



• Application

These cables are suitable for high-reliability distribution systems, critical infrastructure, longer cable runs, high load conditions, unbalanced systems, industrial and commercial facilities, substations, utility networks.

• Performance

Operating Voltage: 25kV
 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 Aluminum ASTM B231 1350 ¾ hard H16/H26 (Non Moisture Blocked Optional)
 Conductor Shield: Conventional semi-conducting cross-linked copolymer
 Optional: Supersmooth conductor shield
 Conductor tape is used for cable size larger than or equal to 1500 kcmil
 Insulation: 320 Mils Tree Retardant Cross-Linked Polyethylene with 133% 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 B231 Standard Specification for Concentric-Lay-Stranded Aluminum 1350 Conductors
 -ASTM B609 Standard Specification for Aluminum 1350 Round Wire, Annealed and Intermediate Tempers, for Electrical Purposes
 -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
1 (Solid)	0.289	0.967	320	1.057	13x14	0.202	50	1.285	794	10.3	502
1 (19)	0.322	1	320	1.11	13x14	0.202	50	1.338	837	10.7	502
1/0 (Solid)	0.324	1.002	320	1.112	16x14	0.164	50	1.34	900	10.7	633
1/0 (19)	0.351	1.029	320	1.139	16x14	0.164	50	1.367	920	10.9	633
2/0 (19)	0.395	1.073	320	1.183	20x14	0.131	50	1.411	1031	11.3	798
3/0 (19)	0.443	1.121	320	1.231	25x14	0.105	50	1.459	1167	11.7	1006
4/0 (19)	0.498	1.168	320	1.278	20x12	0.082	50	1.539	1389	12.3	1269
250 (37)	0.558	1.244	320	1.354	25x12	0.066	75	1.666	1602	13.3	1500
350 (37)	0.661	1.347	320	1.457	32x12	0.051	75	1.769	1923	14.2	2100

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
1 (Solid)	0.129	0.162	0.082	0.056	0.101	1.46	0.216+j0.755	0.162+j0.054	4533	140	170
1 (19)	0.211	0.266	0.077	0.054	0.108	1.56	0.320+j0.753	0.266+j0.055	4533	140	170
1/0 (Solid)	0.102	0.128	0.076	0.054	0.108	1.56	0.182+j0.750	0.128+j0.052	5579	155	195
1/0 (19)	0.167	0.211	0.073	0.053	0.114	1.65	0.265+j0.749	0.211+j0.053	5579	155	195
2/0 (19)	0.133	0.167	0.068	0.051	0.122	1.76	0.221+j0.745	0.167+j0.051	6974	180	220
3/0 (19)	0.105	0.132	0.063	0.049	0.132	1.91	0.186+j0.741	0.132+j0.049	8718	205	250
4/0 (19)	0.084	0.105	0.058	0.047	0.142	2.05	0.159+j0.737	0.105+j0.047	11159	235	285
250 (37)	0.071	0.09	0.054	0.047	0.152	2.19	0.144+j0.730	0.090+j0.047	13852	254	307
350 (37)	0.05	0.065	0.048	0.044	0.172	2.48	0.119+j0.724	0.065+j0.044	17730	305	365

● 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
1 (Solid)	7.34	24.56	8.13	26.85	13x14	0.66	1.27	32.64	1182	261.62	2234
1 (19)	8.18	25.4	8.13	28.19	13x14	0.66	1.27	33.99	1246	271.78	2234
1/0 (Solid)	8.23	25.45	8.13	28.24	16x14	0.54	1.27	34.04	1339	271.78	2817
1/0 (19)	8.92	26.14	8.13	28.93	16x14	0.54	1.27	34.72	1369	276.86	2817
2/0 (19)	10.03	27.25	8.13	30.05	20x14	0.43	1.27	35.84	1534	287.02	3551
3/0 (19)	11.25	28.47	8.13	31.27	25x14	0.34	1.27	37.06	1737	297.18	4477
4/0 (19)	12.65	29.67	8.13	32.46	20x12	0.27	1.27	39.09	2067	312.42	5647
250 (37)	14.17	31.6	8.13	34.39	25x12	0.22	1.91	42.32	2384	337.82	6675
350 (37)	16.79	34.21	8.13	37.01	32x12	0.17	1.91	44.93	2862	360.68	9345

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
1 (Solid)	0.4232	0.53	0.025	0.1837	0.331	4.79	0.216+j0.755	0.162+j0.054	4533	140	170
1 (19)	0.6923	0.87	0.0235	0.1772	0.354	5.1181	0.320+j0.753	0.266+j0.055	4533	140	170
1/0 (Solid)	0.3346	0.42	0.0232	0.1772	0.354	5.1181	0.182+j0.750	0.128+j0.052	5579	155	195
1/0 (19)	0.5479	0.69	0.0223	0.1739	0.374	5.4134	0.265+j0.749	0.211+j0.053	5579	155	195
2/0 (19)	0.4364	0.55	0.0207	0.1673	0.4	5.7743	0.221+j0.745	0.167+j0.051	6974	180	220
3/0 (19)	0.3445	0.43	0.0192	0.1608	0.433	6.2664	0.186+j0.741	0.132+j0.049	8718	205	250
4/0 (19)	0.2756	0.34	0.0177	0.1542	0.466	6.7257	0.159+j0.737	0.105+j0.047	11159	235	285
250 (37)	0.2329	0.3	0.0165	0.1542	0.499	7.185	0.144+j0.730	0.090+j0.047	13852	254	307
350 (37)	0.164	0.21	0.0146	0.1444	0.564	8.1365	0.119+j0.724	0.065+j0.044	17730	305	365