



• Application

These cables are suitable for light load conditions, cost-sensitive projects, residential and light commercial installations, industrial and commercial facilities, and substations.

• 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: 260 Mils Tree Retardant Cross-Linked Polyethylene with 100% insulation level
 Insulation Shield: Strippable semi-conducting cross-linked copolymer
 Concentric Neutral: Helically applied soft drawn bare copper one-third 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	0.847	260	0.937	6x14	0.438	50	1.165	590	9.3	502
1 (19)	0.322	0.88	260	0.97	6x14	0.438	50	1.198	609	9.6	502
1/0 (Solid)	0.324	0.882	260	0.972	6x14	0.438	50	1.2	632	9.6	633
1/0 (19)	0.351	0.902	260	0.992	6x14	0.438	50	1.22	622	9.8	633
1/0 (19)	0.351	0.902	260	0.992	6x14	0.438	50	1.22	622	9.8	633
2/0 (19)	0.395	0.945	260	1.035	7x14	0.375	50	1.263	686	10.1	798
3/0 (19)	0.443	1.001	260	1.111	9x14	0.292	50	1.339	824	10.7	1006
4/0 (19)	0.498	1.048	260	1.158	11x14	0.239	50	1.386	892	11.1	1269
4/0 (19)	0.498	1.048	260	1.158	11x14	0.239	50	1.386	892	11.1	1269
4/0 (19)	0.498	1.048	260	1.158	11x14	0.239	50	1.386	892	11.1	1269
250 (37)	0.558	1.124	260	1.234	13x14	0.202	50	1.462	1035	11.7	1500
350 (37)	0.661	1.221	260	1.331	18x14	0.146	50	1.559	1224	12.5	2100
350 (37)	0.661	1.227	260	1.337	18x14	0.146	50	1.565	1261	12.5	2100
500 (37)	0.789	1.349	260	1.459	16x12	0.103	75	1.774	1637	14.2	3000
750 (61)	0.968	1.538	260	1.648	24x12	0.069	75	1.963	2173	15.7	4500
1000 (61)	1.117	1.687	260	1.827	20x10	0.052	75	2.184	2779	17.5	6000

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	0.073	0.054	0.114	1.65	0.216+j0.759	0.162+j0.052	2092	140	175
1 (19)	0.211	0.266	0.068	0.052	0.121	1.75	0.320+j0.758	0.266+j0.052	2092	140	175
1/0 (Solid)	0.102	0.128	0.067	0.052	0.122	1.76	0.182+j0.755	0.128+j0.050	2092	155	195
1/0 (19)	0.167	0.211	0.064	0.05	0.129	1.86	0.265+j0.754	0.211+j0.050	2092	155	195
1/0 (19)	0.167	0.211	0.064	0.05	0.129	1.86	0.265+j0.754	0.211+j0.050	2092	155	195
2/0 (19)	0.133	0.167	0.059	0.049	0.139	2.01	0.221+j0.750	0.167+j0.048	2441	180	220
3/0 (19)	0.105	0.132	0.055	0.047	0.15	2.17	0.186+j0.745	0.132+j0.047	3138	200	250
4/0 (19)	0.084	0.105	0.051	0.045	0.163	2.35	0.159+j0.740	0.105+j0.045	3836	235	285
4/0 (19)	0.084	0.105	0.051	0.045	0.163	2.35	0.159+j0.740	0.105+j0.045	3836	235	285
4/0 (19)	0.084	0.105	0.051	0.045	0.163	2.35	0.159+j0.740	0.105+j0.045	3836	235	285
250 (37)	0.071	0.09	0.047	0.044	0.175	2.53	0.144+j0.736	0.090+j0.044	4533	256	309
350 (37)	0.05	0.065	0.042	0.042	0.198	2.86	0.119+j0.729	0.065+j0.042	6277	310	370
350 (37)	0.05	0.065	0.042	0.042	0.198	2.86	0.119+j0.729	0.065+j0.042	6277	310	370
500 (37)	0.035	0.046	0.036	0.04	0.226	3.26	0.100+j0.719	0.046+j0.041	8865	370	445
750 (61)	0.024	0.033	0.031	0.038	0.262	3.78	0.087+j0.709	0.033+j0.038	13298	460	525
1000 (61)	0.018	0.026	0.028	0.037	0.294	4.24	0.080+j0.702	0.026+j0.037	17615	520	575

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	21.51	6.6	23.8	6x14	1.44	1.27	29.59	878	236.22	2234
1 (19)	8.18	22.35	6.6	24.64	6x14	1.44	1.27	30.43	906	243.84	2234
1/0 (Solid)	8.23	22.4	6.6	24.69	6x14	1.44	1.27	30.48	941	243.84	2817
1/0 (19)	8.92	22.91	6.6	25.2	6x14	1.44	1.27	30.99	926	248.92	2817
1/0 (19)	8.92	22.91	6.6	25.2	6x14	1.44	1.27	30.99	926	248.92	2817
2/0 (19)	10.03	24	6.6	26.29	7x14	1.23	1.27	32.08	1021	256.54	3551
3/0 (19)	11.25	25.43	6.6	28.22	9x14	0.96	1.27	34.01	1226	271.78	4477
4/0 (19)	12.65	26.62	6.6	29.41	11x14	0.78	1.27	35.2	1327	281.94	5647
4/0 (19)	12.65	26.62	6.6	29.41	11x14	0.78	1.27	35.2	1327	281.94	5647
4/0 (19)	12.65	26.62	6.6	29.41	11x14	0.78	1.27	35.2	1327	281.94	5647
250 (37)	14.17	28.55	6.6	31.34	13x14	0.66	1.27	37.13	1540	297.18	6675
350 (37)	16.79	31.01	6.6	33.81	18x14	0.48	1.27	39.6	1822	317.5	9345
350 (37)	16.79	31.17	6.6	33.96	18x14	0.48	1.27	39.75	1877	317.5	9345
500 (37)	20.04	34.26	6.6	37.06	16x12	0.34	1.91	45.06	2436	360.68	13350
750 (61)	24.59	39.07	6.6	41.86	24x12	0.23	1.91	49.86	3234	398.78	20025
1000 (61)	28.37	42.85	6.6	46.41	20x10	0.17	1.91	55.47	4136	444.5	26700

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	0.0223	0.1772	0.374	5.4134	0.216+j0.759	0.162+j0.052	2092	140	175
1 (19)	0.6923	0.87	0.0207	0.1706	0.397	5.7415	0.320+j0.758	0.266+j0.052	2092	140	175
1/0 (Solid)	0.3346	0.42	0.0204	0.1706	0.4	5.7743	0.182+j0.755	0.128+j0.050	2092	155	195
1/0 (19)	0.5479	0.69	0.0195	0.164	0.423	6.1024	0.265+j0.754	0.211+j0.050	2092	155	195
1/0 (19)	0.5479	0.69	0.0195	0.164	0.423	6.1024	0.265+j0.754	0.211+j0.050	2092	155	195
2/0 (19)	0.4364	0.55	0.018	0.1608	0.456	6.5945	0.221+j0.750	0.167+j0.048	2441	180	220
3/0 (19)	0.3445	0.43	0.0168	0.1542	0.492	7.1194	0.186+j0.745	0.132+j0.047	3138	200	250
4/0 (19)	0.2756	0.34	0.0155	0.1476	0.535	7.71	0.159+j0.740	0.105+j0.045	3836	235	285
4/0 (19)	0.2756	0.34	0.0155	0.1476	0.535	7.71	0.159+j0.740	0.105+j0.045	3836	235	285
4/0 (19)	0.2756	0.34	0.0155	0.1476	0.535	7.71	0.159+j0.740	0.105+j0.045	3836	235	285
250 (37)	0.2329	0.3	0.0143	0.1444	0.574	8.3005	0.144+j0.736	0.090+j0.044	4533	256	309
350 (37)	0.164	0.21	0.0128	0.1378	0.65	9.3832	0.119+j0.729	0.065+j0.042	6277	310	370
350 (37)	0.164	0.21	0.0128	0.1378	0.65	9.3832	0.119+j0.729	0.065+j0.042	6277	310	370
500 (37)	0.1148	0.15	0.011	0.1312	0.741	10.6955	0.100+j0.719	0.046+j0.041	8865	370	445
750 (61)	0.0787	0.11	0.0094	0.1247	0.86	12.4016	0.087+j0.709	0.033+j0.038	13298	460	525
1000 (61)	0.0591	0.09	0.0085	0.1214	0.965	13.9108	0.080+j0.702	0.026+j0.037	17615	520	575