



● 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

● 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

-AEIC 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.

● Construction

Conductor: Aluminum, Class B compressed stranded per ASTM standards

Conductor Shield: Semi-conducting cross-linked copolymer

Insulation: 175 Mils Tree Retardant Cross-Linked Polyethylene (TR-XLPE) with 100% insulation level

Insulation Shield: Strippable semi-conducting cross-linked copolymer

Concentric Neutral: Full concentric neutral, helically applied soft drawn bare aluminum

Overall Jacket: Linear Low-Density Polyethylene (LLDPE), black with red extruded stripes

● 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

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	10x14	0.263	50	0.963	477	7.7	398
2 (7)	0.282	0.663	175	0.753	10x14	0.263	50	0.981	476	7.8	398
2 (7)	0.282	0.695	175	0.785	10x14	0.263	50	1.013	497	8.1	398
1 (Solid)	0.289	0.677	175	0.767	13x14	0.202	50	0.995	549	8	502
1 (19)	0.322	0.71	175	0.8	13x14	0.202	50	1.028	564	8.2	502
1/0 (Solid)	0.324	0.712	175	0.802	16x14	0.164	50	1.03	626	8.2	633
1/0 (19)	0.351	0.732	175	0.822	16x14	0.164	50	1.05	618	8.4	633
1/0 (19)	0.351	0.732	175	0.822	16x14	0.164	50	1.05	618	8.4	633
1/0 (19)	0.351	0.732	175	0.822	16x14	0.164	50	1.05	619	8.4	633
2/0 (19)	0.395	0.783	175	0.873	20x14	0.131	50	1.101	740	8.8	798
3/0 (19)	0.443	0.831	175	0.921	25x14	0.105	50	1.149	863	9.2	1006
4/0 (19)	0.498	0.878	175	0.968	20x12	0.083	50	1.229	1005	9.8	1269
4/0 (19)	0.498	0.878	175	0.968	20x12	0.083	50	1.229	1005	9.8	1269
4/0 (19)	0.498	0.878	175	0.968	13x10	0.08	50	1.271	1052	10.2	1269
250 (37)	0.558	0.954	175	1.044	25x12	0.066	50	1.306	1188	10.4	1500
350 (37)	0.661	1.057	175	1.167	32x12	0.051	50	1.429	1497	11.4	2100

All dimensions are nominal and subject to normal manufacturing tolerances

-Cable marked with this symbol is a standard stock item

-Pulling tension based on pulling eye directly connected to conductor

-Super Smooth Conductor Shield

-Solid Black Jacket

-Super Smooth Conductor Shield. HiDri Plus - moisture absorbing powder under jacket.

-HiDri Plus - moisture absorbing powder under jacket.

● Technical Parameters

Conductor Size	Electrical and Engineering Data										
	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	3487	120	150
2 (7)	0.266	0.336	0.058	0.05	0.085	0.74	0.390+j0.771	0.336+j0.052	3487	120	150
2 (7)	0.266	0.336	0.058	0.05	0.085	0.74	0.390+j0.771	0.336+j0.052	3487	120	150
1 (Solid)	0.129	0.162	0.057	0.05	0.086	0.74	0.216+j0.767	0.162+j0.048	4533	140	170
1 (19)	0.211	0.266	0.053	0.048	0.093	0.81	0.320+j0.765	0.266+j0.049	4533	140	170
1/0 (Solid)	0.102	0.128	0.053	0.048	0.093	0.81	0.182+j0.762	0.128+j0.046	5579	155	195
1/0 (19)	0.167	0.211	0.05	0.047	0.099	0.86	0.265+j0.761	0.211+j0.047	5579	155	195
1/0 (19)	0.167	0.211	0.05	0.047	0.099	0.86	0.265+j0.761	0.211+j0.047	5579	155	195
1/0 (19)	0.167	0.211	0.05	0.047	0.099	0.86	0.265+j0.761	0.211+j0.047	5579	155	195
2/0 (19)	0.133	0.167	0.046	0.045	0.107	0.93	0.221+j0.757	0.167+j0.045	6974	180	220
3/0 (19)	0.105	0.132	0.042	0.044	0.116	1	0.186+j0.752	0.132+j0.043	8718	205	250
4/0 (19)	0.084	0.105	0.039	0.043	0.127	1.1	0.159+j0.746	0.105+j0.042	11081	235	285
4/0 (19)	0.084	0.105	0.039	0.043	0.127	1.1	0.159+j0.746	0.105+j0.042	11081	235	285
4/0 (19)	0.084	0.105	0.039	0.043	0.127	1.1	0.159+j0.744	0.105+j0.043	11450	235	285
250 (37)	0.071	0.09	0.036	0.041	0.137	1.19	0.144+j0.741	0.090+j0.041	13852	254	307
350 (37)	0.05	0.065	0.031	0.039	0.156	1.35	0.119+j0.733	0.065+j0.040	17730	305	365

-Ampacities for Direct Buried are based on ICEA P-117-734-2016 Single-Conductor Solid Dielectric 15-35kV. Single Circuit Flat Direct Buried Figure 3

-Ampacities for Duct are based on ICEA P-117-734-2016 for Single-Conductor Solid Dielectric 15-35kV. Single Circuit Trefoil Conduit Figure 7.

-Sequence Impedance values are based on Rho Earth Resistivity: 100 Ohm-Meter/1000ft.

● 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	inch	inch	mils	inch	No. x AWG	Ω/1000ft	mils	inch	lb/1000ft	inch	N
2 (Solid)	6.53	16.38	4.44	18.67	10x14	0.86	1.27	24.46	710	195.58	1771
2 (7)	7.16	16.84	4.44	19.13	10x14	0.86	1.27	24.92	708	198.12	1771
2 (7)	7.16	17.65	4.44	19.94	10x14	0.86	1.27	25.73	740	205.74	1771
1 (Solid)	7.34	17.2	4.44	19.48	13x14	0.66	1.27	25.27	817	203.2	2234
1 (19)	8.18	18.03	4.44	20.32	13x14	0.66	1.27	26.11	839	208.28	2234
1/0 (Solid)	8.23	18.08	4.44	20.37	16x14	0.54	1.27	26.16	932	208.28	2817
1/0 (19)	8.92	18.59	4.44	20.88	16x14	0.54	1.27	26.67	920	213.36	2817
1/0 (19)	8.92	18.59	4.44	20.88	16x14	0.54	1.27	26.67	920	213.36	2817
1/0 (19)	8.92	18.59	4.44	20.88	16x14	0.54	1.27	26.67	921	213.36	2817
2/0 (19)	10.03	19.89	4.44	22.17	20x14	0.43	1.27	27.97	1101	223.52	3551
3/0 (19)	11.25	21.11	4.44	23.39	25x14	0.34	1.27	29.18	1284	233.68	4477
4/0 (19)	12.65	22.3	4.44	24.59	20x12	0.27	1.27	31.22	1496	248.92	5647
4/0 (19)	12.65	22.3	4.44	24.59	20x12	0.27	1.27	31.22	1496	248.92	5647
4/0 (19)	12.65	22.3	4.44	24.59	13x10	0.26	1.27	32.28	1566	259.08	5647
250 (37)	14.17	24.23	4.44	26.52	25x12	0.22	1.27	33.17	1768	264.16	6675
350 (37)	16.79	26.85	4.44	29.64	32x12	0.17	1.27	36.3	2228	289.56	9345

All dimensions are nominal and subject to normal manufacturing tolerances

-Cable marked with this symbol is a standard stock item

-Pulling tension based on pulling eye directly connected to conductor

-Super Smooth Conductor Shield

-Solid Black Jacket

-Super Smooth Conductor Shield. HiDri Plus - moisture absorbing powder under jacket.

-HiDri Plus - moisture absorbing powder under jacket.

● Technical Parameters

Conductor Size	Electrical and Engineering Data (Metric)										Allowable Ampacity Directly Buried 90°C
	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	
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	3487	120	150
2 (7)	0.8727	1.1	0.0177	0.164	0.279	2.4278	0.390+j0.771	0.336+j0.052	3487	120	150
2 (7)	0.8727	1.1	0.0177	0.164	0.279	2.4278	0.390+j0.771	0.336+j0.052	3487	120	150
1 (Solid)	0.4232	0.53	0.0174	0.164	0.282	2.4278	0.216+j0.767	0.162+j0.048	4533	140	170
1 (19)	0.6923	0.87	0.0162	0.1575	0.305	2.6575	0.320+j0.765	0.266+j0.049	4533	140	170
1/0 (Solid)	0.3346	0.42	0.0162	0.1575	0.305	2.6575	0.182+j0.762	0.128+j0.046	5579	155	195
1/0 (19)	0.5479	0.69	0.0152	0.1542	0.325	2.8215	0.265+j0.761	0.211+j0.047	5579	155	195
1/0 (19)	0.5479	0.69	0.0152	0.1542	0.325	2.8215	0.265+j0.761	0.211+j0.047	5579	155	195
1/0 (19)	0.5479	0.69	0.0152	0.1542	0.325	2.8215	0.265+j0.761	0.211+j0.047	5579	155	195
2/0 (19)	0.4364	0.55	0.014	0.1476	0.351	3.0512	0.221+j0.757	0.167+j0.045	6974	180	220
3/0 (19)	0.3445	0.43	0.0128	0.1444	0.381	3.2808	0.186+j0.752	0.132+j0.043	8718	205	250
4/0 (19)	0.2756	0.34	0.0119	0.1411	0.417	3.6089	0.159+j0.746	0.105+j0.042	11081	235	285
4/0 (19)	0.2756	0.34	0.0119	0.1411	0.417	3.6089	0.159+j0.746	0.105+j0.042	11081	235	285
4/0 (19)	0.2756	0.34	0.0119	0.1411	0.417	3.6089	0.159+j0.744	0.105+j0.043	11450	235	285
250 (37)	0.2329	0.3	0.011	0.1345	0.449	3.9042	0.144+j0.741	0.090+j0.041	13852	254	307
350 (37)	0.164	0.21	0.0094	0.128	0.512	4.4291	0.119+j0.733	0.065+j0.040	17730	305	365

-Ampacities for Direct Buried are based on ICEA P-117-734-2016 Single-Conductor Solid Dielectric 15-35kV. Single Circuit Flat Direct Buried Figure 3

-Ampacities for Duct are based on ICEA P-117-734-2016 for Single-Conductor Solid Dielectric 15-35kV. Single Circuit Trefoil Conduit Figure 7.

-Sequence Impedance values are based on Rho Earth Resistivity: 100 Ohm-Meter/1000ft.