ENGINEERING SPECIFICATIONS

Standards

Underwriters Laboratories Standard UL-83, UL-1277, UL-1581, UL-2556; ASTM Stranding Class B3, B8, B787; NFPA 70 (NEC®) Article 336, 392; NEMA WC 57/ICEA S-73-532; NEMA WC 70/ICEA S-95-658; 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; RoHS Compliant; MasterSpec Division 26 Sections 260519, 260523; UL Listing #E-179429

CONSTRUCTION

Conductors

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

Insulation

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

Assembly

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

Color Coding

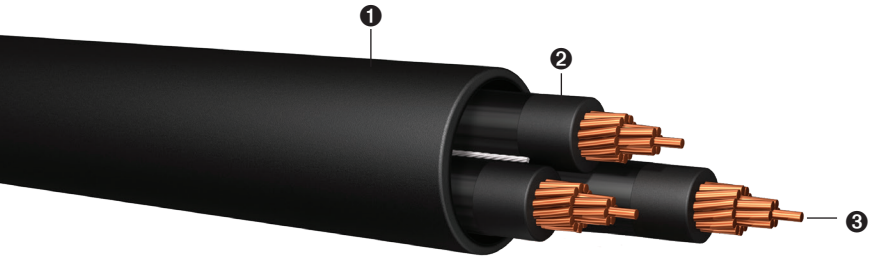
Black insulation with ICEA Method 4 printed number

Overall Jacket

Flame retardant, sunlight-resistant, black PVC jacket. Sunlight-resistant overall jacket available in all colors by request.

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 sizes 8 AWG - 6 AWG are listed with TC-ER-JP rating. Approved for Class I Division II Hazardous Locations.



1. PVC Jacket
2. PVC Insulation w/ Nylon Jacket
3. THHN/THWN-2 Stranded Copper Conductors

Size (AWG)	No. of Conductors		Outside Jacket Thickness PVC (in)		Outside Diameter (in)		Approximate Net Weight (lbs/1000 ft)		Allowablw Ampacity (Amps)[1]		Standard Packaging (ft)
	3	4	3	4	3	4	3	4	75°C	90°C	
8[2]	3	4	0.060	0.060	0.610	0.655	282	351	50	55	1000' 5000' Reels
6[2]	3	4	0.060	0.060	0.685	0.750	400	504	65	75	1000' 4000' Reels
4[3]	3	4	0.080	0.080	0.875	0.961	652	826	85	95	1000' 3000' Reels
2[3]	3	4	0.080	0.080	1.004	1.105	947	1204	115	130	1000' 2000' Reels
1[3]	3	4	0.080	0.080	1.140	1.255	1121	1478	130	145	1000' 2000' 5000' Reels
1/0[3]	3	4	0.080	0.080	1.225	1.355	1436	1802	150	170	1000' 2000' Reels
2/0[3]	3	4	0.080	0.080	1.325	1.465	1750	2207	175	195	1000' 2000' Reels
3/0[3]	3	4	0.080	00.080	1.435	1.585	2120	2712	200	225	1000' 2000' 5000' Reels
4/0[3]	3	4	0.080	.080	1.555	1.785	2610	3426	230	260	1000' 1500' 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 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.
4AWG THROUGH 4/0 IS RATED AS TYPE TC ONLY

[2] Type TC-ER-JP only **PRINT LEGEND:** ENCORE WIRE CORPORATION (SIZE) TYPE TC -ER-JP CABLE CABLE THHN OR THWN-2 CDRS SUN-RES 600V DIR-BUR (UL) DATE/TIME/OPER/QC
[3] Type TC only **PRINT LEGEND:** ENCORE WIRE CORPORATION (SIZE) TYPE TC CABLE CABLE THHN OR THWN-2 CDRS SUN-RES 600V DIR-BUR (UL) DATE/TIME/OPER/QC

TYPE TC - POWER CABLE - NO GROUND - 600V
THHN/THWN-2 INNERS

ENGINEERING SPECIFICATIONS

Standards
Underwriters Laboratories Standard UL-83, UL-1277, UL-1581, UL-2556; ASTM Stranding Class B3, B8, B787; NFPA 70 (NEC®) Article 336, 392; UL-1685 FT4/IEEE 1202 (70,000 Btu/hr) Flame Test; NEMA WC 57/ICEA S-73-532; NEMA WC 70/ICEA S-95-658; 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; UL Listing #E-179429

CONSTRUCTION

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

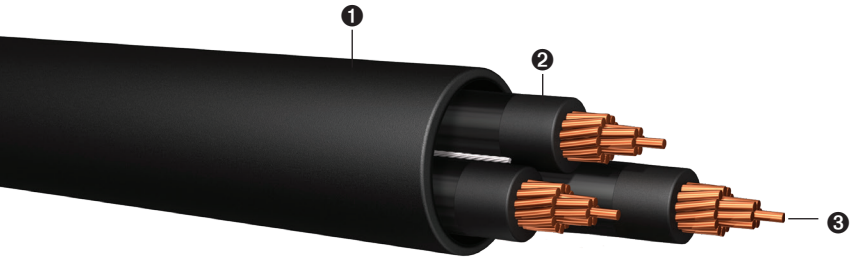
Insulation
High dielectric strength, heat- and moisture-resistant, colored Polyvinyl Chloride (PVC) rated for 90ºC dry or wet to meet UL-83 requirements for Type THHN or THWN-2 wire.

Assembly
The insulated conductors are cabled together without a ground and with or without fillers as required to form a round compact core. 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.

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. Approved for Class I Division II Hazardous Locations.



1. PVC Jacket
2. PVC Insulation w/ Nylon Jacket
3. THHN/THWN-2 Stranded Copper Conductors

Size (AWG)	No. of Conductors		Outside Jacket Thickness PVC (in)		Allowable Ampacity (Amps)[1]		Outside Diameter (in)		Approximate Net Weight (lbs/1000 ft)		Standard Packaging (ft)
	3	4	3	4	75°C	90°C	3	4	3	4	
250	3	4	0.080	0.080	255	290	1.792	1.981	3026	3865	1000' 1500' Reels
300	3	4	0.110	0.110	285	320	1.977	2.160	3640	4703	1000' 1500' Reels
350	3	4	0.110	0.110	310	350	2.091	2.308	4155	5400	1000' 1500' Reels
400	3	4	0.110	0.110	335	380	2.197	2.432	4699	6062	1000' 1500' Reels
500	3	4	0.110	0.110	380	430	2.392	2.650	5750	7382	1000' 1500' Reels
600	3	4	0.110	0.110	420	475	2.752	3.053	6992	9171	1000' 1500' Reels
750	3	4	0.110	0.110	475	535	3.009	3.336	8491	11216	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.
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.
250 KCMIL through 750 KCMIL is rated as Type TC Only.

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