

## ENGINEERING SPECIFICATIONS

### Standards

Underwriters Laboratories Standard UL-44, UL-1277, UL-1581, UL-1685, UL-2556; Federal Specification A-A-59544; ASTM Stranding Class B3, B8 and B787; NEMA WC-70/ICEA S-95-658; NFPA 70 (NEC®) Article 336, 392; UL-1685 Method 1 (70,000 Btu/hr) Flame Test; NEMA WC 57/ICEA 5-73-532; ICEA T-29-520 (210,000 Btu/hr) Flame Test; ARRA 2009 Section 1605 "Buy American" Compliant; RoHS Compliant; MasterSpec Division 26 Sections 260519, 260523; IEEE 1202 (FT4) optional. UL Listing #E-179429



## CONSTRUCTION

### Conductors

Bare, soft-annealed stranded copper conductors per ASTM-B3, ASTM-B8 and ASTM-B787

### Insulation

Cross-linked polyethylene (XLPE) High Heat Water Resistant. Rated for use in wet or dry locations at temperatures not to exceed 90°C dry or wet to meet UL-44 requirements for type XHHW-2 wire. Suitable for use in low-leaking circuits requiring a dielectric constant of 3.5 or less.

### Assembly

The insulated conductors are cabled together without a ground. Nylon rip-cord is supplied for easy stripping.

### Color Coding

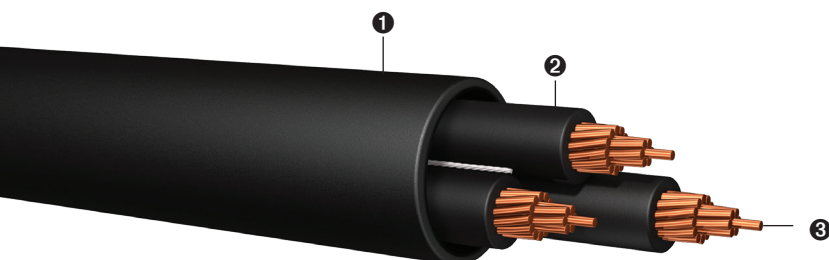
Black insulation with ICEA Method 4 printed number

### Overall Jacket

Flame retardant, sunlight-resistant, black PVC jacket. Sunlight-resistant overall jacket available in all colors by request. Also available in chlorinated polyethylene jacket (CPE) by request.

## APPLICATIONS

Primarily used for connecting power devices in commercial and industrial environments. Suitable for installation in channels, ducts, wireways, cable trays, and raceways. Type XHHW-2 conductors are permitted for 600-volt and 1000-volt applications and are approved for direct burial in wet or dry locations and outdoors in cable trays where sunlight-resistant rating is required. Cable sizes 8 AWG - 6 AWG are listed with TC-ER-JP rating. For cables requiring Class 1 Division II Hazardous Location ratings, please inquire with your local Encore Wire rep. Permitted for 600- and 1000-volt applications.



- ① PVC Jacket
- ② XLPE Insulation
- ③ XHHW-2 Stranded Copper Conductors

Size (AWG)	No. of Conductors		Outside Jacket Thickness PVC (in)		Allowable Ampacity (Amps) <sup>1</sup>			Outside Diameter (in)		Approximate Net Weight (lbs/1000 ft)		Standard Packaging (ft)
			3	4	60°C	75°C	90°C	3	4	3	4	
8 <sup>2</sup>	3	4	0.060	0.060	40	50	55	0.660	0.705	285	354	1000' 5000' Reels
6 <sup>2</sup>	3	4	0.060	0.060	55	65	75	0.735	0.800	403	507	1000' 4000' Reels
4 <sup>3</sup>	3	4	0.080	0.080	70	85	95	0.925	1.001	655	829	1000' 3000' Reels
2 <sup>3</sup>	3	4	0.080	0.080	95	115	130	1.054	1.155	950	1207	1000' 2000' Reels
1 <sup>3</sup>	3	4	0.080	0.080	110	130	145	1.182	1.252	1124	1435	1000' 2000' Reels
1/0 <sup>3</sup>	3	4	0.080	0.080	125	150	170	1.272	1.322	1439	1829	1000' 2000' Reels
2/0 <sup>3</sup>	3	4	0.080	0.080	145	175	195	1.375	1.425	1753	2236	500' 1000' 2000' Reels
3/0 <sup>3</sup>	3	4	0.080	0.080	165	200	225	1.485	1.535	2123	2723	1000' 2000' Reels
4/0 <sup>3</sup>	3	4	0.080	0.080	195	230	260	1.605	1.655	2613	3443	1000' 1500' Reels

<sup>1</sup> Ampacity of conductors are based on NFPA 70 (NEC) Table 310.15(B)(16). See 110.14(C), 240.4(D) and 310.15(B) for other limitations where applicable.

60°C when terminated to equipment for circuits rated 100 amperes or less or marked for size 14 AWG through 1 AWG conductor.

75°C when terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than 1 AWG.

90°C for ampacity derating purposes.

When the neutral is considered current-carrying conductor, the ampacity of 4/C cables shall be reduced by a factor of 0.80 per NEC 310.15(B)(3)(a).

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

<sup>2</sup> Type TC-ER-JP **PRINT LEGEND:** ENCORE WIRE CORPORATION (SIZE) TYPE TC-ER-JP CABLE XHHW-2 CDRS SUN-RES 600V/1000V DIR-BUR (UL) DATE/TIME/OPER/QC

<sup>3</sup> Type TC only **PRINT LEGEND:** ENCORE WIRE CORPORATION (SIZE) TYPE TC CABLE XHHW-2 CDRS SUN-RES 600V/1000V DIR-BUR (UL) DATE/TIME/OPER/QC