



• Application

These cables are suitable for high-reliability distribution systems, critical infrastructure, longer cable runs, light load conditions, cost-sensitive projects, residential and light commercial installations.

• 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 flexin

• 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 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	0.967	320	1.057	6x14	0.438	50	1.285	700	10.3	502
1 (19)	0.322	1	320	1.11	6x14	0.438	50	1.338	743	10.7	502
1/0 (Solid)	0.324	1.002	320	1.112	6x14	0.438	50	1.34	765	10.7	633
1/0 (19)	0.351	1.029	320	1.139	6x14	0.438	50	1.367	784	10.9	633
2/0 (19)	0.395	1.073	320	1.183	7x14	0.375	50	1.411	855	11.3	798
3/0 (19)	0.443	1.121	320	1.231	9x14	0.292	50	1.459	951	11.7	1006
4/0 (19)	0.498	1.176	320	1.286	11x14	0.239	50	1.514	1057	12.1	1269
250 (37)	0.558	1.244	320	1.354	13x14	0.202	50	1.582	1173	12.7	1500
350 (37)	0.661	1.347	320	1.457	18x14	0.146	75	1.735	1495	13.9	2100
500 (37)	0.789	1.475	320	1.585	16x12	0.103	75	1.897	1829	15.2	3000
750 (61)	0.968	1.664	320	1.804	24x12	0.069	75	2.116	2448	16.9	4500
1000 (61)	1.117	1.813	320	1.953	20x10	0.052	75	2.307	2980	18.5	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	0.082	0.056	0.101	1.46	0.216+j0.755	0.162+j0.054	2092	140	175
1 (19)	0.211	0.266	0.077	0.054	0.108	1.56	0.320+j0.753	0.266+j0.055	2092	140	175
1/0 (Solid)	0.102	0.128	0.076	0.054	0.108	1.56	0.182+j0.750	0.128+j0.052	2092	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	2092	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	2441	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	3138	200	250
4/0 (19)	0.084	0.105	0.058	0.047	0.142	2.05	0.159+j0.737	0.105+j0.047	3836	235	285
250 (37)	0.071	0.09	0.054	0.046	0.152	2.19	0.144+j0.733	0.090+j0.046	4533	256	309
350 (37)	0.05	0.065	0.048	0.044	0.172	2.48	0.119+j0.724	0.065+j0.044	6277	310	370
500 (37)	0.035	0.046	0.042	0.042	0.195	2.81	0.100+j0.716	0.046+j0.042	8865	370	445
750 (61)	0.024	0.033	0.036	0.04	0.226	3.26	0.087+j0.706	0.033+j0.040	13298	460	525
1000 (61)	0.018	0.026	0.032	0.038	0.253	3.65	0.080+j0.699	0.026+j0.038	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	24.56	8.13	26.85	6x14	1.44	1.27	32.64	1042	261.62	2234
1 (19)	8.18	25.4	8.13	28.19	6x14	1.44	1.27	33.99	1106	271.78	2234
1/0 (Solid)	8.23	25.45	8.13	28.24	6x14	1.44	1.27	34.04	1138	271.78	2817
1/0 (19)	8.92	26.14	8.13	28.93	6x14	1.44	1.27	34.72	1167	276.86	2817
2/0 (19)	10.03	27.25	8.13	30.05	7x14	1.23	1.27	35.84	1272	287.02	3551
3/0 (19)	11.25	28.47	8.13	31.27	9x14	0.96	1.27	37.06	1415	297.18	4477
4/0 (19)	12.65	29.87	8.13	32.66	11x14	0.78	1.27	38.46	1573	307.34	5647
250 (37)	14.17	31.6	8.13	34.39	13x14	0.66	1.27	40.18	1746	322.58	6675
350 (37)	16.79	34.21	8.13	37.01	18x14	0.48	1.91	44.07	2225	353.06	9345
500 (37)	20.04	37.47	8.13	40.26	16x12	0.34	1.91	48.18	2722	386.08	13350
750 (61)	24.59	42.27	8.13	45.82	24x12	0.23	1.91	53.75	3643	429.26	20025
1000 (61)	28.37	46.05	8.13	49.61	20x10	0.17	1.91	58.6	4435	469.9	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	0.025	0.1837	0.331	4.79	0.216+j0.755	0.162+j0.054	2092	140	175
1 (19)	0.6923	0.87	0.0235	0.1772	0.354	5.1181	0.320+j0.753	0.266+j0.055	2092	140	175
1/0 (Solid)	0.3346	0.42	0.0232	0.1772	0.354	5.1181	0.182+j0.750	0.128+j0.052	2092	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	2092	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	2441	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	3138	200	250
4/0 (19)	0.2756	0.34	0.0177	0.1542	0.466	6.7257	0.159+j0.737	0.105+j0.047	3836	235	285
250 (37)	0.2329	0.3	0.0165	0.1509	0.499	7.185	0.144+j0.733	0.090+j0.046	4533	256	309
350 (37)	0.164	0.21	0.0146	0.1444	0.564	8.1365	0.119+j0.724	0.065+j0.044	6277	310	370
500 (37)	0.1148	0.15	0.0128	0.1378	0.64	9.2192	0.100+j0.716	0.046+j0.042	8865	370	445
750 (61)	0.0787	0.11	0.011	0.1312	0.741	10.6955	0.087+j0.706	0.033+j0.040	13298	460	525
1000 (61)	0.0591	0.09	0.0098	0.1247	0.83	11.9751	0.080+j0.699	0.026+j0.038	17615	520	575