

TYPE TC - POWER CABLE - W/ INSULATED GROUND XHHW-2 INNERS

ENGINEERING SPECIFICATIONS

Standards

Underwriters Laboratories Standard UL-44, UL-1277, UL-1581, UL-1685, UL-2556; ASTM Stranding Class B3, B8, B787; NFPA 70 (NEC®) Article 336, 392; UL-1685 Method 1 (70,000 Btu/hr) Flame Test; 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



Listed 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.

Ground Conductor

XLPE Insulated Green Ground

Assembly

The insulated conductors are cabled together with a green insulated ground and with or without fillers as required to form a round compact core. Nylon rip-cord is supplied for easy stripping.

Color Coding

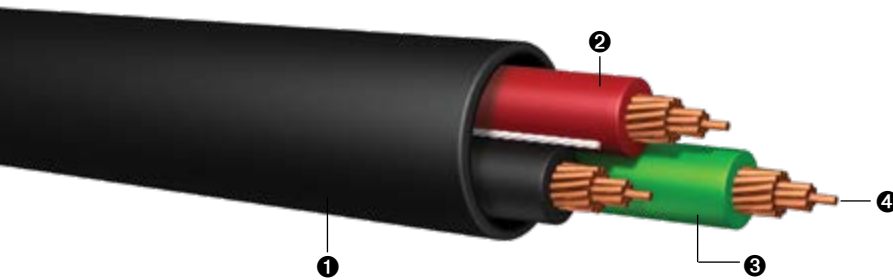
Colored insulation with ICEA Method 1

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. Approved for direct burial in wet or dry locations and outdoors in cable trays where sunlight-resistant rating is required. Cables constructed and listed for applications requiring TC-ER-JP rating. Approved for Class I Division II Hazardous Locations.



- 1 PVC Jacket
- 2 XLPE Insulation
- 3 Green Insulated Grounding Conductor
- 4 XHHW-2 Stranded Copper Conductors

TYPE TC - Power Cable - Insulated Ground - XHHW-2 Inners

Size (AWG)	Size of Ground Wire (AWG)	Outside Jacket Thickness PVC (in)	Allowable Ampacity (Amps) ¹			Outside Diameter (in)	Approximate Net Weight (lbs/1000 ft)	Standard Packaging (ft)
			60°C	75°C	90°C			
14/2	14 AWG Green Insulated	0.045	15	20	25	0.386	89	1000' 5000' Reels
14/3	14 AWG Green Insulated	0.045	15	20	25	0.422	110	1000' 5000' Reels
14/4	14 AWG Green Insulated	0.045	15	20	25	0.456	133	1000' 5000' Reels
12/2	12 AWG Green Insulated	0.045	20	25	30	0.430	120	1000' 5000' Reels
12/3	12 AWG Green Insulated	0.045	20	25	30	0.471	153	1000' 5000' Reels
10/2	10 AWG Green Insulated	0.045	30	35	40	0.480	167	1000' 5000' Reels
10/3	10 AWG Green Insulated	0.045	30	35	40	0.525	220	1000' 5000' Reels

¹ 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 over 100 amperes or marked for conductors 14 AWG to 1 AWG conductor.

75°C when terminated to equipment for circuits rated over 100 amperes or marked 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.

PRINT LEGEND: ENCORE WIRE CORPORATION (size) TYPE TC-ER-JP CABLE THHN OR THWN-2 CDRS SUN-RES 600V DIR-BUR (UL) DATE/TIME/OPER/QC