



# Triplex 600 Volt USE-2 HI-SCORE Underground Service Entrance

Aluminum Conductor. HI-SCORE Cross-linked Polyethylene (XLP) Insulation.

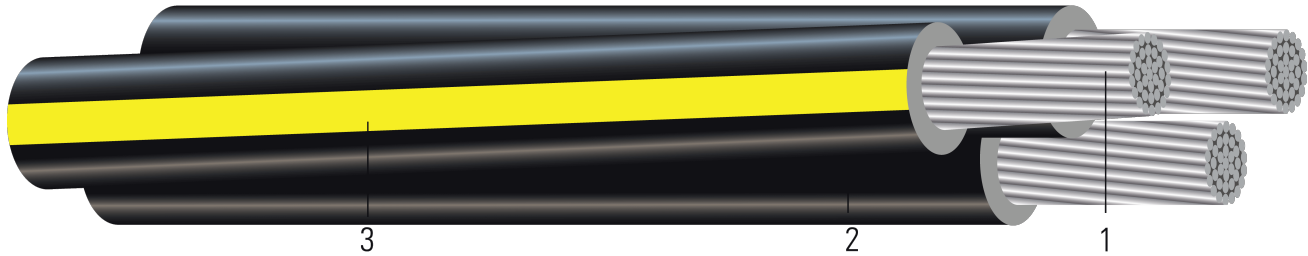


Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** Conductors are stranded, compressed 1350-H16/H26 (3/4 Hard) aluminum
2. **Insulation:** Rugged Cross Linked Polyethylene (XLPE) meeting the requirements of ANSI/ICEA S-81-570. LLDPE and HDPE or MDPE
3. **Neutral:** Cross Linked Polyethylene (XLPE) with three Yellow Extruded Stripes (YES)

For information about our [Cable-Rejuvenation Services](#) please visit us at: [Cable-Rejuvenation Services](#)  
You can email us at: [Cable-Rejuvenation Services](#)

## APPLICATIONS AND FEATURES:

Conductors are stranded, compressed 1350-H16/H26 (3/4 Hard) aluminum, insulated with cross-linked polyethylene. Especially suited for applications requiring superior resistance to mechanical damage. Neutrals are identified by three yellow extruded stripes. Cables with "YES" neutrals have sequential footage markers. Conductors are durably surface printed for identification. Two-phase conductors and one neutral conductor are cabled together to produce the triplex cable configuration. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions. UL listed as USE-2 per UL 854 Service-Entrance Cables.

## SPECIFICATIONS:

- 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
- ASTM B901 Standard Specification for Compressed Round Stranded Aluminum Conductors Using Single Input Wire Construction. *(The number of strands for both phase and neutral may differ)*
- UL 854 Service Entrance Cable
- ICEA S-81-570 Standard for 600 Volt Rated Cables of Ruggedized Design for Direct Burial Installations as Single Conductors or Assemblies of Single Conductors
- ICEA S-105-692 Standard For 600 Volt Single Layer Thermoset Insulated Utility Underground Distribution Cables





**Table 1 – Weights and Measurements**

Stock Number	Code Word	Phase Cond. Size	Phase Strand	Dia. Over Phase Conductor	Phase Insul. Thickness	Dia. Over Phase Insulation	Neutral Cond. Size	Neutral Strand	Neutral Insul. Thickness	Approx. OD	Approx. Weight
		AWG/ Kcmil	No.	inch	mil	inch	AWG/ Kcmil	No.	mil	inch	lb/1000ft
308411	Erskine	6	7	0.177	60	0.297	6	6	60	0.643	132
618576	Vassar	4	7	0.225	60	0.345	4	6	60	0.745	189
607483	Stephens	2	7	0.282	60	0.402	4	6	60	0.870	247
TBA	Ramapo	2	7	0.282	60	0.402	2	6	60	0.870	386
308452	Brenau	1/0	19	0.361	80	0.521	2	6	60	1.127	594
TBA	Bergen	1/0	19	0.361	80	0.521	1/0	7	80	1.127	630
308478	Converse	2/0	11	0.405	80	0.565	1	7	80	1.198	482
TBA	Hunter	2/0	19	0.405	80	0.565	2/0	11	80	1.222	762
TBA	Hollins	3/0	19	0.456	80	0.616	1/0	7	80	1.333	868
TBA	Rockland	3/0	19	0.456	80	0.616	3/0	15	80	1.333	929
612667	Sweetbriar	4/0	18	0.498	80	0.658	2/0	11	80	1.421	708
308510	Sweetbriar	4/0	18	0.498	80	0.658	2/0	11	80	1.421	708
TBA	Monmouth	4/0	19	0.512	80	0.672	4/0	17	80	1.454	1126
310748	Pratt	250	26	0.558	95	0.748	3/0	15	80	1.581	858
619996	Wesleyan	350	33	0.641	95	0.831	4/0	18	80	1.795	1119
308544	Wesleyan	350	30	0.661	95	0.851	4/0	17	80	1.794	1119
322073	Gloucester	350	30	0.661	95	0.851	3/0	15	80	1.794	1071
656744	Rider	500	37	0.789	95	0.979	350	24	95	2.052	1595
TBA	Holyoke	500	37	0.789	95	0.979	300	18	95	2.117	2314
TBA	Fairfield	750	61	0.968	110	1.188	500	30	95	2.568	3526

All dimensions are nominal and subject to normal manufacturing tolerances

1. The actual number of strands may differ for single input wire per ASTM B901





**Table 2 – Electrical and Engineering Data**

Code Word	Phase Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity in Duct 90°C
	AWG/Kcmil	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp
Erskine	6	2.6	472	0.674	0.812	0.051	50 / 55
Vassar	4	3.0	751	0.424	0.511	0.048	65 / 75
Stephens	2	3.5	1194	0.266	0.320	0.045	90 / 100
Ramapo	2	3.5	1194	0.266	0.320	0.045	90 / 100
Brenau	1/0	5.6	1900	0.167	0.201	0.044	120 / 135
Bergen	1/0	5.6	1900	0.167	0.201	0.044	120 / 135
Converse	2/0	6.0	2395	0.133	0.159	0.043	135 / 150
Hunter	2/0	6.1	2395	0.133	0.159	0.043	135 / 150
Hollins	3/0	6.7	3020	0.105	0.126	0.042	155 / 175
Rockland	3/0	6.7	3020	0.105	0.126	0.042	155 / 175
Sweetbriar	4/0	7.1	3808	0.084	0.100	0.041	180 / 205
Sweetbriar	4/0	7.1	3808	0.084	0.100	0.041	180 / 205
Monmouth	4/0	7.3	3808	0.084	0.100	0.041	180 / 205
Pratt	250	7.9	4500	0.071	0.086	0.041	205 / 230
Wesleyan	350	9.0	6300	0.050	0.062	0.040	250 / 280
Wesleyan	350	9.0	6300	0.050	0.062	0.040	250 / 280
Gloucester	350	9.0	6300	0.050	0.062	0.040	250 / 280
Rider	500	12.3	9000	0.035	0.044	0.039	310 / 350
Holyoke	500	12.7	9000	0.035	0.044	0.039	310 / 350
Fairfield	750	15.4	13500	0.024	0.031	0.038	385 / 435

Notes:

1. Inductive reactance assumes cables are cradled in conduit, and the neutral is carrying no current.
2. Triple parallel inductive reactance calculation assumes the phase conductors are adjacent to one another.
3. Conductors assumed to be reverse lay stranded, compressed construction.
4. Phase spacing assumes cables are touching.
5. Resistances shown are for the Phase conductors only.
6. Ampacity based on 90°C conductor temperature, 20°C ambient, RHO 90, 100% load factor.

