Application

These high voltage power cables are engineered for applications where mechanical protection is essential. They are suitable for mains enclosed in conduit, buried installations, or underground ducts in industrial plants, buildings, and transformer stations where mechanical resilience is required to withstand potential impacts and external stresses.

Performance

Voltage rating U_0/U(Um): 19/33kV
Mechanical performance (minimum bending Radius):
Single core unarmoured cable: 20 x overall diameter
Single core AWA armoured cable: 15 x overall diameter
Three core unarmoured cable: 15 x overall diameter
Three core SWA armoured cable: 12 x overall diameter
Thermal performance:
Maximum operating temperature: 90℃
Maximum short-circuit temperature: 250℃ (Max. 5s)
Minimum service temperature: -10℃
Fire performance:
Flame retardant according to IEC/EN 60332-1-2 standard
Reduced emission of halogens chlorine <15%

Construction

Conductor: Stranded compacted copper or aluminum conductor, class 2
Conductor Screen: Semi-conductive compound
Insulation: XLPE (Cross-linked polyethylene)
Alternative: EPR (Ethylene Propylene Rubber)
Insulation Screen: Semi-conductive compound
Metallic Screen: Individual concentric copper wires or copper tape
Optional Filler: PET (Polyethylene terephthalate) fibres
Binding Tape: Polyester tape or non-woven fabric
Optional Inner Sheath: PVC (Polyvinyl chloride)
Alternative: LSZH (Low Smoke Zero Halogen)
Optional Armour:
Single-core conductor: AWA (Aluminum Wire Armoring)
Three-core conductor: SWA (Steel Wire Armoring)
Outer Sheath:
PVC (Polyvinyl chloride)
Alternative: LDPE, MDPE (Low/Medium Density Polyethylene)
Alternative: LSZH (Low Smoke Zero Halogen)
Conductor Shape
Single Core: Circular, circular compacted
Three Core: Circular, circular compacted, sectorial

Specification

-AS 1429, IEC/EN 60228, IEC 60502-2

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 Rhineland 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

No.of Cores	Nominal Cross Section Area	Nominal Dia. of Conductor	Nominal Thickness of Insulation	Max. Resistance of Conductor				Approx. Short Circuit Current			
				D.C. at 20℃		A.C. at 90℃		Conductor(1s)		Copper Wire Screen(1s)	
				Copper	Aluminum	Copper	Aluminum	Copper	Aluminum	Copper	Aluminum
-	mm^2	mm	mm	Ω/km	Ω/km	Ω/km	Ω/km	kA	kA	kA	kA
1	50	8.2	8.0	0.387	0.641	0.494	0.0822	7.2	4.7	7.1	4.4
1	70	9.8	8.0	0.268	0.443	0.342	0.568	10.0	6.6	10.0	6.4
1	95	11.5	8.0	0.193	0.320	0.247	0.411	13.6	9.0	13.5	8.8
1	120	12.9	8.0	0.153	0.253	0.196	0.325	17.2	11.3	13.5	10.0
1	150	14.3	8.0	0.124	0.206	0.159	0.265	21.5	14.2	13.5	13.5
1	185	16.1	8.0	0.0991	0.164	0.128	0.211	26.5	17.5	13.5	13.5
1	240	18.3	8.0	0.0754	0.125	0.0984	0.162	34.3	22.7	13.5	13.5
1	300	20.8	8.0	0.0601	0.100	0.0796	0.130	42.9	28.3	13.5	13.5
1	400	23.5	8.0	0.0470	0.0778	0.0631	0.102	57.2	37.8	13.5	13.5
1	500	26.6	8.0	0.0366	0.0605	0.0508	0.0802	71.5	47.2	13.5	13.5
3	50	8.2	8.0	0.387	0.641	0.494	0.0822	7.2	4.7	7.1	4.4
3	70	9.8	8.0	0.268	0.443	0.342	0.568	10.0	6.6	10.0	6.4
3	95	11.5	8.0	0.193	0.320	0.247	0.411	13.6	9.0	13.5	8.8
3	120	12.9	8.0	0.153	0.253	0.196	0.325	17.2	11.3	13.5	10.0
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