630	1505
240	ENX18C01SUV	5.5	2.2	37.8	3205	1740
300	ENX19C01SUV	5.5	2.2	40.3	3830	1990
400	ENX20C01SUV	5.5	2.3	43.4	4775	2410
500	ENX21C01SUV	5.5	2.4	47.3	5900	2820
630	ENX22C01SUV	5.5	2.5	51.0	7255	3375

Electrical Data								
Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance Trefoil (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
35	0.524	0.6684	-	-	0.167	0.175		
50	0.387	0.4938	0.641	0.8220	0.175	0.163		
70	0.268	0.3422	0.443	0.5683	0.196	0.154		
95	0.193	0.2469	0.320	0.4107	0.219	0.147		
120	0.153	0.1961	0.253	0.3250	0.238	0.140		
150	0.124	0.1594	0.206	0.2649	0.254	0.137		
185	0.0991	0.1281	0.164	0.2113	0.278	0.132		
240	0.0754	0.0986	0.125	0.1617	0.307	0.127		
300	0.0601	0.0798	0.100	0.1302	0.339	0.123		
400	0.0470	0.0641	0.0778	0.1024	0.373	0.119		
500	0.0366	0.0520	0.0605	0.0811	0.420	0.115		
630	0.0283	0.0428	0.0469	0.0648	0.465	0.111		

The above data is approximate and subjected to manufacturing tolerance
this data is applicable also for 12.7/22 kV

12/20 (24) kV - Multi Core Cable

Copper or Aluminium
 Circular Compacted Conductor
 SC/XLPE/SC Insulation
 Copper Tape Screen
 PVC Jacket



Conductor
 Conductor screen
 Insulation
 Insulation screen
 Copper tape
 Filler
 Binder tape
 Outer sheath

Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminium	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
35	ENX11C03SUV	5.5	2.6	50.8	2840	-
50	ENX12C03SUV	5.5	2.7	52.3	3225	2365
70	ENX13C03SUV	5.5	2.8	56.0	4010	2755
95	ENX14C03SUV	5.5	3.0	60.1	4925	3200
120	ENX15C03SUV	5.5	3.1	63.5	5830	3645
150	ENX16C03SUV	5.5	3.2	66.7	6930	4245
185	ENX17C03SUV	5.5	3.3	70.6	8135	4755
240	ENX18C03SUV	5.5	3.5	75.8	9940	5535
300	ENX19C03SUV	5.5	3.6	81.4	12010	6475
400	ENX20C03SUV	5.5	3.9	88.2	14910	7785
500	ENX21C03SUV	5.5	4.1	96.6	18540	9275

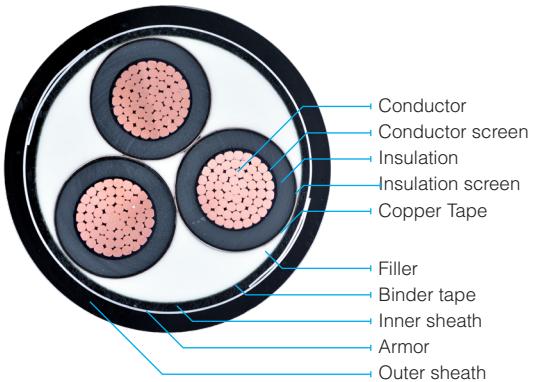
Electrical Data

Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
35	0.524	0.6684	-	-	0.167	0.161		
50	0.387	0.4939	0.641	0.8221	0.175	0.150		
70	0.268	0.3423	0.443	0.5683	0.196	0.141		
95	0.193	0.2470	0.320	0.4108	0.219	0.134		
120	0.153	0.1963	0.253	0.3251	0.238	0.128		
150	0.124	0.1597	0.206	0.2651	0.254	0.126		
185	0.0991	0.1284	0.164	0.2116	0.278	0.120		
240	0.0754	0.0991	0.125	0.1621	0.307	0.116		
300	0.0601	0.0805	0.100	0.1306	0.339	0.112		
400	0.0470	0.0649	0.0778	0.1030	0.373	0.109		
500	0.0366	0.0531	0.0605	0.0818	0.420	0.105		

The above data is approximate and subjected to manufacturing tolerance
 this data is applicable also for 12.7/22 kV

12/20 (24) kV - Multi Core Cable

Copper or Aluminium
 Circular Compacted Conductor
 SC/XLPE/SC Insulation
 Copper Tape Screen
 Double Steel Tape Armouring
 PVC Jacket



Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Steel Tape Thickness	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminium	mm	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
35	ENX11C03SSTV	5.5	0.5	2.8	56.2	4075	-
50	ENX12C03SSTV	5.5	0.5	2.9	57.9	4520	3660
70	ENX13C03SSTV	5.5	0.5	3.0	61.6	5395	4140
95	ENX14C03SSTV	5.5	0.5	3.1	65.7	6405	4680
120	ENX15C03SSTV	5.5	0.5	3.2	69.3	7425	5240
150	ENX16C03SSTV	5.5	0.5	3.3	72.5	8600	5915
185	ENX17C03SSTV	5.5	0.5	3.5	76.8	9975	6595
240	ENX18C03SSTV	5.5	0.8	3.7	83.4	12695	8285
300	ENX19C03SSTV	5.5	0.8	3.8	89.2	15000	9465
400	ENX20C03SSTV	5.5	0.8	4.1	96.2	18185	11060
500	ENX21C03SSTV	5.5	0.8	4.3	104.8	22170	12900

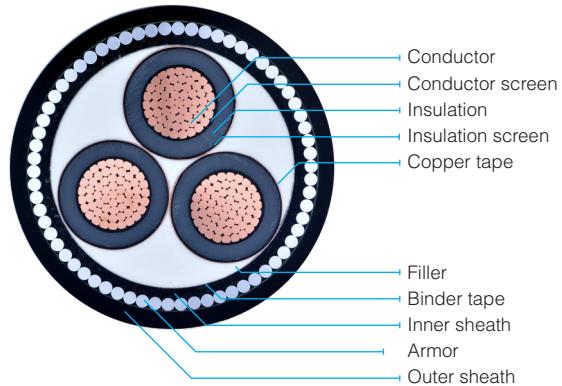
Electrical Data

Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
35	0.524	0.6684	-	-	0.167	0.161		
50	0.387	0.4939	0.641	0.8221	0.175	0.150		
70	0.268	0.3423	0.443	0.5683	0.196	0.141		
95	0.193	0.2470	0.320	0.4108	0.219	0.134		
120	0.153	0.1963	0.253	0.3251	0.238	0.128		
150	0.124	0.1597	0.206	0.2651	0.254	0.126		
185	0.0991	0.1284	0.164	0.2116	0.278	0.120		
240	0.0754	0.0991	0.125	0.1621	0.307	0.116		
300	0.0601	0.0805	0.100	0.1306	0.339	0.112		
400	0.0470	0.0649	0.0778	0.1030	0.373	0.109		
500	0.0366	0.0531	0.0605	0.0818	0.420	0.105		

The above data is approximate and subjected to manufacturing tolerance
 this data is applicable also for 12.7/22 kV

12/20 (24) kV - Multi Core Cable

Copper or Aluminium
 Circular Compacted Conductor
 SC/XLPE/SC Insulation
 Copper Tape Screen
 Steel Wire Armouring
 PVC Jacket



Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Steel Wire Diameter	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm²	N: Copper A: Aluminium	mm	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
35	ENX11C03SSWV	5.5	2.5	2.9	59.4	5100	-
50	ENX12C03SSWV	5.5	2.5	3.0	61.1	6200	5345
70	ENX13C03SSWV	5.5	2.5	3.1	64.8	7190	5935
95	ENX14C03SSWV	5.5	2.5	3.2	68.9	8310	6580
120	ENX15C03SSWV	5.5	3.15	3.4	73.9	10160	7970
150	ENX16C03SSWV	5.5	3.15	3.5	77.1	11480	8790
185	ENX17C03SSWV	5.5	3.15	3.6	81.2	12950	9570
240	ENX18C03SSWV	5.5	3.15	3.8	86.6	15165	10755
300	ENX19C03SSWV	5.5	3.15	3.9	93.0	17630	12090
400	ENX20C03SSWV	5.5	3.15	4.2	100.0	20970	13845
500	ENX21C03SSWV	5.5	3.15	4.4	108.6	25250	15985

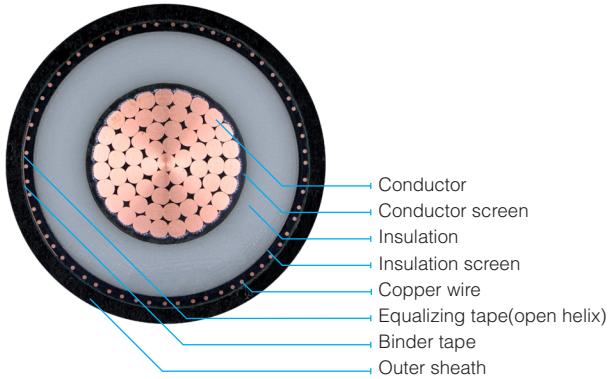
Electrical Data

Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
35	0.524	0.6684	-	-	0.167	0.161		
50	0.387	0.4939	0.641	0.8221	0.175	0.150		
70	0.268	0.3423	0.443	0.5683	0.196	0.141		
95	0.193	0.2470	0.320	0.4108	0.219	0.134		
120	0.153	0.1963	0.253	0.3251	0.238	0.128		
150	0.124	0.1597	0.206	0.2651	0.254	0.126		
185	0.0991	0.1284	0.164	0.2116	0.278	0.120		
240	0.0754	0.0991	0.125	0.1621	0.307	0.116		
300	0.0601	0.0805	0.100	0.1306	0.339	0.112		
400	0.0470	0.0649	0.0778	0.1030	0.373	0.109		
500	0.0366	0.0531	0.0605	0.0818	0.420	0.105		

The above data is approximate and subjected to manufacturing tolerance
 this data is applicable also for 12.7/22 kV

18/30 (36) kV - Single Core Cable

Copper or Aluminium
Circular Compacted Conductor
SC/XLPE/SC Insulation
Copper Wires Screen
PVC Jacket



Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminium	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
50	DNX12C01SUV	8.0	2.0	32.1	1325	1040
70	DNX13C01SUV	8.0	2.0	33.7	1565	1150
95	DNX14C01SUV	8.0	2.1	35.6	1875	1300
120	DNX15C01SUV	8.0	2.1	37.1	2145	1415
150	DNX16C01SUV	8.0	2.2	38.7	2535	1640
185	DNX17C01SUV	8.0	2.2	40.6	2930	1810
240	DNX18C01SUV	8.0	2.3	43.0	3530	2065
300	DNX19C01SUV	8.0	2.4	45.7	4195	2355
400	DNX20C01SUV	8.0	2.5	48.8	5165	2800
500	DNX21C01SUV	8.0	2.6	52.7	6320	3240
630	DNX22C01SUV	8.0	2.7	56.4	7710	3830

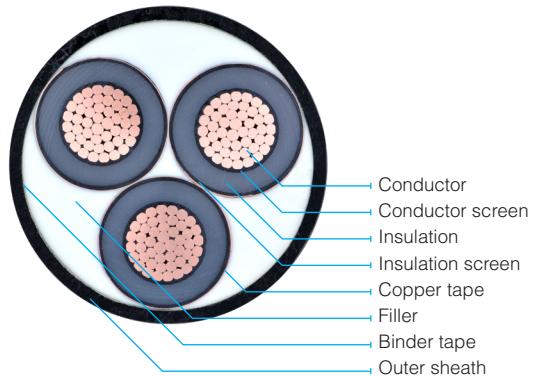
Electrical Data

Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance Trefoil (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
50	0.387	0.4938	0.641	0.8220	0.137	0.177		
70	0.268	0.3422	0.443	0.5683	0.152	0.167		
95	0.193	0.2468	0.320	0.4107	0.168	0.159		
120	0.153	0.1960	0.253	0.3249	0.181	0.152		
150	0.124	0.1593	0.206	0.2648	0.192	0.148		
185	0.0991	0.1279	0.164	0.2112	0.209	0.142		
240	0.0754	0.0983	0.125	0.1616	0.229	0.136		
300	0.0601	0.0794	0.100	0.1299	0.251	0.132		
400	0.0470	0.0636	0.0778	0.1021	0.275	0.128		
500	0.0366	0.0514	0.0605	0.0807	0.308	0.123		
630	0.0283	0.0421	0.0469	0.0642	0.339	0.119		

The above data is approximate and subjected to manufacturing tolerance
this data is applicable also for 19/33 kV

18/30 (36) kV - Multi Core Cable

Copper or Aluminium
 Circular Compacted Conductor
 SC/XLPE/SC Insulation
 Copper Tape Screen
 PVC Jacket



Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminium	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
50	DNX12C03SUV	8.0	3.1	63.9	4190	3330
70	DNX13C03SUV	8.0	3.2	67.6	5055	3800
95	DNX14C03SUV	8.0	3.3	71.5	5995	4265
120	DNX15C03SUV	8.0	3.5	75.1	6675	4490
150	DNX16C03SUV	8.0	3.6	77.9	8040	5355
185	DNX17C03SUV	8.0	3.7	82.2	9345	5965
240	DNX18C03SUV	8.0	3.8	87.2	11205	6795
300	DNX19C03SUV	8.0	4.0	93.0	13435	7895
400	DNX20C03SUV	8.0	4.2	99.2	16400	9280
500	DNX21C03SUV	8.0	4.4	107.6	20120	10855

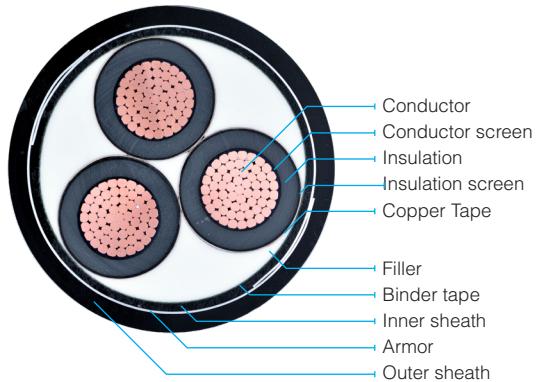
Electrical Data

Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
50	0.387	0.4938	0.641	0.8220	0.137	0.166		
70	0.268	0.3423	0.443	0.5683	0.152	0.156		
95	0.193	0.2469	0.320	0.4107	0.168	0.149		
120	0.153	0.1961	0.253	0.3250	0.181	0.142		
150	0.124	0.1595	0.206	0.2649	0.192	0.138		
185	0.0991	0.1282	0.164	0.2114	0.209	0.132		
240	0.0754	0.0986	0.125	0.1618	0.229	0.127		
300	0.0601	0.0799	0.100	0.1302	0.251	0.123		
400	0.0470	0.0642	0.0778	0.1025	0.275	0.118		
500	0.0366	0.0523	0.0605	0.0812	0.308	0.114		

The above data is approximate and subjected to manufacturing tolerance
 this data is applicable also for 19/33 kV

18/30 (36) kV - Multi Core Cable

Copper or Aluminium
 Circular Compacted Conductor
 SC/XLPE/SC Insulation
 Copper Tape Screen
 Double Steel Tape Armouring
 PVC Jacket



Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Steel Tape Thickness	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminium	mm	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
50	DNX12C03SSTV	8.0	0.5	3.3	69.9	5830	4970
70	DNX13C03SSTV	8.0	0.5	3.4	73.6	6785	5530
95	DNX14C03SSTV	8.0	0.5	3.5	77.7	7860	6130
120	DNX15C03SSTV	8.0	0.8	3.7	82.7	9700	7515
150	DNX16C03SSTV	8.0	0.8	3.8	85.5	10865	8175
185	DNX17C03SSTV	8.0	0.8	3.9	90.0	12360	8980
240	DNX18C03SSTV	8.0	0.8	4.1	95.4	14495	10085
300	DNX19C03SSTV	8.0	0.8	4.2	101.2	16935	11395
400	DNX20C03SSTV	8.0	0.8	4.5	107.8	20230	13105
500	DNX21C03SSTV	8.0	0.8	4.7	116.4	24320	15050

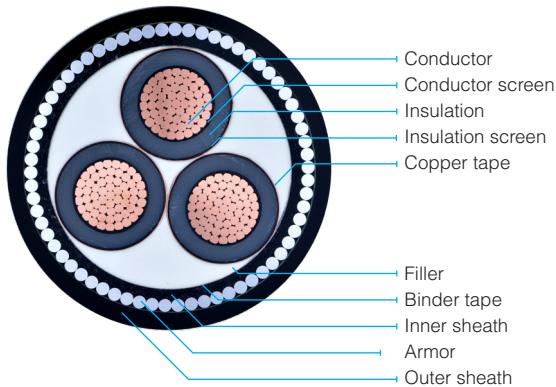
Electrical Data

Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
50	0.387	0.4938	0.641	0.8220	0.137	0.166		
70	0.268	0.3423	0.443	0.5683	0.152	0.156		
95	0.193	0.2469	0.320	0.4107	0.168	0.149		
120	0.153	0.1961	0.253	0.3250	0.181	0.142		
150	0.124	0.1595	0.206	0.2649	0.192	0.138		
185	0.0991	0.1282	0.164	0.2114	0.209	0.132		
240	0.0754	0.0986	0.125	0.1618	0.229	0.127		
300	0.0601	0.0799	0.100	0.1302	0.251	0.123		
400	0.0470	0.0642	0.0778	0.1025	0.275	0.118		
500	0.0366	0.0523	0.0605	0.0812	0.308	0.114		

The above data is approximate and subjected to manufacturing tolerance
 this data is applicable also for 19/33 kV

18/30 (36) kV - Multi Core Cable

Copper or Aluminium
 Circular Compacted Conductor
 SC/XLPE/SC Insulation
 Copper Tape Screen
 Steel Wire Armouring
 PVC Jacket



Nominal Cross sectional area	Cable code	Nominal Insulation Thickness	Steel Wire Diameter	Nominal Sheath Thickness	Approximate Overall Diameter	Approximate Weight	
mm ²	N: Copper A: Aluminium	mm	mm	mm	mm	Copper Kg/Km	Aluminium Kg/Km
50	DNX12C03SSWV	8.0	3.15	3.4	74.3	8525	7670
70	DNX13C03SSWV	8.0	3.15	3.5	78.0	9620	8365
95	DNX14C03SSWV	8.0	3.15	3.7	82.3	10920	9190
120	DNX15C03SSWV	8.0	3.15	3.8	85.9	12130	9945
150	DNX16C03SSWV	8.0	3.15	3.9	89.3	13335	10645
185	DNX17C03SSWV	8.0	3.15	4.0	93.8	14975	11595
240	DNX18C03SSWV	8.0	3.15	4.2	99.2	17295	12885
300	DNX19C03SSWV	8.0	3.15	4.3	105.0	19910	14375
400	DNX20C03SSWV	8.0	3.15	4.6	111.6	23375	16250
500	DNX21C03SSWV	8.0	3.15	4.8	120.2	27695	18430

Electrical Data

Nominal Cross sectional area	Maximum Conductor Resistance		Maximum Conductor Resistance		Capacitance	Reactance (60 Hz)		
	Copper		Aluminium					
	DC at 20 °C	AC at 90 °C	DC at 20 °C	AC at 90 °C				
mm ²	Ω/Km	Ω/Km	Ω/Km	Ω/Km	μf/km	Ω/Km		
50	0.387	0.4938	0.641	0.8220	0.137	0.166		
70	0.268	0.3423	0.443	0.5683	0.152	0.156		
95	0.193	0.2469	0.320	0.4107	0.168	0.149		
120	0.153	0.1961	0.253	0.3250	0.181	0.142		
150	0.124	0.1595	0.206	0.2649	0.192	0.138		
185	0.0991	0.1282	0.164	0.2114	0.209	0.132		
240	0.0754	0.0986	0.125	0.1618	0.229	0.127		
300	0.0601	0.0799	0.100	0.1302	0.251	0.123		
400	0.0470	0.0642	0.0778	0.1025	0.275	0.118		
500	0.0366	0.0523	0.0605	0.0812	0.308	0.114		

The above data is approximate and subjected to manufacturing tolerance

CURRENT RATING



Current Ratings

Methods of Installation:

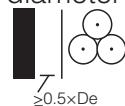
Current ratings are tabulated for cables installed in the following conditions:

- Ambient air temperature	30°C
- Ground temperature	20°C
- Thermal resistivity of soil	1.2°C.m/W
- Depth of laying	1m
-Maximum conductor temperature	90°C
-Screens bonded at both ends.	

1. Single-core cables in air

The cables are assumed to be spaced at least 0.5 times the cable diameter from any vertical surface and installed on brackets or ladder racks as follows:

a. Three cables in trefoil formation touching throughout their length



b. Three cables in horizontal flat formation touching throughout their length



2. Single-core cables buried direct

Current ratings are given for cables buried direct in the ground at a depth of 1.0 m under the following conditions:

a. Three cables in trefoil formation touching throughout their length

b. Three cables in horizontal flat formation touching throughout their length

3. Three-core cables

Current ratings are given for three-core cables installed under the following conditions:



a. Single cable in air spaced at least 0.3 times the cable diameter from any vertical surface

b. Single cable buried direct in the ground at a depth of 1.0 m

De: external diameter of the cable.

Current Ratings

Medium Voltage Cables 3.6/6.0 kV TO 18/30 kV

A. Single Core Cables

Nominal Cross sectional area mm ²	CURRENT CARRYING CAPACITY IN AMPERES (A)							
	In Air				In Ground			
	Copper		Aluminium		Copper		Aluminium	
Trefoil	Flat (touched)	Trefoil	Flat (touched)	Trefoil	Flat (touched)	Trefoil	Flat (touched)	
35	197	202	-	-	176	176	-	-
50	235	241	182	186	207	207	160	161
70	293	300	227	233	252	251	196	196
95	357	365	277	284	301	301	234	234
120	412	421	320	328	341	341	266	266
150	465	473	362	370	379	377	296	295
185	533	544	418	427	427	424	335	334
240	627	637	493	503	490	485	386	384
300	716	727	567	578	548	542	435	432
400	815	821	657	666	609	596	491	485
500	935	938	766	774	679	661	557	548
630	1058	1058	885	892	750	726	628	615

B. Three Core Cables (Unarmoured)

Nominal Cross sectional area mm ²	CURRENT CARRYING CAPACITY IN AMPERES (A)			
	In Air		In Ground	
	Copper	Aluminium	Copper	Aluminium
Trefoil	Flat (touched)	Trefoil	Flat (touched)	
35	180	-	168	-
50	213	165	197	153
70	265	206	241	187
95	322	250	288	223
120	365	288	324	254
150	412	325	362	283
185	470	373	408	321
240	551	438	470	371
300	635	502	530	418
400	712	580	589	476
500	822	672	662	541

Current Ratings

Medium Voltage Cables 3.6/6.0 kV TO 18/30 kV

C. Three Core Cables (STA)

Nominal Cross sectional area mm ²	CURRENT CARRYING CAPACITY IN AMPERES (A)			
	In Air		In Ground	
	Copper	Aluminium	Copper	Aluminium
35	180	-	167	-
50	213	165	196	152
70	260	205	237	186
95	314	248	282	221
120	360	285	320	251
150	406	322	356	280
185	463	369	400	317
240	538	432	459	366
300	616	493	514	411
400	682	566	564	465
500	777	651	626	525

D. Three Core Cables (SWA)

Nominal Cross sectional area mm ²	CURRENT CARRYING CAPACITY IN AMPERES (A)			
	In Air		In Ground	
	Copper	Aluminium	Copper	Aluminium
35	183	-	168	-
50	216	168	197	153
70	263	208	237	186
95	318	251	282	222
120	363	288	318	251
150	409	326	353	280
185	462	371	394	315
240	534	432	448	361
300	605	490	496	403
400	663	558	538	451
500	745	635	587	503

Certificates

DNV·GL

KEMA TYPE TEST CERTIFICATE OF COMPLETE TYPE TESTS

was issued to

Red Sea Cables Company (RESCAB)

Yanbu, Saudi Arabia

for the test object:

three-core

power cable

Type: 8,7/15 kV 3x500mm² AL/XLPE/STA/PVC Cable

Rating: 8,7/15 (17,5) kV - 3x500mm² - AL - XLPE

manufactured by

Red Sea Cables Company (RESCAB)

Yanbu, Saudi Arabia

The test object has successfully passed the required type tests of

IEC 60502-2

The test results are recorded in Certificate No.

1219-18

This Certificate was issued on 16 July 2018.

DNV GL Netherlands B.V.



J.P. Fonteijne
Executive Vice President
KEMA Laboratories

KEMA
Laboratories



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Certificates

DNV·GL

KEMA TYPE TEST CERTIFICATE OF COMPLETE TYPE TESTS

was issued to

Red Sea Cables Company (RESCAB)

Yanbu, Saudi Arabia

for the test object:

three-core

power cable

Type: 18/30 kV 3x240 mm² Cu/XLPE/STA/PVC Cable

Rating: 18/30 (36) kV – 3x240mm² – Cu - XLPE

manufactured by

Red Sea Cables Company (RESCAB)

Yanbu, Saudi Arabia

The test object has successfully passed the required type tests of

IEC 60502-2

The test results are recorded in Certificate No.

1221-18

This Certificate was issued on 16 July 2018.

DNV GL Netherlands B.V.



J.P. Ponteijne
Executive Vice President
KEMA Laboratories

KEMA
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Certificates

DNV-GL

KEMA TYPE TEST CERTIFICATE OF COMPLETE TYPE TESTS

was issued to

Red Sea Cables Company (RESCAB)

Yanbu, Saudi Arabia

for the test object:

single-core

power cable

Type: 18/30 kV 1x500 mm² Cu/XLPE/PVC Cable

Rating: 18/30 (36) kV – 1x500mm² – Cu - XLPE

manufactured by

Red Sea Cables Company (RESCAB)

Yanbu, Saudi Arabia

The test object has successfully passed the required type tests of

IEC 60502-2

The test results are recorded in Certificate No.

1220-18

This Certificate was issued on 16 July 2018.

DNV GL Netherlands B.V.



J.P. Ponteijne

Executive Vice President
KEMA Laboratories

KEMA

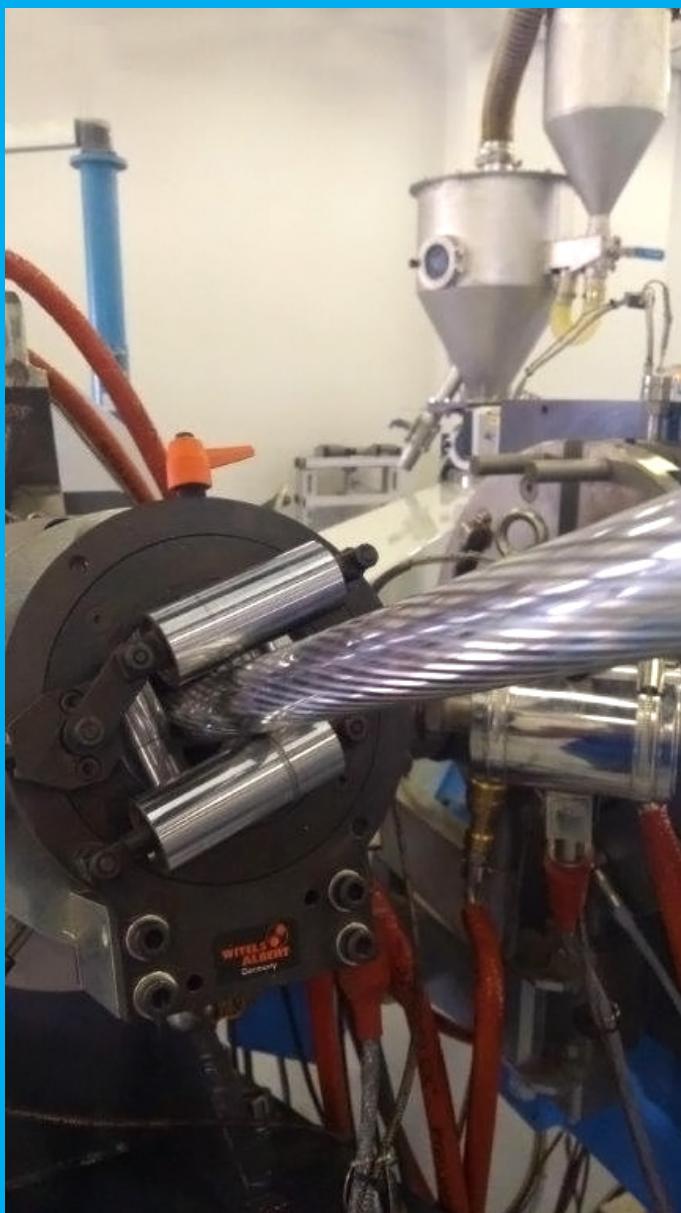
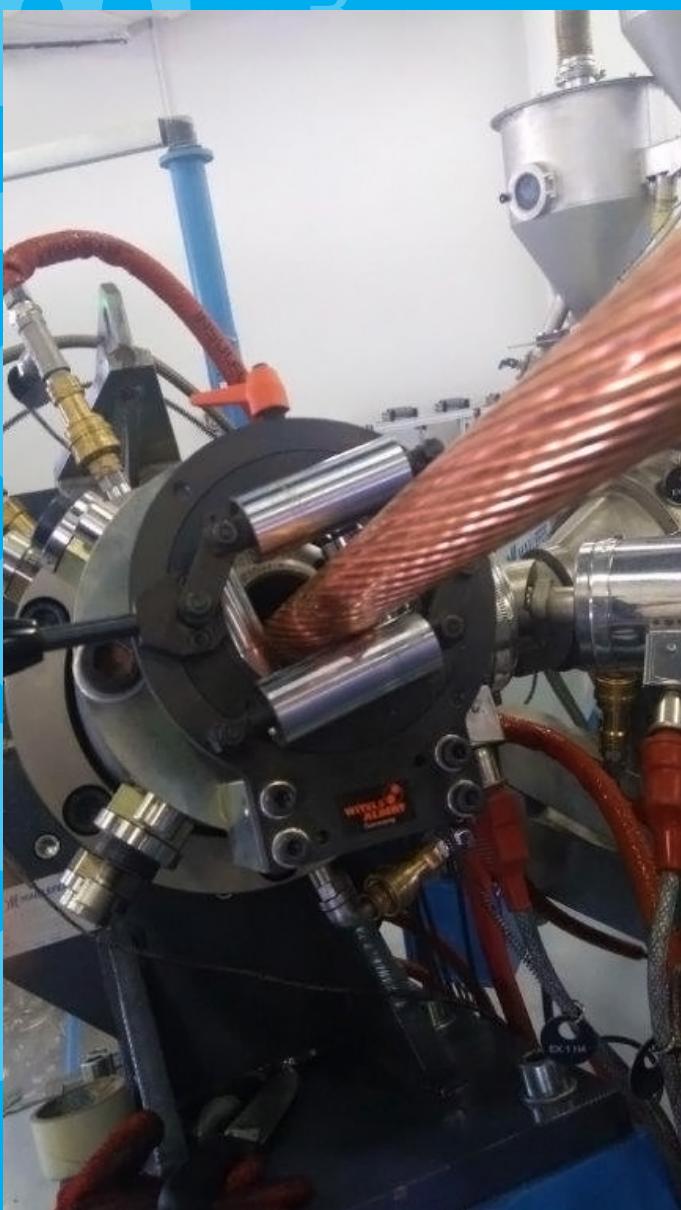
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3



RED SEA CABLES



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