ENGINEERING SPECIFICATIONS

Standards

Underwriters Laboratories Standard UL-44, UL-1277, UL-1581, UL-1685, UL-2556; ASTM Stranding Class B3, B8, B787; Federal Specification A-A-59544, 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 S-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 or ASTM-B787

Insulation

Cross-linked polyethylene (XLPE) High Heat Water Resistant. Rated for use in wet or dry locations at temperatures not to exceed 90ºC 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

Soft, uncoated copper per ASTM-B8 or ASTM-B787; XLPE insulated green ground

Assembly

The insulated conductors are cabled together with a green insulated ground. Nylon rip-cord is supplied for easy stripping.

Color Coding

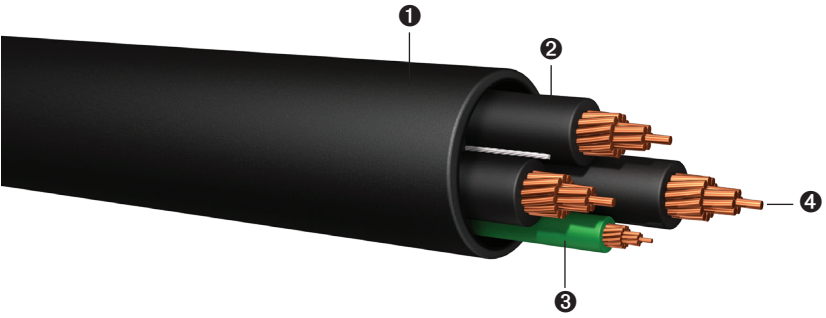
Black insulation with ICEA Method 4 printed number

Overall Jacket

Flame retardant, sunlight-resistant, black PVC jacket. 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. Encore Wire's Type TC-ER is acceptable for use in Class 1, Division 2 and Class 2, Division 2 locations where utilized with listed fittings rated for the classified location and condition of exposure to which the listed fittings are applied.



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

Size (AWG)	No. of Conductors		No. of Strands per Conductor	Size of Ground Wire (AWG)	No. of Strands for Ground	Outside Jacket Thickness PVC (in)		Allowable Ampacity (Amps)[1]			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	3	4	7	10 AWG Green Insulated	19	0.060	0.060	40	50	55	0.660	0.705	318	388	1000' 5000' Reels
6	3	4	7	8 AWG Green Insulated	7	0.060	0.060	55	65	75	0.740	0.810	455	561	1000' 4000' Reels
4	3	4	7	8 AWG Green Insulated	7	0.080	0.080	70	85	95	0.930	1.080	707	903	1000' 3000' Reels
2	3	4	7	6 AWG Green Insulated	7	0.080	0.080	85	115	130	1.058	1.165	1032	1290	1000' 2000' Reels
1	3	4	19	6 AWG Green Insulated	7	0.080	0.080	95	130	145	1.185	1.308	1206	1645	1000' 2000' Reels
1/0	3	4	19	6 AWG Green Insulated	7	0.080	0.080	110	150	170	1.275	1.405	1520	1934	1000' 2000' Reels
2/0	3	4	19	6 AWG Green Insulated	7	0.080	0.080	125	175	195	1.378	1.518	1834	2429	500' 1000' 2000' Reels
3/0	3	4	19	4 AWG Green Insulated	7	0.080	0.080	145	200	225	1.488	1.638	2252	2882	1000' 2000' Reels
4/0	3	4	19	4 AWG Green Insulated	7	0.080	0.080	165	230	260	1.608	1.758	2743	3552	1000' 1500' 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 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.

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

Last Edit: 2/17/26

TRAY CABLE - POWER - W/ INSULATED GROUND - 600V/1000V
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; Federal Specification A-A-59544, 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 S-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

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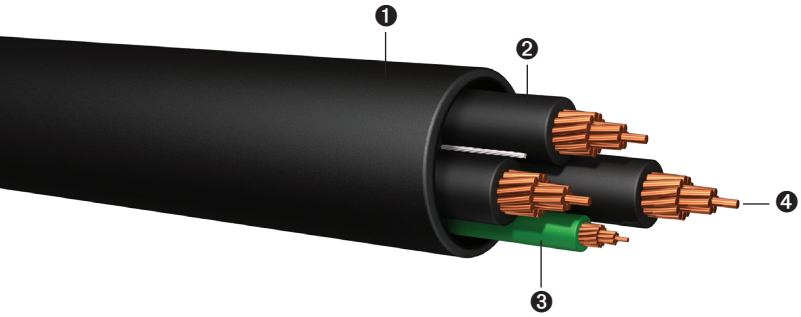

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						3	4	60°C	75°C	90°C	3	4	3	4	
250	3	4	37	4	7	0.080	0.080	215	255	290	1.782	1.974	3158	3994	1000' 1500' Reels
300	3	4	37	3	7	0.110	0.110	240	285	320	1.968	2.156	3843	4846	1000' 1500' Reels
350	3	4	37	3	7	0.110	0.110	260	310	350	2.081	2.302	4320	5565	1000' 1500' Reels
400	3	4	37	3	7	0.110	0.110	280	335	380	2.187	2.421	4857	6288	1000' 1500' Reels
500	3	4	37	2	7	0.110	0.110	320	380	430	2.383	2.639	5958	7590	1000' 1500' Reels
600	3	4	61	2	7	0.110	0.110	350	420	475	2.697	2.990	7358	9378	1000' 1500' Reels
750	3	4	61	1	19	0.110	0.110	400	475	535	3.015	3.347	8752	11307	1000' 1500' Reels

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