Application

This XLPE PVC 2 XHHW Aluminum Wire is designed for various applications, including wet and dry environments, conduits, ducts, troughs, trays, direct burial, aerial installation supported by a messenger, and locations where superior electrical properties are essential. These cables can operate continuously at a conductor temperature of up to 90°C for normal operation in wet and dry conditions, 130°C for emergency overload, and 250°C for short circuit conditions. They are suitable for use in Class I, II, and III, Division 2 hazardous locations as per NEC Article 501 and 502. Constructions with three or more conductors are listed for exposed runs (TCER) per NEC 336.10. These cables are silicone-free.

Construction

Conductor: Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B836 or compact bare AA-8000 series aluminum alloy, Class B stranded per ASTM.
Insulation: Cross-Linked Polyethylene (XLPE) Type XHHW-2.
Grounding Conductor: Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B836.
Filler: Paper filler (cable size 8 & 6 uses Polypropylene filler).
Binder: Polyester flat thread binder tape for cable sizes larger than 2 AWG.
Overall Jacket: Polyvinyl Chloride (PVC) Jacket.

Specification

-ASTM B800 8000 Series Aluminum Alloy Wire
-ASTM B836 Compact Rounded Stranded Aluminum Conductors
-UL 44 Thermoset-Insulated Wires and Cables
-UL 1277 Electrical Power and Control Tray Cables
-UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
-ICEA S-58-679 Control Cable Conductor Identification Method 3 (1-BLACK, 2-RED, 3-BLUE)
-ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
-IEEE 1202 FT4 Vertical Tray Flame Test (70,000 Btu/hr) and ICEA T-29-520 - (210,000 Btu/hr)

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

Physical Performance								
Size	Conductor Overall Dia.	Insulation Thickness	Insulation Overall Dia.	Ground	Jacket Thickness	Approx. Outer Dia.	Aluminum Weight	Approx. Weight
AWG/kcmil	inch	mil	inch	No. x AWG	mils	inch	lb/1000ft	lb/1000ft
8	0.134	45		1×8	60	0.604	63	180

Electrical Performance									
Size	Min Bending Radius	Max. Pull Tension	D.C. Resistance @ 25°C	A.C. Resistance @ 90°C	Inductive Reactance @ 60Hz	Shield Short Circuit Current 6 Cycles	Allowable Ampacity at 60°Ct	Allowable Ampacity At 75°Ct	Allowable Ampacity At 90°Ct
AWG/kcmil	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	A	A	A	A
8	2.4	297	1.07	1.345	0.034	3785	35	40	45