

PowrServ® XL Underground Distribution Cable

600 V Quadruplex Al Conductor XLPE Insulation, UL Type USE-2



Product Construction:

Complete Cable:

Quadruplex 600 V PowrServ® XL cables consist of three phase conductors and one neutral conductor, all of which are insulated with extruded lead-free Cross-linked Polyethylene (XLPE). The cables are twisted together to form a quadruplex assembly. These XLPE insulated cables are manufactured and tested in accordance with ANSI/ICEA S-105-692 and UL 854, listed as a Type USE-2 cable.

Conductors:

Class B or SIW compressed 1350-H19 aluminum.

Insulation:

The insulation is extruded lead-free Cross-linked Polyethylene (XLPE). The three phase conductors are black, and the neutral conductor is black, identified by three extruded yellow stripes.

Phase Identification:

Phase identification is provided by means of white print legend markings, "Phase A" marking, and sequential footage markings on one phase conductor, white print legend markings and "Phase B" marking on another phase conductor, white print legend markings and "Phase C" marking on another phase conductor, and white print legend markings and three extruded yellow stripes on the neutral conductor.

Features and Benefits:

600 V PowrServ XL underground distribution cables are suitable for direct burial or installations in ducts and are resistant to abrasion, impact and sunlight. For NEC-complying applications, the maximum conductor operating temperature is 90°C in wet or dry locations. This cable is also suitable for non-code-complying installations with a maximum conductor temperature of 90°C in wet or dry locations.

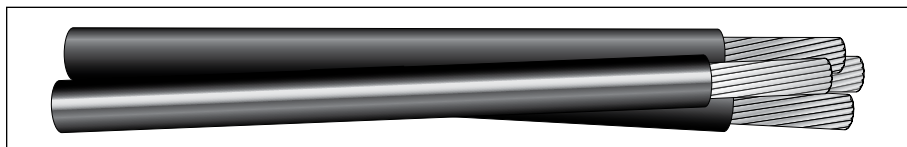
Applications:

PowrServ XL underground distribution cable is intended for use in underground systems operated at 600 volts or less.

Options:

- Aluminum 1350-H16 or H26 (¾ Hard) stranded conductor
- Copper conductors
- Series 8000 aluminum alloy conductor
- Sizes 250 through 500 kcmil available with thin wall (0.080") insulation
- High-molecular-weight Polyethylene (PE) insulation, 75°C rating
- Type RHH/RHW-2 per UL 44
- Other phase identification methods
- Combined Duct & Cable factory-installed in extruded HDPE duct
- MasterPak® reel-less packaging

For more information, contact your General Cable sales representative or e-mail info@generalcable.com.



POWRSERV XL QUADRUPLEX CABLE—XLPE INSULATION—600 VOLTS												
CODE WORD	PHASE CONDUCTOR			NEUTRAL CONDUCTOR			EFF. O.D. INCHES	APPROX. WEIGHT LB/1000 FT		AMPACITY (2)		PACKAGING 1000 FT REEL (3)
	SIZE AWG OR kcmil	NO. OF WIRES (1)	INS. THKN. INCHES	SIZE AWG OR kcmil	NO. OF WIRES	INS. THKN. INCHES		AL	TOTAL	DIRECT BURIED	IN DUCT	
Tulsa/XP/EYS	4	7	0.060	4	7	0.060	0.83	157	253	125	80	NR 32.24
Dyke/XP/EYS	2	7	0.060	4	7	0.060	0.94	226	340	160	105	NR 32.24
Wittenberg/XP/EYS	2	7	0.060	2	7	0.060	0.97	250	369	160	105	NR 36.24
Notre Dame/XP/EYS	1/0	19	0.080	2	7	0.060	1.17	360	529	205	140	NR 42.26
Purdue/XP/EYS	1/0	19	0.080	1/0	19	0.080	1.24	397	583	205	140	NR 42.26
Syracuse/XP/EYS	2/0	19	0.080	1	19	0.080	1.29	454	651	230	170	NR 42.26
Lafayette/XP/EYS	2/0	19	0.080	2/0	19	0.080	1.34	501	707	230	170	NR 45.28
Swarthmore/XP/EYS	3/0	19	0.080	1/0	19	0.080	1.40	573	791	265	195	NR 45.28
Davidson/XP/EYS	3/0	19	0.080	3/0	19	0.080	1.46	631	860	265	195	NR 45.28
Wake Forest/XP/EYS	4/0	19	0.080	2/0	19	0.080	1.53	722	965	300	220	NR 50.32
Earlham/XP/EYS	4/0	19	0.080	4/0	19	0.080	1.59	796	1052	300	220	NR 50.32
Rust/XP/EYS	250†	37	0.095	3/0	19	0.080	1.72	863	1170	330	245	NR 50.32
Slippery Rock/XP/EYS	350†	37	0.095	4/0	19	0.080	1.91	1187	1535	395	300	NR 58.32
Niagara/XP/EYS	350†	37	0.095	350	37	0.095	2.01	1316	1716	395	300	NR 58.32
Wofford/XP/EYS	500†	37	0.095	350	37	0.095	2.28	1739	2182	475	375	NR 66.36

(1) Actual number of wires may differ for compressed round stranded aluminum conductors using single input wire (SIW).

(2) Ampacities are for non-code-complying installations. For installations covered by National Electrical Code (NEC), see the appropriate section of the NEC. Ampacity based on earth thermal resistivity of 90°C-cm/watt, 90°C conductor temp., 20°C earth ambient temperature, 100% load factor and 36" depth of burial. Values based on no current in the neutral conductor. For specific ampacities, contact your General Cable sales representative.

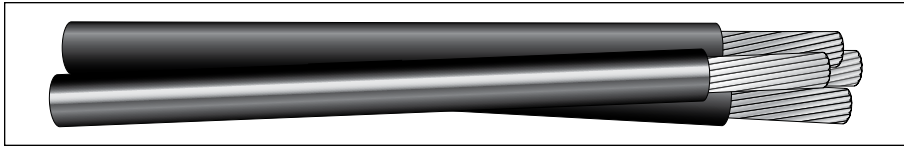
(3) Reel sizes may vary. MasterPak reel-less packaging is available - see Section 6 for description and typical dimensions for selected low-voltage products.

† Available with thin wall (0.080") insulation.

Dimensions and weights not designated minimum or maximum are nominal values and subject to manufacturing tolerances. In this context, weight means mass.

PowrServ® AR Underground Distribution Cable

600 V Quadruplex Al Conductor Composite XLPE/HDXLPE Insulation, UL Type USE-2



POWRSERV AR QUADRUPLIX CABLE — XLPE/HDXLPE — 600 VOLTS

CODE WORD	PHASE CONDUCTOR				NEUTRAL CONDUCTOR				EFF. O.D. IN	APPROX. WEIGHT LB/1000 FT		AMPACITY (2)		PKG. 1000 FEET REEL (3)
	SIZE AWG OR kcmil	NO. OF WIRES (1)	XLPE THKN. IN	HDXLPE THKN. IN	SIZE AWG OR kcmil	NO. OF WIRES	XLPE THKN. IN	HDXLPE THKN. IN				DIRECT BURIED	IN DUCT	
										AL	TOTAL			
Tulsa/AR/EYS	4	7	0.030	0.030	4	7	0.030	0.030	0.83	157	255	125	80	NR 32.24
Dyke/AR/EYS	2	7	0.030	0.030	4	7	0.030	0.030	0.94	226	342	160	105	NR 32.24
Wittenberg/AR/EYS	2	7	0.030	0.030	2	7	0.030	0.030	0.97	250	371	160	105	NR 36.24
Notre Dame/AR/EYS	1/0	19	0.040	0.040	2	7	0.030	0.030	1.17	360	532	205	140	NR 42.26
Purdue/AR/EYS	1/0	19	0.040	0.040	1/0	19	0.040	0.040	1.24	397	586	205	140	NR 42.26
Syracuse/AR/EYS	2/0	19	0.040	0.040	1	19	0.040	0.040	1.29	454	654	230	170	NR 42.26
Lafayette/AR/EYS	2/0	19	0.040	0.040	2/0	19	0.040	0.040	1.34	501	710	230	170	NR 45.28
Swarthmore/AR/EYS	3/0	19	0.040	0.040	1/0	19	0.040	0.040	1.40	573	794	265	195	NR 45.28
Davidson/AR/EYS	3/0	19	0.040	0.040	3/0	19	0.040	0.040	1.46	631	864	265	195	NR 45.28
Wake Forest/AR/EYS	4/0	19	0.040	0.040	2/0	19	0.040	0.040	1.53	722	969	300	220	NR 50.32
Earlham/AR/EYS	4/0	19	0.040	0.040	4/0	19	0.040	0.040	1.59	796	1056	300	220	NR 50.32
Rust/AR/EYS	250†	37	0.045	0.050	3/0	19	0.040	0.040	1.72	863	1175	330	245	NR 50.32
Slippery Rock/AR/EYS	350†	37	0.045	0.050	4/0	19	0.040	0.040	1.91	1187	1541	395	300	NR 58.32
Niagara/AR/EYS	350†	37	0.045	0.050	350	37	0.045	0.050	2.09	1320	1768	395	300	NR 58.32
Wofford/AR/EYS	500†	37	0.045	0.050	350	37	0.045	0.050	2.28	1739	2189	475	375	NR 66.36

(1) Actual number of wires may differ for compressed round stranded aluminum conductors using single input wire (SIW).

(2) Ampacities are for non-code-complying installations. For installations covered by National Electrical Code (NEC), see the appropriate section of the NEC. Ampacity based on earth thermal resistivity of 90°C-cm/watt, 90°C conductor temp., 20°C earth ambient temperature, 100% load factor and 36" depth of burial. Values based on no current in the neutral conductor. For specific ampacities, contact your General Cable sales representative.

(3) Reel sizes may vary. MasterPak reel-less packaging is available - see Section 6 for description and typical dimensions for selected low-voltage products.

[†] Available with thin wall (0.040"/0.040") insulation.

Dimensions and weights not designated minimum or maximum are nominal values and subject to manufacturing tolerances. In this context, weight means mass.

Product Construction:

Complete Cable:

Quadruplex PowrServ® abuse-resistant (AR) cables consist of three phase conductors and one neutral conductor, all of which are insulated with extruded lead-free composite Cross-linked Polyethylene (XLPE) and High-Density Cross-linked Polyethylene (HDXLPE). The cables are twisted together to form a quadruplex assembly. These XLPE insulated cables are manufactured and tested in accordance with ANSI/ICEA S-81-570 and UL 854, listed as a Type USE-2 cable.

Conductors:

Class B or SIW compressed 1350-H19 aluminum.

Composite Insulation:

The extruded lead-free cross-linked polyethylene insulation meets the requirements of ANSI/ICEA S-81-570. The extruded lead-free high-density cross-linked polyethylene meets the requirements of ASTM D1248, Type III. The three phase conductors are black, and the neutral conductor is black, identified by three extruded yellow stripes.

Phase Identification:

Phase identification is provided by means of white print legend markings, "Phase A" marking, and sequential footage markings on one phase conductor, white print legend markings and "Phase B" marking on another phase conductor, white print legend markings and "Phase C" marking on another phase conductor, and white print legend markings and three extruded yellow stripes on the neutral conductor.

Features and Benefits:

The dual extruded composite insulation system provides a very high degree of protection against insulation damage from unclean backfill material and from cuts and abrasions that can occur during installation. For NEC-complying applications, the maximum conductor operating temperature is 90°C in wet or dry locations. This cable is also suitable for non-code-complying installations with a maximum conductor temperature of 90°C in wet or dry locations.

Applications:

PowrServ AR XLPE/HDXLPE underground distribution cable is intended for use in underground systems operated at 600 volts or less.

Options:

- Aluminum 1350-H16 or H26 (¾ Hard) stranded conductor
- Copper conductors
- Sizes 250 through 500 kcmil available with thin wall (0.040"/0.040") insulation
- Composite PE/HDPE insulation, 75°C rating
- Other phase identification methods
- Combined Duct & Cable factory-installed in extruded HDPE duct
- MasterPak® reel-less packaging

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