



## • Application

XLPE insulated power cables with rated voltage 12/20kV are used for medium voltage power distribution, serving as transformer feeders in substations, and in power plants, industrial installations, residential areas, and mining operations. These cables are suitable for dry or wet locations, fixed installations in air, direct burial in the ground, or in ducts where higher mechanical protection is required.

## • Performance

Voltage Rating:  $U_0/U(M)$ : 12/20(24)kV  
 Chemical Performance: Resistant to chemicals, UV, and oils  
 Mechanical Performance (Minimum Bending Radius):  
 Single core unarmoured cable: 20 x overall diameter  
 Single core AWA or aluminum tape armoured cable: 15 x overall diameter  
 Three core unarmoured cable: 15 x overall diameter  
 Three core SWA or STA armoured cable: 12 x overall diameter  
 Thermal Performance:  
 Maximum operating temperature: 90°C  
 Maximum short-circuit temperature: 250°C (Max. 5s)  
 Minimum service temperature: -10°C  
 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 and/or copper tape  
 Filler: PET (polyethylene terephthalate) fibers  
 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) or aluminum tape  
 Three-core conductor: SWA (Steel Wire Armoring) or galvanized steel tape (single or double layer, flat or corrugated)  
 Outer Sheath: PVC (Polyvinyl chloride)  
 Alternative: LDPE, MDPE (Low/Medium Density Polyethylene)  
 Alternative: LSZH (Low Smoke Zero Halogen)

## • Construction

Conductor Shape  
 Single Core: Circular, circular compacted  
 Three Core: Circular, circular compacted, sectorial

## • Specification

-IEC 60502-2, IEC/EN 60228

## • 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

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°C		A.C. at 90°C		Conductor(1s)		Copper Wire Screen(1s)	
				Copper	Aluminum	Copper	Aluminum	Copper	Aluminum	Unarmored	AWA
-	mm <sup>2</sup>	mm	mm	Ω/km	Ω/km	Ω/km	Ω/km	kA	kA	kA	kA
1	35	7.1	5.5	0.524	-	0.668	-	5.0	-	1.96	-
1	50	8.3	5.5	0.387	0.641	0.494	0.822	7.2	4.7	1.96	2.39
1	70	9.7	5.5	0.268	0.443	0.342	0.568	10.0	6.6	1.96	2.39
1	95	11.5	5.5	0.193	0.320	0.247	0.411	13.6	9.0	1.96	2.39
1	120	12.9	5.5	0.153	0.253	0.196	0.325	17.2	11.3	1.96	2.39
1	150	14.3	5.5	0.124	0.206	0.159	0.265	21.5	14.2	3.1	3.7
1	185	15.9	5.5	0.0991	0.164	0.128	0.211	26.5	17.5	3.1	3.7
1	240	18.3	5.5	0.0754	0.125	0.0984	0.162	34.3	22.7	3.1	3.7
1	300	20.6	5.5	0.0601	0.100	0.0796	0.130	42.9	28.3	3.1	3.7
1	400	23.5	5.5	0.0470	0.0778	0.0631	0.102	57.2	37.8	4.33	5.18
1	500	26.6	5.5	0.0366	0.0605	0.0508	0.0802	71.5	47.2	4.33	5.18
1	630	30.4	5.5	0.0283	0.0469	0.0434	0.0651	90.1	59.0	4.33	5.18
3	35	7.1	5.5	0.524	-	0.669	-	5.0	-	1.96	-
3	50	8.3	5.5	0.387	-	0.494	-	7.15	-	1.96	-
3	70	9.7	5.5	0.268	0.443	0.344	0.569	10.01	6.56	1.96	1.96
3	95	11.5	5.5	0.193	0.320	0.247	0.411	13.59	8.90	1.96	1.96
3	120	12.9	5.5	0.153	0.253	0.196	0.325	17.16	11.24	1.96	1.96
3	150	14.3	5.5	0.124	0.206	0.161	0.265	21.45	14.06	3.1	3.1
3	185	15.9	5.5	0.0991	0.164	0.129	0.212	26.46	17.33	3.1	3.1
3	240	18.3	5.5	0.0754	0.125	0.099	0.163	34.32	22.49	3.1	3.1
3	300	20.6	5.5	0.0601	0.100	0.0815	0.131	42.90	28.11	3.1	3.1
3	400	23.5	5.5	0.0470	0.0778	0.0660	0.103	57.20	37.48	4.33	4.33