



• Application

These cables are suitable for underground distribution systems, wet and dry locations, industrial and commercial facilities, substations, utility networks, critical infrastructure, and both temporary and permanent installations. Ideal for high load conditions and unbalanced systems.

• Performance

Operating Voltage: 15kV
 Temperature Rating:
 Normal Operation: Up to 90°C
 Emergency Overload: Up to 130°C
 Short Circuit Conditions: Up to 250°C
 Ambient Temperature Range: Suitable for environments ranging from -40°C to +90°C
 Mechanical Performance:
 Maximum Sidewall Pressure: 1000 lbs./FT
 Bending Radius: 12 times the cable diameter for fixed installations, 15 times for occasional flexing

• Construction

Conductor: Moisture-blocked class B compressed stranded soft drawn bare copper per ASTM B3 and ASTM B8
 Optional: Conductor moisture block and tinned copper per ASTM B33
 Conductor Shield: Conventional semi-conducting cross-linked copolymer
 Optional: Supersmooth conductor shield
 A conductor tape is used for cable size larger than or equal to 1500 kcmil
 Insulation: 175 Mils Tree Retardant Cross-Linked Polyethylene (TR-XLPE) with 100% insulation level
 Insulation Shield: Strippable semi-conducting cross-linked copolymer
 Concentric Neutral: Helically applied soft drawn bare copper full concentric neutral
 Overall Jacket: Linear Low-Density Polyethylene (LLDPE) Jacket, black with red extruded stripes

• Specification

-ASTM B3 Soft or Annealed Copper Wire
 -ASTM B8 Concentric-Lay-Stranded Copper Conductors
 -ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire
 -ICEA S-94-649 Standard for Concentric Neutral Cables Rated 5 - 46kV
 -AIEC CS-8 Specification for extruded dielectric shielded power cables rated for 5 through 46KV (Qualification Test Requirements)
 -Rural Utility Standard RUS 1728F-U1 or 1728.204 (Electric standards and specifications for materials and construction)
 -UL 1072 Listed as MV 90 When Specified
 -Optional CSA 68.5: -40°C and MV 90°C optional marking available upon request

• 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

Weights and Measurements											
Conductor Size	Conductor Overall Dia.	Insulation Overall Dia.	Insul. Thickness	Insulation Shield Overall Dia.	Concentric Neutral	Max. D.C. Resistance 25°C	Jacket Thickness	Approx. Overall Dia.	Approx. Weight	Min. Bending Radius	Max. Pull Tension
AWG/kcmil	inch	inch	mils	inch	No. x AWG	Ω/1000ft	mils	inch	lb/1000ft	inch	lb
2 (Solid)	0.257	0.645	175	0.735	16x14	0.164	50	0.963	701	7.7	530
2 (7)	0.282	0.663	175	0.753	16x14	0.164	50	0.981	689	7.8	530
2 (7)	0.282	0.695	175	0.785	16x14	0.164	50	1.013	713	8.1	530
1 (Solid)	0.289	0.677	175	0.767	20x14	0.131	50	0.995	825	8	669
1 (19)	0.322	0.702	175	0.792	20x14	0.131	50	1.02	811	8.2	669
1/0 (Solid)	0.324	0.712	175	0.802	25x14	0.105	50	1.03	975	8.2	844
1/0 (19)	0.361	0.749	175	0.839	25x14	0.105	50	1.067	994	8.5	844
1/0 (19)	0.361	0.742	175	0.832	16x12	0.103	50	1.093	986	8.7	844
2/0 (19)	0.405	0.793	175	0.883	32x14	0.082	50	1.111	1196	8.9	1064
3/0 (19)	0.456	0.844	175	0.934	25x12	0.066	50	1.196	1420	9.6	1342
4/0 (19)	0.512	0.9	175	0.99	32x12	0.051	50	1.252	1727	10	1692
250 (37)	0.558	0.954	175	1.044	25x10	0.041	50	1.348	2046	10.8	2000

Electrical and Engineering Data											
Conductor Size	D.C. Resistance @ 25°C	A.C. Resistance @ 90°C	Capacities Reactance @ 60Hz	Inductive Reactance @ 60Hz	Charging Current	Dielectric Loss	Zero Sequence Impedance	Positive Sequence Impedance	Short Circuit Current @ 30 Cycle	Allowable Ampacity in Duct 90°C	Allowable Ampacity Directly Buried 90°C
AWG/kcmil	Ω/1000ft	Ω/1000ft	MΩ/1000ft	Ω/1000ft	A/1000ft	W/1000ft	Ω/1000ft	Ω/1000ft	A	A	A
2 (Solid)	0.162	0.204	0.062	0.052	0.08	0.69	0.258+j0.772	0.204+j0.051	5579	155	195
2 (7)	0.162	0.204	0.058	0.05	0.085	0.74	0.258+j0.771	0.204+j0.052	5579	155	195
2 (7)	0.162	0.204	0.058	0.05	0.085	0.74	0.258+j0.771	0.204+j0.052	5579	155	195
1 (Solid)	0.128	0.162	0.057	0.05	0.086	0.74	0.216+j0.767	0.162+j0.048	6974	175	220
1 (19)	0.128	0.162	0.053	0.048	0.093	0.81	0.216+j0.765	0.162+j0.049	6974	175	220
1/0 (Solid)	0.102	0.128	0.053	0.048	0.093	0.81	0.182+j0.762	0.128+j0.046	8718	200	250
1/0 (19)	0.102	0.128	0.049	0.047	0.101	0.87	0.182+j0.761	0.128+j0.047	8718	200	250
1/0 (19)	0.102	0.128	0.049	0.047	0.101	0.87	0.182+j0.759	0.128+j0.048	8865	200	250
2/0 (19)	0.081	0.102	0.045	0.045	0.109	0.94	0.156+j0.756	0.102+j0.045	11159	225	280
3/0 (19)	0.064	0.081	0.041	0.044	0.119	1.03	0.135+j0.750	0.081+j0.044	13852	260	315
4/0 (19)	0.051	0.065	0.038	0.042	0.13	1.13	0.119+j0.745	0.065+j0.043	17730	295	355
250 (37)	0.043	0.056	0.036	0.042	0.137	1.19	0.111+j0.740	0.056+j0.042	22019	318	360

• Technical Parameters

Weights and Measurements (Metric)											
Conductor Size	Conductor Overall Dia.	Insulation Overall Dia.	Insul. Thickness	Insulation Shield Overall Dia.	Concentric Neutral	Max. D.C. Resistance 25°C	Jacket Thickness	Approx. Overall Dia.	Approx. Weight	Min. Bending Radius	Max. Pull Tension
AWG/kcmil	mm	mm	mm	mm	No. x AWG	Ω/km	mm	mm	kg/km	mm	N
2 (Solid)	6.53	16.38	4.44	18.67	16x14	0.54	1.27	24.46	1043	195.58	2359
2 (7)	7.16	16.84	4.44	19.13	16x14	0.54	1.27	24.92	1025	198.12	2359
2 (7)	7.16	17.65	4.44	19.94	16x14	0.54	1.27	25.73	1061	205.74	2359
1 (Solid)	7.34	17.2	4.44	19.48	20x14	0.43	1.27	25.27	1228	203.2	2977
1 (19)	8.18	17.83	4.44	20.12	20x14	0.43	1.27	25.91	1207	208.28	2977
1/0 (Solid)	8.23	18.08	4.44	20.37	25x14	0.34	1.27	26.16	1451	208.28	3756
1/0 (19)	9.17	19.02	4.44	21.31	25x14	0.34	1.27	27.1	1479	215.9	3756
1/0 (19)	9.17	18.85	4.44	21.13	16x12	0.34	1.27	27.76	1467	220.98	3756
2/0 (19)	10.29	20.14	4.44	22.43	32x14	0.27	1.27	28.22	1780	226.06	4735
3/0 (19)	11.58	21.44	4.44	23.72	25x12	0.22	1.27	30.38	2113	243.84	5972
4/0 (19)	13	22.86	4.44	25.15	32x12	0.17	1.27	31.8	2570	254	7529
250 (37)	14.17	24.23	4.44	26.52	25x10	0.13	1.27	34.24	3045	274.32	8900

Electrical and Engineering Data (Metric)											
Conductor Size	D.C. Resistance @ 25°C	A.C. Resistance @ 90°C	Capacities Reactance @ 60Hz	Inductive Reactance @ 60Hz	Charging Current	Dielectric Loss	Zero Sequence Impedance	Positive Sequence Impedance	Short Circuit Current @ 30 Cycle	Allowable Ampacity in Duct 90°C	Allowable Ampacity Directly Buried 90°C
AWG/kcmil	Ω/km	Ω/km	MΩ/km	Ω/km	A/km	W/km	Ω/1000ft	Ω/1000ft	A	A	A
2 (Solid)	0.5315	0.67	0.0189	0.1706	0.262	2.2638	0.258+j0.772	0.204+j0.051	5579	155	195
2 (7)	0.5315	0.67	0.0177	0.164	0.279	2.4278	0.258+j0.771	0.204+j0.052	5579	155	195
2 (7)	0.5315	0.67	0.0177	0.164	0.279	2.4278	0.258+j0.771	0.204+j0.052	5579	155	195
1 (Solid)	0.4199	0.53	0.0174	0.164	0.282	2.4278	0.216+j0.767	0.162+j0.048	6974	175	220
1 (19)	0.4199	0.53	0.0162	0.1575	0.305	2.6575	0.216+j0.765	0.162+j0.049	6974	175	220
1/0 (Solid)	0.3346	0.42	0.0162	0.1575	0.305	2.6575	0.182+j0.762	0.128+j0.046	8718	200	250
1/0 (19)	0.3346	0.42	0.0149	0.1542	0.331	2.8543	0.182+j0.761	0.128+j0.047	8718	200	250
1/0 (19)	0.3346	0.42	0.0149	0.1542	0.331	2.8543	0.182+j0.759	0.128+j0.048	8865	200	250
2/0 (19)	0.2657	0.33	0.0137	0.1476	0.358	3.084	0.156+j0.756	0.102+j0.045	11159	225	280
3/0 (19)	0.21	0.27	0.0125	0.1444	0.39	3.3793	0.135+j0.750	0.081+j0.044	13852	260	315
4/0 (19)	0.1673	0.21	0.0116	0.1378	0.427	3.7073	0.119+j0.745	0.065+j0.043	17730	295	355
250 (37)	0.1411	0.18	0.011	0.1378	0.449	3.9042	0.111+j0.740	0.056+j0.042	22019	318	360