Application

The AS/NZS 5000.1 standard XLPE insulated power cables are versatile solutions for mains, submains, and subcircuit power distribution systems. They are suitable for various installations, including those enclosed in conduit, buried directly underground, or placed in underground ducts in buildings and industrial plants where mechanical damage is not a concern. These cables are also available with reduced earth core configurations.

Performance

Electrical Performance: Rated U_0/U: 0.6/1kV, ensuring efficient power transmission.
Chemical Performance: Resistant to chemicals, UV rays, and oils, ensuring durability and reliability in various environments.
Mechanical Performance: Minimum bending radius of 15 times the overall diameter ensures flexibility during installation.
Terminal Performance:
Maximum Service Temperature: 90℃
Maximum Short-Circuit Temperature: 250℃ (max. 5s)
Minimum Service Temperature: -10℃

Construction

Conductor: Plain annealed copper conductor for optimal conductivity.
Insulation: XLPE (Cross-linked Polyethylene) insulation provides excellent electrical properties and thermal stability.
Outer Sheath: PVC 5V-90 (Polyvinyl Chloride) offers additional protection and insulation.
Core Identification:
Three cores: Red, White, Blue
Three cores + Earth: Red, White, Blue, Green/Yellow
Four cores: Red, White, Blue, Black
Four cores + Earth: Red, White, Blue, Black, Green/Yellow
Sheath Colour: Black, providing added protection and a uniform appearance.

Specification

-AS/NZS 5000.1, AS/NZS 3008, AS/NZS 1125
-SAA-173128-EA

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

Physical Performance Parameters								
No.of Cores	Nominal Cross Section Area	No. of Stranding Wires in Conductor	Nominal Thickness of Insulation	Nominal Cross Section Area of Earth Conductor	Nominal Insulation Thickness of Earth Conductor	Nominal Thickness of Sheath	Nominal Overall Dia.	Nominal Weight
-	mm^2	mm	mm	mm^2	mm	mm	mm	kg/km
3	10	7/1.35	0.7	-	-	1.4	15.3	435
3	16	7/1.70	0.7	-	-	1.4	17.6	625
3	25	7/2.14	0.9	-	-	1.4	21.5	950
3+1	10	7/1.35	0.7	4	0.7	1.4	16.0	475
3+1	16	7/1.70	0.7	6	0.7	1.4	18.3	690
3+1	25	7/2.14	0.9	6	0.7	1.4	21.8	1020
3+1	35	7/2.65	0.9	10	0.7	1.4	26.9	1400
3+1	50	19/1.89	1.0	16	0.7	1.4	30.7	1900
3+1	70	19/2.24	1.1	25	0.9	1.4	35.9	2600
3+1	95	19/2.65	1.1	25	0.9	1.5	38.0	3050
3+1	120	19/2.94	1.2	35	0.9	1.6	41.8	4200
3+1	150	19/3.28	1.4	50	1.0	1.7	43.0	5250
3+1	185	37/2.65	1.6	70	1.1	1.8	48.4	6620
3+1	240	37/2.94	1.7	95	1.1	2.0	54.5	8720
4	10	7/1.35	0.7	-	-	1.4	16.7	550
4	16	7/1.70	0.7	-	-	1.4	19.2	800
4	25	7/2.14	0.9	-	-	1.4	23.6	1250
4+E	10	7/1.35	0.7	4	0.7	1.4	16.0	475
4+E	16	7/1.70	0.7	6	0.7	1.4	18.3	690
4+E	25	7/2.14	0.9	6	0.7	1.4	21.8	1020
4+E	35	7/2.65	0.9	10	0.7	1.4	26.9	1400
4+E	50	19/1.89	1.0	16	0.7	1.4	30.7	1900
4+E	70	19/2.24	1.1	25	1.1	1.4	35.9	2600
4+E	95	19/2.65	1.1	25	0.9	1.5	38.0	3050
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Technical Parameters

Electrical Performance Parameters							
Nominal Cross Section Area	Current Rating in air	Current Rating buried directly	Current Rating buried in duct	Max. D.C. Resistance at 20℃	Max. A.C. Resistance at 90℃	Reactance	3 Phase Voltage Drop at 90℃
mm^2	A	A	A	Ω/km	Ω/km	Ω/km	mV/A
10	68	91	68	1.83	2.33	00840	4.05
16	83	110	83	1.15	1.47	0.0805	2.55
25	110	145	110	0.727	0.927	0.0808	1.61
35	135	170	135	0.524	0.669	0.0786	1.17
50	170	205	160	0.387	0.494	0.0751	0.868
70	215	250	200	0.268	0.343	0.0741	0.609
95	265	300	240	0.193	0.248	0.0725	0.450
120	305	345	275	0.153	0.197	0.0713	0.366
150	350	385	310	0.124	0.160	0.0718	0.307
185	405	435	355	0.0991	0.129	0.0720	0.259
240	480	500	420	0.0754	0.0998	0.0709	0.216