



• Application

These medium voltage power cables are highly versatile and suitable for a range of demanding environments. They are designed for installation in power supply stations, indoors in cable ducts, outdoors, underground, and even in water. Additionally, these cables are ideal for use on cable trays in industrial settings, switchboards, and power stations, providing reliable and robust power distribution in diverse conditions.

• Performance

Voltage rating $U_0/U(U_m)$: 12.7/22(24)kV
 Mechanical performance:
 Minimum bending radius (fixed): 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

• Construction

Conductor: Class 2 stranded copper
 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, IEC/EN 60228
 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	5.5	2.1	33.6	1717
1	95	5.5	2.1	34.9	2013
1	120	5.5	2.2	36.5	2318
1	150	5.5	2.2	38.1	2646
1	185	5.5	2.3	39.8	3048
1	240	5.5	2.3	42.2	3688
1	300	5.5	2.5	46.2	4515
1	400	5.5	2.6	49	5430
1	500	5.5	2.7	52.8	6593
1	630	5.5	2.8	57.7	8162
1	800	5.5	2.9	62	10092
3	70	5.5	3.1	64	6986
3	95	5.5	3.2	67.2	8072
3	120	5.5	3.4	72.4	10002
3	150	5.5	3.5	76.1	11266
3	185	5.5	3.6	79.7	12665
3	240	5.5	3.8	85.5	15126
3	300	5.5	3.9	90.9	17436
3	400	5.5	4.2	97.1	20706

● Technical Parameters

Electrical Performance Parameters						
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		0.3421			
95	0.193		0.2466			
120	0.153		0.1957			
150	0.124		0.159			
185	0.0991		0.1275			
240	0.0754		0.0977			
300	0.0601		0.0786			
400	0.047		0.0625			
500	0.0366		0.0501			
630	0.0283		0.0404			
800	0.0221		0.0336			
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
0.209	0.833	42.32	0.137	10.02	276	306
0.227	0.905	45.96	0.132	13.59	328	366
0.246	0.982	49.86	0.126	17.17	369	418
0.268	1.069	54.30	0.122	21.46	411	468
0.288	1.151	58.45	0.118	26.47	449	530
0.321	1.281	65.06	0.113	34.34	508	611
0.353	1.41	71.65	0.111	42.93	547	675
0.388	1.551	78.77	0.107	57.23	597	753
0.434	1.733	88.07	0.103	71.54	647	834
0.498	1.986	100.89	0.100	90.14	697	921
0.553	2.205	112.06	0.097	114.47	741	1002

● Technical Parameters

Electrical Performance Parameters						
Multicore Cables						
Nominal Cross Section Area	Max. Conductor D.C. Resistance at 20 °C		Maxi. Conductor A.C. Resistance at Operating Temp. and 50Hz			
mm ²	Ω/km		Ω/km			
70	0.268		0.3422			
95	0.193		0.2467			
120	0.153		0.196			
150	0.124		0.1593			
185	0.0991		0.1279			
240	0.0754		0.0982			
300	0.0601		0.0794			
400	0.047		0.0636			

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	μf/km	kA	A	A
0.25	0.833	42.32	0.116	10.02	264	277
0.272	0.905	45.96	0.112	13.59	312	331
0.295	0.982	49.86	0.107	17.17	355	380
0.321	1.069	54.30	0.103	21.46	396	429
0.346	1.151	58.45	0.100	26.47	445	486
0.385	1.281	65.06	0.096	34.34	510	565
0.424	1.41	71.65	0.093	42.93	569	639
0.466	1.551	78.77	0.090	57.23	634	721

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