



• Application

These high voltage power cables are engineered for a variety of demanding installations. They are ideal for power transmission in ground installations, outdoors, indoors, and within cable ducts. Suitable for power stations, industrial plants, and distribution networks, these cables provide reliable performance in critical power applications.

• Performance

Voltage rating $U_0/U(U_m)$: 19/33(36)kV
 Mechanical performance:
 Minimum bending radius of single core: 15 x overall diameter
 Temperature rating:
 Fixed: 0°C to +90°C
 Initial temperature at short-circuit condition (S.C.C) for metallic screen: 80°C
 Maximum conductor temperature during short-circuit: 250°C
 Fire performance:
 Flame retardant according to IEC/EN 60332-1-2 standard
 Reduced emission of halogens chlorine <15%

• Construction

Conductor: Class 2 stranded copper conductor
 Conductor Screen: Semi-conductive XLPE (Cross-Linked Polyethylene)
 Insulation: XLPE (Cross-Linked Polyethylene)
 Insulation Screen: Semi-conductive XLPE (Cross-Linked Polyethylene)
 Metallic Screen: Individual or collective overall copper tape screen
 Filler: PET (polyethylene terephthalate) fibres
 Separator: Binding tape
 Inner Sheath: PVC (Polyvinyl chloride)
 Armour:
 Single-core conductor: AWA (Aluminium Wire Armouring)
 Multi-core conductor: SWA (Steel Wire Armouring)
 Outer Sheath: PVC (Polyvinyl chloride)
 Sheath Colour: Red, black

• Specification

-BS 6622, EN 60228, IEC 60502-2
 -Flame Retardant according to IEC/EN 60332-1-2

• Eastful Cable Lab



We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.
 CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

• Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rheinland and CCS.



• National Green Factory



Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China. We are committed to the development of high-end, intelligent and green manufacturing industry.

*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

● Technical Parameters

Physical Performance Parameters					
Number of Cores	Nominal Cross Section Area	Nominal Insulation Thickness	Nominal Outer Sheath Thickness	Nominal Overall Dia.	Nominal Weight
-	mm ²	mm	mm	mm	kg/km
1	70	8	2.2	38.8	2077
1	95	8	2.3	40.3	2393
1	120	8	2.3	41.7	2692
1	150	8	2.4	44.7	3193
1	185	8	2.5	46.4	3623
1	240	8	2.6	49	4309
1	300	8	2.6	51.6	4999
1	400	8	2.7	54.4	5956
1	500	8	2.8	58	7107
1	630	8	3	63.3	8783
1	800	8	3.1	67.6	10766
3	70	8	3.5	77.6	9625
3	95	8	3.7	81	10827
3	120	8	3.8	84.4	12043
3	150	8	3.9	88.1	13379
3	185	8	4	91.5	14800
3	240	8	4.2	97.1	17324
3	300	8	4.3	102.7	19777
3	400	8	4.6	109.1	23228

● Technical Parameters

Electrical Performance Parameters (Copper Conductor)						
Single Core Cables						
Nominal Cross Section Area	Max. Conductor D.C. Resistance at 20 °C		Max. Conductor A.C. Resistance at Operating Temp. and 50Hz			
mm ²	Ω/km		Ω/km			
70	0.268		0.342			
95	0.193		0.2465			
120	0.153		0.1957			
150	0.124		0.1589			
185	0.0991		0.1273			
240	0.0754		0.0975			
300	0.0601		0.0784			
400	0.047		0.0623			
500	0.0366		0.0498			
630	0.0283		0.0401			
800	0.0221		0.0332			
Capacitance	Charging Current	Dielectric Losses	Reactance at 50 Hz	Conductor S.C.C For 1 Sec	Current Rating	
μF/km	A/km	W/km	Ω/km	kA	Laid in ground	Laid in free air
0.159	0.947	72	0.146	10.02	275	308
0.171	1.022	77.64	0.141	13.59	326	369
0.184	1.101	83.67	0.135	17.17	368	421
0.199	1.191	90.51	0.132	21.46	406	470
0.213	1.275	96.88	0.128	26.47	440	528
0.236	1.408	107.03	0.122	34.34	496	608
0.258	1.541	117.11	0.118	42.93	545	679
0.282	1.684	127.99	0.113	57.23	597	758
0.313	1.87	142.16	0.109	71.54	650	844
0.356	2.127	161.68	0.106	90.14	699	931
0.394	2.35	178.65	0.102	114.47	744	1013

● Technical Parameters

Electrical Performance Parameters						
Multicore Cables						
Nominal Cross Section Area	Max. Conductor DC Resistance at 20 °C		Maxi. Conductor AC Resistance at Operating Temp. and 50Hz			
mm ²	Ω/km		Ω/km			
70	0.268		0.3421			
95	0.193		0.2466			
120	0.153		0.1958			
150	0.124		0.1591			
185	0.0991		0.1276			
240	0.0754		0.0979			
300	0.0601		0.079			
400	0.047		0.063			

Capacitance	Charging Current	Dielectric Losses	Reactance at 50 Hz	Conductor S.C.C For 1 Sec	Current Rating	
					Laid in ground	Laid in free air
μF/km	A/km	W/km	Ω/km	kA	A	A
0.19	0.947	72	0.128	10.02	264	281
0.205	1.022	77.64	0.123	13.59	312	336
0.221	1.101	83.67	0.118	17.17	354	383
0.239	1.191	90.51	0.114	21.46	395	432
0.256	1.275	96.88	0.11	26.47	443	489
0.283	1.408	107.03	0.106	34.34	507	567
0.31	1.541	117.11	0.102	42.93	567	641
0.338	1.684	127.99	0.098	57.23	633	724

Laying conditions at trefoil formation are as below:

-Soil thermal resistivity 100 °C.Cm/Watt

-Burial depth 0.8 m

-Ground temperature 20 °C | Air temperature 30 °C | Frequency 50 Hz

De-rating Factor							
Air Temperature	De-rating Factor	Ground Temperature	De-rating Factor	Ground Thermal Resistivity	De-rating Factor	Depth of Laying	De-rating Factor
°C	-	°C	-	km/W	-	m	-
25	1.00	10	1.03	0.9	1.06	0.80	1.00
30	0.96	15	1.00	1.0	1.04	1.00	0.97
35	0.92	20	0.97	1.2	1.00	1.25	0.95
40	0.88	25	0.93	1.5	0.92	1.50	0.94
45	0.83	30	0.83	2.0	0.82	1.75	0.93
50	0.78	35	0.86	2.5	0.74	2.00	0.91
55	0.73	40	0.82	3.0	0.68	2.50	0.90