# PowrNet® 600 V Underground Network Cable

600 V Single Cu Conductor EAM Insulation LSZH Jacket



## **Product Construction:**

## **Complete Cable:**

General Cable's PowerNet® 600 V network cables consist of a Class B compressed copper conductor, covered with EAM insulation and a black Low-Smoke, Zero-Halogen (LSZH), flameretardant, lead-free thermoset jacket. All cables are manufactured and tested in accordance with ANSI/NEMA WC70/ICEA S-95-658.

#### Conductors

Class B compressed copper meeting the requirements of ASTM B8.

#### Insulation/Jacket:

The extruded thermoset, flame-retardant EAM insulation meets the requirements of an EPR Type II (Class E-2) insulation of ANSI/NEMA WC70/ICEA S-95-658. The extruded thermoset black jacket is a Type II Low-Smoke, Zero-Halogen (LSZH), flame-retardant, lead-free thermoset polyolefin and meets the requirements of ANSI/NEMA WC70/ICEA S-95-658.

#### **Features and Benefits:**

General Cable's PowrNet 600 V network cable was developed for use in congested urban networks (particularly in duct systems) where high-reliability, easy-to-install low-smoke and-fume cables are needed. This unique cable design provides advantages of a track-resistant, low-smoke and reduced-gas evolution in the event of a fire. These installed performance features are complemented by excellent abrasion and tear resistance properties coupled with a low coefficient of friction which allows easy pulling into existing duct systems. PowrNet is rated 600 V and has a wet and dry conductor operating temperature rating of 90°C.

## Applications:

General Cable's PowerNet cable was engineered for use in congested urban secondary network duct and buried systems in wet or dry locations where maximum reliability, ease of installation, and low-smoke cables are required.

### Options:

- Multiplexed constructions of 2 to 6 conductors
- Multiplexed with bare ground conductors
- · Compact copper conductors
- Tinned copper conductors
- Reduced insulation/jacket thickness for 750 and 1000 kcmil sizes
- Type RHH/RHW-2 per UL 44
- Type USE-2 per UL 854
- UL OIL RES I (PR 1)
- UL ST-1 limited smoke designation (sizes 1/0 AWG and larger)
- UL "For CT Use" (sizes 1/0 AWG and larger)
- EPR insulation
- 2000 V rating



600 V SINGLE COPPER CONDUCTOR EAM INSULATION LSZH JACKET								
SIZE	NO.	NOM.	INS./JACKET	NOM.	APPROX. WEIGHT LB/1000 FT		AMPACITY	
AWG OR kemil	AL Wires	COND. O.D. IN.	NOM. THKN. Inches	O.D. Inches	COPPER	TOTAL	DIRECT Buried	IN DUCT
6	7	0.178	0.045 / 0.030	0.328	81	120	120	90
4	7	0.225	0.045 / 0.030	0.375	129	176	160	115
2	7	0.283	0.045 / 0.030	0.433	205	262	205	145
1	19	0.313	0.055 / 0.045	0.513	258	342	230	170
1/0	19	0.352	0.055 / 0.045	0.552	326	417	260	195
2/0	19	0.395	0.055 / 0.045	0.595	411	512	295	220
3/0	19	0.443	0.055 / 0.045	0.643	518	629	335	250
4/0	19	0.498	0.055 / 0.045	0.698	653	777	380	285
250	37	0.558	0.065 / 0.045	0.778	772	920	420	320
350	37	0.661	0.065 / 0.065	0.921	1081	1290	500	390
500	37	0.789	0.065 / 0.065	1.049	1544	1790	600	470
750	61	0.968	0.080 / 0.065	1.258	2316	2643	735	590
1000	61	1.117	0.080 / 0.065	1.407	3088	3463	830	670

