



• Application

They are suitable for high-reliability distribution systems, industrial and commercial installations, critical infrastructure, longer cable runs, light load conditions, cost-sensitive projects, residential and light commercial installations, underground distribution systems, wet and dry locations, industrial and commercial facilities, and substations. Ideal for areas where neutral current is significantly lower than phase current.

• 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: Aluminum, Class B compressed stranded per ASTM standards
 Conductor Shield: Semi-conducting cross-linked copolymer
 Insulation: 220 Mils Tree Retardant Cross-Linked Polyethylene (TR-XLPE) with 133% insulation level
 Insulation Shield: Strippable semi-conducting cross-linked copolymer
 Concentric Neutral: One third neutral, helically applied soft drawn bare aluminum
 Overall Jacket: Linear Low-Density Polyethylene (LLDPE), 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 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	0.728	220	0.818	6x14	0.438	50	1.046	469	8.4	398
2 (7)	0.282	0.753	220	0.843	6x14	0.438	50	1.071	487	8.6	398
1 (Solid)	0.289	0.767	220	0.857	6x14	0.438	50	1.085	523	8.7	502
1 (19)	0.322	0.8	220	0.89	6x14	0.438	50	1.118	541	8.9	502
1/0 (Solid)	0.324	0.802	220	0.892	6x14	0.438	50	1.12	563	9	633
1/0 (19)	0.351	0.822	220	0.912	6x14	0.438	50	1.14	562	9.1	633
2/0 (19)	0.395	0.865	220	0.955	10x14	0.263	50	1.183	660	9.5	798
2/0 (19)	0.395	0.865	220	0.955	7x14	0.375	50	1.183	624	9.5	798
3/0 (19)	0.443	0.921	220	1.011	9x14	0.292	50	1.239	727	9.9	1006
4/0 (19)	0.498	0.968	220	1.058	11x14	0.239	50	1.286	803	10.3	1269
4/0 (19)	0.498	0.968	220	1.058	11x14	0.239	50	1.286	803	10.3	1269
250 (37)	0.558	1.038	220	1.148	13x14	0.202	50	1.376	930	11	1500
350 (37)	0.661	1.141	220	1.251	18x14	0.146	50	1.479	1147	11.8	2100
500 (37)	0.789	1.269	220	1.379	16x12	0.103	50	1.64	1491	13.1	3000
500 (37)	0.789	1.269	220	1.379	16x12	0.103	80	1.701	1555	13.6	3000
750 (61)	0.968	1.458	220	1.568	24x12	0.069	75	1.883	2075	15.1	4500
750 (61)	0.968	1.458	220	1.568	15x10	0.069	75	1.925	2102	15.4	4500
1000 (61)	1.117	1.607	220	1.747	20x10	0.052	75	2.104	2670	16.8	6000

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

-PowerGlide: Low coefficient jacket can be installed in duct without the aid of lubrication.

● Technical Parameters

Conductor Size	Electrical and Engineering Data										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/1000ft	Ω/1000ft	MΩ/1000ft	Ω/1000ft	A/1000ft	W/1000ft	Ω/1000ft	Ω/1000ft	A	A	A
2 (Solid)	0.162	0.204	0.071	0.054	0.07	0.61	0.258+j0.768	0.204+j0.053	2092	120	150
2 (7)	0.266	0.336	0.067	0.052	0.074	0.64	0.390+j0.767	0.336+j0.054	2092	120	150
1 (Solid)	0.129	0.162	0.066	0.052	0.075	0.65	0.216+j0.763	0.162+j0.050	2092	140	175
1 (19)	0.211	0.266	0.061	0.05	0.08	0.69	0.320+j0.761	0.266+j0.051	2092	140	175
1/0 (Solid)	0.102	0.128	0.061	0.05	0.081	0.7	0.182+j0.759	0.128+j0.048	2092	155	195
1/0 (19)	0.167	0.211	0.058	0.049	0.085	0.74	0.265+j0.757	0.211+j0.049	2092	155	195
2/0 (19)	0.133	0.167	0.053	0.047	0.092	0.8	0.221+j0.753	0.167+j0.047	3487	180	220
2/0 (19)	0.133	0.167	0.053	0.047	0.092	0.8	0.221+j0.753	0.167+j0.047	2441	180	220
3/0 (19)	0.105	0.132	0.049	0.045	0.1	0.87	0.186+j0.749	0.132+j0.045	3138	200	250
4/0 (19)	0.084	0.105	0.045	0.044	0.109	0.94	0.159+j0.744	0.105+j0.043	3836	235	285
4/0 (19)	0.084	0.105	0.045	0.044	0.109	0.94	0.159+j0.744	0.105+j0.043	3836	235	285
250 (37)	0.071	0.09	0.042	0.043	0.117	1.01	0.144+j0.739	0.090+j0.043	4533	256	309
350 (37)	0.05	0.065	0.037	0.04	0.133	1.15	0.119+j0.732	0.065+j0.040	6277	310	370
500 (37)	0.035	0.046	0.032	0.039	0.153	1.33	0.100+j0.721	0.046+j0.039	8865	370	445
500 (37)	0.035	0.046	0.032	0.039	0.153	1.33	0.100+j0.721	0.046+j0.039	8865	370	445
750 (61)	0.024	0.033	0.028	0.037	0.177	1.53	0.087+j0.712	0.033+j0.037	13298	460	525
750 (61)	0.024	0.033	0.028	0.038	0.177	1.53	0.087+j0.711	0.033+j0.038	13211	460	525
1000 (61)	0.018	0.026	0.025	0.036	0.2	1.73	0.080+j0.703	0.026+j0.036	17615	520	575

-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	18.49	5.59	20.78	6x14	1.44	1.27	26.57	698	213.36	1771
2 (7)	7.16	19.13	5.59	21.41	6x14	1.44	1.27	27.2	725	218.44	1771
1 (Solid)	7.34	19.48	5.59	21.77	6x14	1.44	1.27	27.56	778	220.98	2234
1 (19)	8.18	20.32	5.59	22.61	6x14	1.44	1.27	28.4	805	226.06	2234
1/0 (Solid)	8.23	20.37	5.59	22.66	6x14	1.44	1.27	28.45	838	228.6	2817
1/0 (19)	8.92	20.88	5.59	23.16	6x14	1.44	1.27	28.96	836	231.14	2817
2/0 (19)	10.03	21.97	5.59	24.26	10x14	0.86	1.27	30.05	982	241.3	3551
2/0 (19)	10.03	21.97	5.59	24.26	7x14	1.23	1.27	30.05	929	241.3	3551
3/0 (19)	11.25	23.39	5.59	25.68	9x14	0.96	1.27	31.47	1082	251.46	4477
4/0 (19)	12.65	24.59	5.59	26.87	11x14	0.78	1.27	32.66	1195	261.62	5647
4/0 (19)	12.65	24.59	5.59	26.87	11x14	0.78	1.27	32.66	1195	261.62	5647
250 (37)	14.17	26.37	5.59	29.16	13x14	0.66	1.27	34.95	1384	279.4	6675
350 (37)	16.79	28.98	5.59	31.78	18x14	0.48	1.27	37.57	1707	299.72	9345
500 (37)	20.04	32.23	5.59	35.03	16x12	0.34	1.27	41.66	2219	332.74	13350
500 (37)	20.04	32.23	5.59	35.03	16x12	0.34	2.03	43.21	2314	345.44	13350
750 (61)	24.59	37.03	5.59	39.83	24x12	0.23	1.91	47.83	3088	383.54	20025
750 (61)	24.59	37.03	5.59	39.83	15x10	0.23	1.91	48.89	3128	391.16	20025
1000 (61)	28.37	40.82	5.59	44.37	20x10	0.17	1.91	53.44	3973	426.72	26700

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

-PowerGlide: Low coefficient jacket can be installed in duct without the aid of lubrication.

• 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	0.0216	0.1772	0.23	2.0013	0.258+j0.768	0.204+j0.053	2092	120	150
2 (7)	0.8727	1.1	0.0204	0.1706	0.243	2.0997	0.390+j0.767	0.336+j0.054	2092	120	150
1 (Solid)	0.4232	0.53	0.0201	0.1706	0.246	2.1325	0.216+j0.763	0.162+j0.050	2092	140	175
1 (19)	0.6923	0.87	0.0186	0.164	0.262	2.2638	0.320+j0.761	0.266+j0.051	2092	140	175
1/0 (Solid)	0.3346	0.42	0.0186	0.164	0.266	2.2966	0.182+j0.759	0.128+j0.048	2092	155	195
1/0 (19)	0.5479	0.69	0.0177	0.1608	0.279	2.4278	0.265+j0.757	0.211+j0.049	2092	155	195
2/0 (19)	0.4364	0.55	0.0162	0.1542	0.302	2.6247	0.221+j0.753	0.167+j0.047	3487	180	220
2/0 (19)	0.4364	0.55	0.0162	0.1542	0.302	2.6247	0.221+j0.753	0.167+j0.047	2441	180	220
3/0 (19)	0.3445	0.43	0.0149	0.1476	0.328	2.8543	0.186+j0.749	0.132+j0.045	3138	200	250
4/0 (19)	0.2756	0.34	0.0137	0.1444	0.358	3.084	0.159+j0.744	0.105+j0.043	3836	235	285
4/0 (19)	0.2756	0.34	0.0137	0.1444	0.358	3.084	0.159+j0.744	0.105+j0.043	3836	235	285
250 (37)	0.2329	0.3	0.0128	0.1411	0.384	3.3136	0.144+j0.739	0.090+j0.043	4533	256	309
350 (37)	0.164	0.21	0.0113	0.1312	0.436	3.773	0.119+j0.732	0.065+j0.040	6277	310	370
500 (37)	0.1148	0.15	0.0098	0.128	0.502	4.3635	0.100+j0.721	0.046+j0.039	8865	370	445
500 (37)	0.1148	0.15	0.0098	0.128	0.502	4.3635	0.100+j0.721	0.046+j0.039	8865	370	445
750 (61)	0.0787	0.11	0.0085	0.1214	0.581	5.0197	0.087+j0.712	0.033+j0.037	13298	460	525
750 (61)	0.0787	0.11	0.0085	0.1247	0.581	5.0197	0.087+j0.711	0.033+j0.038	13211	460	525
1000 (61)	0.0591	0.09	0.0076	0.1181	0.656	5.6759	0.080+j0.703	0.026+j0.036	17615	520	575

-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.