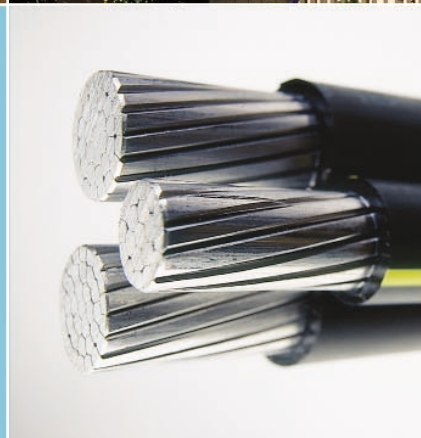


ALUMINUM
UNDERGROUND
SECONDARY 600 VOLT CABLES



Black Crosslinked
Polyethylene (XLPE)
with and without
TRISTRIFE®

grounded in service
wired to innovate™



Alcan Aluminum Underground Secondary 600 Volt Cables:

Alcan Cable's Underground Secondary 600 Volt Cables provide outstanding performance and reliability. Alcan provides a full range of underground 600 volt cables available as single conductor or with one, two or three phase conductors and a neutral twisted together, with no overall cover. The neutral conductor is equal in size to, or two sizes smaller than the phase conductors.

Product Application and Features:

- Designed for use in electric distribution circuits not exceeding 600 volts phase to phase and may be directly buried or installed in ducts.
- May be used in wet or dry locations at conductor temperatures not exceeding 90° C for normal operation, 130° C for emergency overloads and 250° C under short circuit conditions.
- Meets or exceeds industry requirements per ASTM B-231.
- To ensure exceptional product quality, Alcan underground 600 volt cable meets or exceeds requirements of ICEA S-105-692.

Product Construction:

Alcan Underground Secondary 600 Volt Cables are constructed of:

- Hard drawn Class B stranded compressed 1350 aluminum conductors. Three quarter hard (H26)1350 aluminum per ASTM B609 is available upon request.
- Black crosslinked polyethylene insulation on the phase conductors.
- TRISTRIPLE® cable features a neutral conductor that is insulated with black, weather resistant crosslinked polyethylene with three continuous extruded yellow polyethylene stripes located 120° apart. The identification stripes are weather resistant.
- In multiplexed cable assemblies, the phase conductors and neutral are twisted together with a left-hand lay not greater than 60 times the outside diameter of one phase conductor.



Product Markings:

Each conductor will display the following surface markings:

- Alcan (Plant of Manufacture), conductor size, AL 600V 90°C XLPE (Year of Manufacture).
- The center aluminum wire in each stranded conductor is indent printed "Alcan (Plant of Manufacture) (Year of Manufacture)."
- Sequential footage markings are printed every two feet on one phase conductor to ensure length measurement accuracy.
- "USE-2" per U.L. 854 available upon request.



UNDERGROUND SECONDARY 600 VOLT CABLES

Single Aluminum Conductor

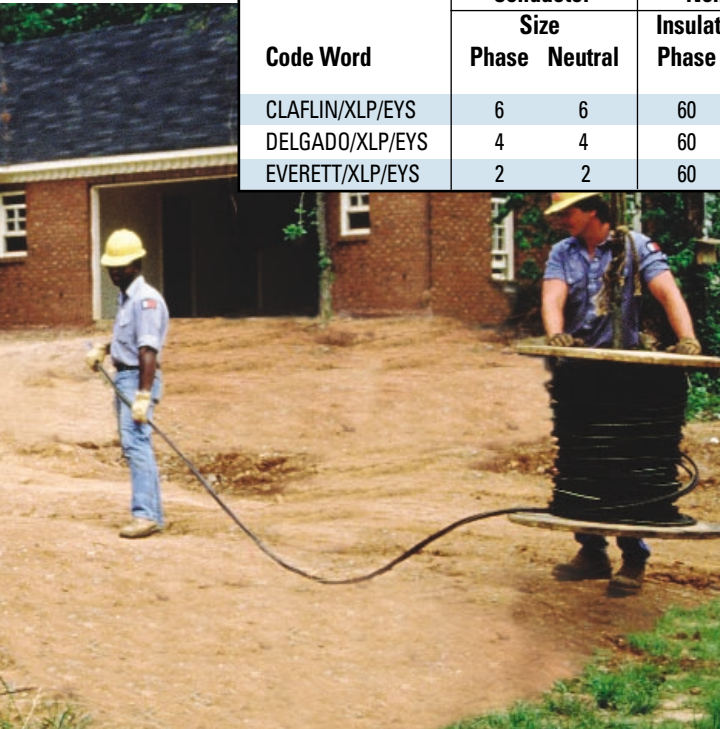
Code Word	Conductor Size	Nominal Insulation Mils	Approx O.D. Inches	ESTIMATED WT. LBS./1000 FT.		Ampacity* Directly Buried	Standard Package (Ft.)
				Aluminum	Total		
PRINCETON/XLP	6	60	0.298	25	44	108	2000
MERCER/XLP	4	60	0.345	39	63	140	2000
CLEMSON/XLP	2	60	0.403	62	92	180	2000
KENYON/XLP	1	80	0.473	78	121	203	1000
HARVARD/XLP	1/0	80	0.512	99	146	231	1000
YALE/XLP	2/0	80	0.555	125	177	263	1000
TUFTS/XLP	3/0	80	0.603	157	215	299	1000
BELOIT/XLP	4/0	80	0.658	198	263	338	1000
HOFSTRA/XLP	250	95	0.732	234	314	368	1000
GONZAGA/XLP	300	95	0.784	281	367	407	1000
RUTGERS/XLP	350	95	0.831	328	420	444	1000
DARTMOUTH/XLP	400	95	0.875	376	476	475	1000
EMORY/XLP	500	95	0.956	469	577	540	1000
DUKE/XLP	600	110	1.060	562	697	595	1000
FURMAN/XLP	700	110	1.127	656	804	645	1000
SEWANEE/XLP	750	110	1.159	703	853	667	1000
FORDHAM/XLP	1000	110	1.304	937	1108	800	1000

Duplexed Aluminum Conductor

Black Neutral – TRISTRIFE®

Code Word	Conductor Size		Nominal Insulation Mils		Approx O.D. Inches	ESTIMATED WT. LBS./1000 FT.		Ampacity* Directly Buried	Standard Package (Ft.)
	Phase	Neutral	Phase	Neutral		Aluminum	Total		
CLAFLIN/XLP/EYS	6	6	60	60	0.596	49	89	112	2000
DELGADO/XLP/EYS	4	4	60	60	0.690	79	127	146	2000
EVERETT/XLP/EYS	2	2	60	60	0.806	125	185	187	2000

* Ampacities are based on 90° C conductor temperature, 20° C ambient RHO-90 earth, for cables buried 36" deep, only the phase conductors carrying current, 100% load factor. DO NOT USE THESE FIGURES FOR NEC APPLICATIONS.



This catalog is intended to provide introductory technical data to aid the correct selection of wire and cable for permanent installation. Wire and cable products supplied by Alcan comply with the codes, standards and product specifications as indicated in this catalog. Weights and measurements are subject to manufacturing tolerances and product design changes. Consequently, Alcan does not accept responsibility for costs incurred by a purchaser as a result of weights and measurements not conforming exactly to those indicated.



Triplexed Aluminum Conductor

Black Neutral – TRISTRIFE®

Code Word	Conductor Size		Nominal Insulation Mils		Approx O.D. Inches	ESTIMATED WT. LBS./1000 FT.		Ampacity* Directly Buried	Standard Package (Ft.)
	Phase	Neutral	Phase	Neutral		Aluminum	Total		
ERSKINE/XLP/EYS	6	6	60	60	0.642	74	133	100	1000
VASSAR/XLP/EYS	4	4	60	60	0.742	118	191	130	1000
STEPHENS/XLP/EYS	2	4	60	60	0.830	164	248	168	1000
RAMAPO/XLP/EYS	2	2	60	60	0.867	187	277	168	1000
BRENAU/XLP/EYS	1/0	2	80	60	1.039	261	385	219	1000
BERGEN/XLP/EYS	1/0	1/0	80	80	1.103	298	439	219	1000
CONVERSE/XLP/EYS	2/0	1	80	80	1.144	330	476	249	1000
HUNTER/XLP/EYS	2/0	2/0	80	80	1.196	376	533	249	1000
HOLLINS/XLP/EYS	3/0	1/0	80	80	1.241	415	578	284	1000
ROCKLAND/XLP/EYS	3/0	3/0	80	80	1.299	474	647	284	1000
SWEETBRIAR/XLP/EYS	4/0	2/0	80	80	1.352	524	705	322	1000
MONMOUTH/XLP/EYS	4/0	4/0	80	80	1.418	598	792	322	1000
PRATT/XLP/EYS	250	3/0	95	80	1.497	629	847	356	1000
WESLEYAN/XLP/EYS	350	4/0	95	80	1.687	859	1109	431	1000
NEWARK/XLP/EYS	350	350	95	95	1.791	984	1267	431	1000
RIDER/XLP/EYS	500	350	95	95	1.978	1271	1583	525	1000
WESTCHESTER/XLP/EYS	500	500	95	95	2.060	1412	1740	525	1000
FAIRFIELD/XLP/EYS	750	500	110	95	2.371	1884	2294	615	1000

Quadruplexed Aluminum Conductor

Black Neutral – TRISTRIFE®

Code Word	Conductor Size		Nominal Insulation Mils		Approx O.D. Inches	ESTIMATED WT. LBS./1000 FT.		Ampacity* Directly Buried	Standard Package (Ft.)
	Phase	Neutral	Phase	Neutral		Aluminum	Total		
TULSA/XLP/EYS	4	4	60	60	0.833	157	254	119	1000
DYKE/XLP/EYS	2	4	60	60	0.938	227	341	153	1000
WITTENBERG/XLP/EYS	2	2	60	60	0.973	250	370	153	1000
NOTRE DAME/XLP/EYS	1/0	2	80	60	1.176	361	532	198	1000
PURDUE/XLP/EYS	1/0	1/0	80	80	1.236	397	586	198	1000
SYRACUSE/XLP/EYS	2/0	1	80	80	1.293	455	654	226	1000
LAFAYETTE/XLP/EYS	2/0	2/0	80	80	1.340	502	710	226	1000
SWARTHMORE/XLP/EYS	3/0	1/0	80	80	1.404	574	794	257	1000
DAVIDSON/XLP/EYS	3/0	3/0	80	80	1.456	632	863	257	1000
WAKE FOREST/XLP/EYS	4/0	2/0	80	80	1.530	724	969	291	1000
EARLHAM/XLP/EYS	4/0	4/0	80	80	1.589	798	1056	291	1000
RUST/XLP/EYS	250	3/0	95	80	1.695	865	1162	319	1000
SLIPPERY ROCK/XLP/EYS	350	4/0	95	80	1.910	1181	1531	385	1000
NIAGARA/XLP/EYS	350	350	95	95	2.006	1318	1690	385	1000
WOFFORD/XLP/EYS	500	350	95	95	2.237	1742	2163	467	1000

* Ampacities are based on 90° C conductor temperature, 20°C ambient RHO-90 earth, for cables buried 36" deep, only the phase conductors carrying current, 100% load factor. DO NOT USE THESE FIGURES FOR NEC APPLICATIONS.

UNDERGROUND SECONDARY 600 VOLT CABLES



Triplex Aluminum Conductor

Impedance Data

Code Word	Phase	Neutral	RESISTANCE (OHMS/1000 FT.)			INDUCTIVE REACTANCE (OHMS/1000 FT.)
			25° C	50° C	75° C	X1
ERSKINE	6	6	0.6725	0.7392	0.8059	0.0337
VASSAR	4	4	0.4227	0.4645	0.5064	0.0335
STEPHENS	2	4	0.2655	0.2929	0.3182	0.0319
RAMAPO	2	2	0.2655	0.2929	0.3182	0.0315
BRENAU	1/0	2	0.1671	0.1837	0.2002	0.0301
BERGEN	1/0	1/0	0.1671	0.1837	0.2002	0.0301
CONVERSE	2/0	1/0	0.1326	0.1456	0.1587	0.0293
HUNTER	2/0	2/0	0.1326	0.1456	0.1587	0.0293
HOLLINS	3/0	1/0	0.1053	0.1157	0.1259	0.0286
ROCKLAND	3/0	3/0	0.1053	0.1157	0.1259	0.0286
SWEETBRIAR	4/0	2/0	0.0835	0.0917	0.1000	0.0279
MONMOUTH	4/0	4/0	0.0835	0.0917	0.1000	0.0279
PRATT	250	3/0	0.0706	0.0777	0.0847	0.0284
WESLEYAN	350	4/0	0.0506	0.0557	0.0606	0.0275
NEWARK	350	350	0.0506	0.0557	0.0606	0.0275
RIDER	500	350	0.0356	0.0390	0.0426	0.0266
WESTCHESTER	500	500	0.0356	0.0390	0.0426	0.0266
FAIRFIELD	750	500	0.0251	0.0263	0.0286	0.0264

RHO = 90, phase spacing is phase conductor outside diameter.

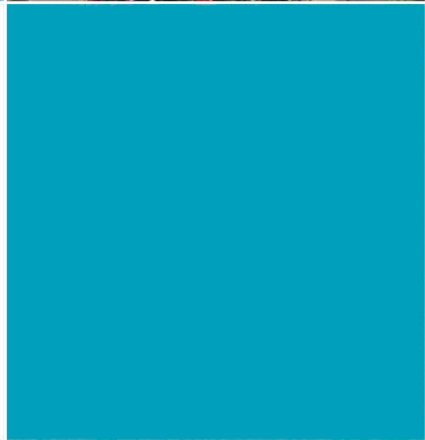
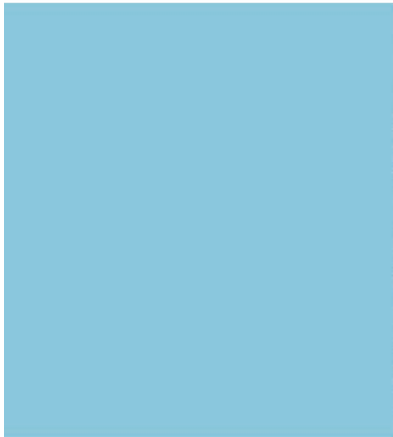
Quadruplex Aluminum Conductor

Impedance Data

Code Word	Phase	Neutral	POSITIVE SEQUENCE RESISTANCE (OHMS/1000 FT.)			POSITIVE SEQUENCE INDUCTIVE REACTANCE (OHMS/1000 FT.)
			25° C	50° C	75° C	X1
TULSA	4	4	0.4227	0.4645	0.5064	0.0335
DYKE	2	4	0.2655	0.2929	0.3182	0.0319
WITTENBERG	2	2	0.2655	0.2929	0.3182	0.0315
NOTRE DAME	1/0	2	0.1671	0.1837	0.2002	0.0301
PURDUE	1/0	1/0	0.1671	0.1837	0.2002	0.0301
SYRACUSE	2/0	1	0.1326	0.1456	0.1587	0.0293
LAFAYETTE	2/0	2/0	0.1326	0.1456	0.1587	0.0293
SWARTHMORE	3/0	1/0	0.1053	0.1157	0.1259	0.0286
DAVIDSON	3/0	3/0	0.1053	0.1157	0.1259	0.0286
WAKE FOREST	4/0	2/0	0.0835	0.0917	0.1000	0.0280
EARLHAM	4/0	4/0	0.0835	0.0917	0.1000	0.0280
RUST	250	3/0	0.0706	0.0777	0.0847	0.0284
SLIPPERY ROCK	350	4/0	0.0506	0.0557	0.0606	0.0275
NIAGARA	350	350	0.0506	0.0577	0.0606	0.0275
WOFFORD	500	350	0.0356	0.0390	0.0426	0.0267
WINDHAM	750	500	0.0251	0.0263	0.0286	0.0264

RHO = 90, phase spacing is phase conductor outside diameter.

Alcan Cable operates throughout North America – in the U.S. as a division of Alcan Products Corporation, and in Canada as a division of Alcan, Inc. Alcan Cable has its own research and development facilities and is backed by the technology and laboratories of the Alcan Group. We're proud of our long history of providing new and innovative aluminum solutions to the many customers we serve.



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