# **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, 725; UL-1685 Method 1 (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; IEEE 1202 (FT4) optional. UL Listing #E-179429



#### Conductors Bare soft-anneale

**CONSTRUCTION** 

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**

Colored insulation with ICEA Method 1

## **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. For cables requiring Class 1 Division II Hazardous Location ratings, please inquire with your local Encore Wire rep.



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

Size	No. of Conductors	Outside Jacket Thickness PVC (in)	Allowable Ampacity (Amps) <sup>1</sup>			Outside Diameter	Approximate Net Weight	Standard Packaging
(AWG)			60°C	75°C	90°C	(in)	(lbs/1000 ft)	(ft)
14 AWG	2 <sup>2</sup>	0.045	15	20	25	0.262 x 0.370	61	1000' 5000' Reels
	3 <sup>3</sup>	0.045	15	20	25	0.373	86	1000' 5000' Reels
	4 <sup>3</sup>	0.045	15	20	25	0.413	104	1000' 5000' Reels
	5 <sup>3</sup>	0.045	15	20	25	0.432	124	1000' 5000' Reels
	6 <sup>3</sup>	0.045	15	20	25	0.472	145	1000' 5000' Reels
	7 <sup>3</sup>	0.045	15	20	25	0.472	166	1000' 5000' Reels
	8 <sup>3</sup>	0.045	15	20	25	0.550	199	1000' 5000' Reels
	9 <sup>3</sup>	0.045	15	20	25	0.590	222	1000' 5000' Reels
	10 <sup>3</sup>	0.045	15	20	25	0.639	245	1000' 5000' Reels
	11 <sup>3</sup>	0.045	15	20	25	0.645	268	1000' 5000' Reels
	12 <sup>3</sup>	0.045	15	20	25	0.660	284	1000' 5000' Reels

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

<sup>3</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

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# **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; 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; 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**

Colored insulation with ICEA Method 1

## **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. For cables requiring Class 1 Division II Hazardous Location ratings, please inquire with your local Encore Wire rep.



PVC Jacket
 XLPE Insulation
 XHHW-2 Stranded Copper Conductors

Size	No. of Conductors	Outside Jacket Thickness PVC (in)	Allowable Ampacity (Amps) <sup>1</sup>			Outside Diameter	Approximate Net Weight	Standard Packaging
(AWG)			60°C	75°C	90°C	(in)	(lbs/1000 ft)	(ft)
12 AWG	2 <sup>2</sup>	0.045	20	25	30	0.282 x 0.410	84	1000' 5000' Reels
	3 <sup>3</sup>	0.045	20	25	30	0.411	116	1000' 5000' Reels
	4 <sup>3</sup>	0.045	20	25	30	0.447	148	1000' 5000' Reels
	5 <sup>3</sup>	0.045	20	25	30	0.492	169	1000' 5000' Reels
	6 <sup>3</sup>	0.045	20	25	30	0.568	216	1000' 5000' Reels
	7 <sup>3</sup>	0.045	20	25	30	0.568	245	1000' 5000' Reels
	8 <sup>3</sup>	0.045	20	25	30	0.612	275	1000' 5000' Reels
	9 <sup>3</sup>	0.045	20	25	30	0.653	305	1000' 5000' Reels
	10 <sup>3</sup>	0.045	20	25	30	0.715	339	1000' 5000' Reels
	11 <sup>3</sup>	0.045	20	25	30	0.726	371	1000' 5000' Reels
	12 <sup>3</sup>	0.045	20	25	30	0.738	395	1000' 5000' Reels

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

<sup>3</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



800.962.9473

# TRAY CABLE - POWER & CONTROL - NO GROUND - 10 AWG - 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; NFPA 70 (NEC®) Article 336, 392, 725; UL-1685 Method 1 (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; IEEE 1202 (FT4) optional. UL Listing #E-179429 Note: See 240.4(D) for Overcurrent Protective Device Limitations

# 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**

Colored insulation with ICEA Method 1

## **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. For cables requiring Class 1 Division II Hazardous Location ratings, please inquire with your local Encore Wire rep.



PVC Jacket
XLPE Insulation
XHHW-2 Stranded Copper Conductors

Size (AWG)	No. of Conductors	Outside Jacket Thickness PVC (in)	Allowable Ampacity (Amps) <sup>1</sup>			Outside Diameter	Approximate Net Weight	Standard Packaging
			60°C	75°C	90°C	(in)	(lbs/1000 ft)	(ft)
10 AWG	2 <sup>2</sup>	0.045	30	35	40	0.292 x 0.460	114	1000' 5000' Reels
	3 <sup>3</sup>	0.045	30	35	40	0.464	161	1000' 5000' Reels
	4 <sup>3</sup>	0.045	30	35	40	0.506	208	1000' 5000' Reels
	5 <sup>3</sup>	0.045	30	35	40	0.578	262	1000' 5000' Reels
	6 <sup>3</sup>	0.045	30	35	40	0.630	306	1000' 5000' Reels
	7 <sup>3</sup>	0.045	30	35	40	0.630	348	1000' 5000' Reels
	8 <sup>3</sup>	0.045	30	35	40	0.684	395	1000' 5000' Reels
	9 <sup>3</sup>	0.045	30	35	40	0.738	440	1000' 5000' Reels
	10 <sup>3</sup>	0.045	30	35	40	0.810	486	1000' 5000' Reels
	11 <sup>3</sup>	0.045	30	35	40	0.851	536	1000' 5000' Reels
	12 <sup>3</sup>	0.045	30	35	40	0.877	597	1000' 5000' 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.

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