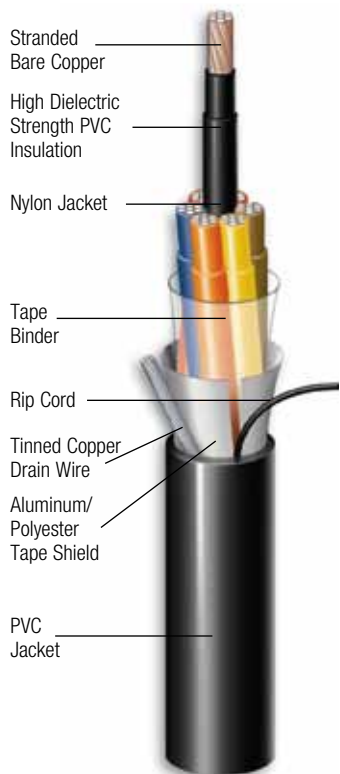


## ENGINEERING SPECIFICATIONS:



### Standards:

Underwriters Laboratories Standards UL-1277, UL-83  
 ASTM Stranding Class B3, B8, B787  
 NFPA 70: National Electrical Code, NEC Article 336 & 392  
 NEMA WC 57/ICEA 5-73-532  
 UL 1685-FT4/IEEE 1202 (70,000 Btu/hr) Flame Test  
 ICEA T-29-520 (210,000 Btu/hr) Flame Test  
 ARRA 2009; Section 1605 "Buy American" Compliant

### CONSTRUCTION:

#### Conductors:

Stranded, uncoated copper conductors per ASTM-B3, ASTM-B787 and ASTM-B8

#### Conductor Insulation:

High dielectric strength, heat and moisture-resistant, colored Polyvinyl Chloride (PVC) rated for continuous at 90°C dry or wet to meet UL-83 requirements for Type THHN or THWN-2 wire.

#### Ground Conductor:

16 AWG tinned copper drain wire

#### Applications:

Primarily used for connecting power devices in an industrial environment. Suitable for installation in channels, ducts, wireways, cable trays, and conduits. Approved for direct burial in wet or dry locations and outdoors in cable trays where sunlight-resistant rating is required. This Type TC tray cable complies with the crush and impact requirements of Type MC cable and is identified for such use with the marking Type TC-ER. Installation shall be permitted between a cable tray and the utilization equipment or device. The cable shall be secured at intervals not exceeding 1.8 m (6 ft). Approved for Class I Division II Hazardous Locations.

#### Assembly:

The insulated conductors are cabled together with or without fillers as required to form a round compact core. An aluminum shield is applied over the entire assembly prior to jacketing. A Drain Wire made of tinned copper per ASTM B-33 is applied next to aluminum shielding. Nylon rip-cord is supplied for easy stripping.

#### Color Coding:

Color-coded insulation with ICEA Method 1 with printed number.

#### Overall Jacket:

A flame retardant sunlight resistant black PVC jackets is applied over shielded core. Sunlight Resistant overall jacket available in all colors by request.

### Type TC-Control or Instrumentation-Shielded 10 AWG W/ 16 AWG Drain Wire 600V

Size (AWG)	Number of Conductors	Outer Jacket Thickness PVC (in)	Outside Diameter (in)	Approximate Net Weight (lbs/ 1000 ft)	Standard Packaging
	2	0.045	0.438	154	1000' 5000' reels
	3	0.045	0.479	195	1000' 5000' reels
	4	0.045	0.505	236	1000' 5000' reels
	5	0.060	0.569	297	1000' 5000' reels
	6	0.060	0.603	339	1000' 5000' reels
	7	0.060	0.640	381	1000' 5000' reels
	8	0.060	0.677	423	1000' 5000' reels
	9	0.060	0.714	465	1000' 5000' reels
	10	0.080	0.791	546	1000' 5000' reels
	11	0.080	0.828	590	1000' 5000' reels
	12	0.080	0.847	630	1000' 5000' reels
10 AWG	13	0.080	0.866	671	1000' 5000' reels
	14	0.080	0.885	712	1000' 5000' reels
	15	0.080	0.905	753	1000' 5000' reels
	16	0.080	0.924	794	1000' 5000' reels
	17	0.080	0.943	834	1000' 5000' reels
	18	0.080	0.963	875	1000' 5000' reels
	19	0.080	0.980	916	1000' 5000' reels
	20	0.080	0.998	957	1000' 5000' reels
	21	0.080	1.016	997	1000' 5000' reels
	22	0.080	1.034	1038	1000' 5000' reels
	23	0.080	1.052	1079	1000' 5000' reels
	24	0.080	1.069	1119	1000' 5000' reels

The above data is approximate and subject to normal manufacturing tolerances.

For ampacities see Table 310.15(B)(16) of the NEC.

PRINT LEGEND: ENCORE WIRE CORPORATION 10 AWG/(NO. OF CONDUCTORS) SHIELDED TYPE TC-ER SUN-RES 600 VOLTS DIR-BUR (UL) DATE/TIME/OPER/QC.