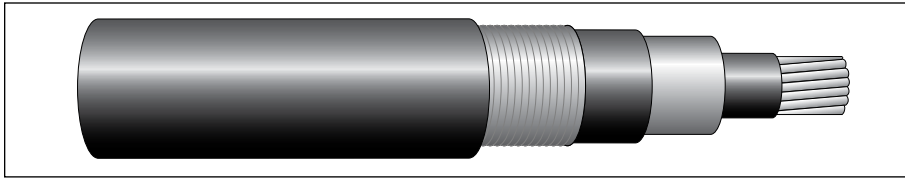


EmPowr® Link Shielded Power Cable 15-46 kV

CU Conductor TRXLPE Insulation Longitudinally Applied Corrugated Tape LLDPE Jacket



COPPER CONDUCTOR LONGITUDINALLY APPLIED CORRUGATED TAPE SHIELDED 15 kV POWER CABLE

COMPACT CONDUCTOR		DIAMETER (2) (mm)				NOM. JACKET THKN. (2) (mm)	APPROX. WEIGHT (kg/km)			AMPACITY (3)	
SIZE (AWG OR kcmil)	NO. OF WIRES (1)	INS.	LACT SHIELD THKN.	O.D.	LLDPE JACKET		CU COND.	CU SHIELD	TOTAL	DIRECT BURIED	IN DUCT

4.45 mm (175 mils) NOMINAL TRXLPE INSULATION – 15 kV 100% LEVEL

250	37	23.2	0.203	27.0	31.1	2.0	1149	196	1889	475	420
250	37	23.2	0.254	27.2	31.2	2.0	1149	245	1939	475	420
350	37	25.7	0.203	29.5	33.5	2.0	1609	208	2424	575	505
350	37	25.7	0.254	29.6	33.7	2.0	1609	284	2500	575	505
500	37	28.7	0.203	32.5	36.6	2.0	2298	233	3215	695	615
500	37	28.7	0.254	32.7	36.7	2.0	2298	284	3268	695	615
750	61	33.3	0.203	37.4	41.5	2.0	3447	275	4541	855	760
750	61	33.3	0.254	37.6	41.7	2.0	3447	344	4611	855	760
1000	61	37.1	0.203	41.3	46.9	2.8	4596	303	5921	980	905
1000	61	37.1	0.254	41.5	47.0	2.8	4596	379	5999	980	905

5.59 mm (220 mils) NOMINAL TRXLPE INSULATION – 15 kV 133% LEVEL

250	37	25.5	0.203	29.3	33.4	2.0	1149	208	2005	475	420
250	37	25.5	0.254	29.5	33.5	2.0	1149	284	2081	475	420
350	37	27.9	0.203	31.8	35.8	2.0	1609	233	2560	575	505
350	37	27.9	0.254	31.9	36.0	2.0	1609	284	2612	575	505
500	37	31.0	0.203	34.8	38.9	2.0	2298	240	3344	695	615
500	37	31.0	0.254	35.3	39.4	2.0	2298	327	3442	695	615
750	61	35.6	0.203	39.7	45.3	2.8	3447	296	4798	855	760
750	61	35.6	0.254	39.9	45.5	2.8	3447	370	4874	855	760
1000	61	39.4	0.203	43.6	49.2	2.8	4596	317	6090	980	905
1000	61	39.4	0.254	43.7	49.3	2.8	4596	396	6171	980	905

(1) For compact stranded constructions, the number of wires may be reduced as follows:

- 19-Wire Constructions – 18 Wires Minimum
- 37-Wire Constructions – 35 Wires Minimum
- 61-Wire Constructions – 58 Wires Minimum

(2) Extruded layer thicknesses are in accordance with CSA C68.5 for Primary Shielded and Concentric Neutral Cable for Distribution Utilities.

(3) Ampacities based on earth thermal resistivity of 90°C-cm/watt, 90°C conductor temperature, 20°C earth ambient temperature, 75% load factor, and 36" depth of burial. Values based on one three phase circuit, one conductor per phase, in flat adjacent configuration with neutral wires bonded at each end. Ducts sized for 40% fill. For specific ampacities, contact your General Cable sales representative.

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:

Cross-linked semi-conducting conductor shield, insulation and semi-conducting insulation shield are extruded over an aluminum or copper conductor and cured in a single operation. Corrugated copper tape and an extruded black jacket are applied over the cable core.

Conductor:

Class B concentric lay stranded compact annealed uncoated copper or compact 3/4 to full hard 1350 aluminum (all sizes). The stranded conductors are longitudinally water blocked (STRANDFILL®) and tested in accordance with ICEA T-31-610.

Conductor Shield:

Extruded semi-conducting thermosetting polymeric stress control layer.

Insulation:

Extruded, unfilled Tree-Retardant Cross-linked Polyethylene (TRXLPE) as defined in CSA C68.5.

Insulation Shield:

Extruded semi-conducting thermosetting layer, clean- and free-stripping from insulation.

Metallic Shield:

Copper, 8 or 10 mil thick Longitudinally Applied Corrugated Tape (LACT) with a minimum 375 mil overlap.

Jacket:

Black, non-conducting, sunlight-resistant Linear Low-Density Polyethylene (LLDPE). Three extruded red stripes are incorporated into the cable jacket to provide visual identification of a jacketed power cable.

Features and Benefits:

- Even distribution of fault current and better heat dissipation
- Allows expansion/contraction of the cable core
- Improved bending characteristics versus helical copper tape shield
- Triple-extruded for clean interfaces
- Class 10,000 environment utilized for material handling
- Excellent moisture resistance
- High dielectric strength
- Low dielectric loss
- Excellent resistance to treeing
- Clean-stripping insulation shield

Temperature Rating:

- Normal.....90°C
- Emergency*130°C
- Short Circuit250°C

*Operation at the emergency overload temperature shall not exceed 1500 hours cumulative during the lifetime of the cable.

