



## • Application

35kV cables are suited for use in wet and dry areas, conduits, ducts, direct burial, sunlight, and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation. 130°C for emergency overload, and 250°C for short circuit conditions. Jacket types available that can be installed in conduit without the aid of lubrication. Rated for 1000 lbs./FT maximum sidewall pressure.

## • 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; Supersmooth conductor shield optional; A conductor tape is used for cable size larger than or equal to 1500 kcmil

Insulation: 420 Mils Tree Retardant Cross Linked Polyethylene 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; PowerGlide® LLDPE jacket optional

## • 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											
Cond. Size	Conductor Overall Dia.	Insulation Overall Dia.	Insul. Thickness	Insulation Shield Overall Dia.	Concentric Neutral	Neutral 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
4/0 (19)	0.498	1.376	420	1.486	32x14	0.082	75	1.764	1674	14.1	1269
250 (37)	0.558	1.444	420	1.554	25x12	0.066	75	1.866	1869	14.9	1500
350 (37)	0.661	1.547	420	1.687	32x12	0.051	75	1.999	2252	16	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

Electrical and Engineering Data											
Cond. Size	D.C. Resistance @ 25°C	A.C. Resistance @ 90°C	Capacitive 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
4/0 (19)	0.084	0.105	0.069	0.051	0.168	3.4	0.159+j0.730	0.105+j0.050	11159	240	280
250 (37)	0.071	0.09	0.064	0.049	0.18	3.6	0.144+j0.725	0.090+j0.050	13852	261	
350 (37)	0.05	0.065	0.057	0.047	0.201	4.1	0.119+j0.718	0.065+j0.047	17730	315	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.

Weights and Measurements (Metric)											
Cond. Size	Conductor Overall Dia.	Insulation Overall Dia.	Insul. Thickness	Insulation Shield Overall Dia.	Concentric Neutral	Neutral D.C. Resistance 25°C	Jacket Thickness	Approx. Overall Dia.	Approx. Weight	Min Bending Radius	Max Pull Tension
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