

# TRAY CABLE - POWER & CONTROL - NO GROUND - 14 AWG - 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, 725; 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

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 90°C 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. Nylon rip-cord is supplied for easy stripping.

#### Color Coding

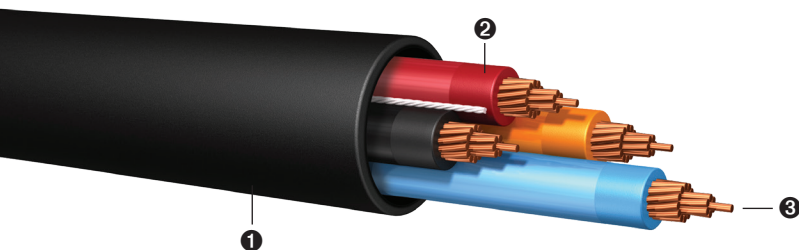
Color-coded insulation with ICEA Method 1

#### 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 a sunlight-resistant rating is required. Cable 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.



- ❶ PVC Jacket
- ❷ PVC Insulation w/ Nylon Jacket
- ❸ 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) | Allowable Ampacity (Amps) <sup>1</sup> |      | Standard Packaging (ft) |
|------------|-------------------|-----------------------------------|-----------------------|--------------------------------------|--|------|-------------------------|
|            |                   |                                   |                       |                                      | 75°C                                   | 90°C |                         |
| 14 AWG     | 2 <sup>3</sup>    | 0.045                             | 0.230 x 0.340         | 58                                   | 20                                     | 25   | 1000' 5000' Reels       |
|            | 3 <sup>3</sup>    | 0.045                             | 0.350                 | 79                                   | 20                                     | 25   | 1000' 5000' Reels       |
|            | 4 <sup>3</sup>    | 0.045                             | 0.380                 | 99                                   | 20                                     | 25   | 1000' 5000' Reels       |
|            | 5 <sup>3</sup>    | 0.045                             | 0.410                 | 118                                  | 20                                     | 25   | 1000' 5000' Reels       |
|            | 6 <sup>3</sup>    | 0.045                             | 0.450                 | 139                                  | 20                                     | 25   | 1000' 5000' Reels       |
|            | 7 <sup>3</sup>    | 0.045                             | 0.460                 | 148                                  | 20                                     | 25   | 1000' 5000' Reels       |
|            | 8 <sup>3</sup>    | 0.045                             | 0.490                 | 178                                  | 20                                     | 25   | 1000' 5000' Reels       |
|            | 9 <sup>3</sup>    | 0.045                             | 0.525                 | 199                                  | 20                                     | 25   | 1000' 5000' Reels       |
|            | 10 <sup>3</sup>   | 0.045                             | 0.600                 | 238                                  | 20                                     | 25   | 1000' 5000' Reels       |
|            | 11 <sup>3</sup>   | 0.045                             | 0.615                 | 257                                  | 20                                     | 25   | 1000' 5000' Reels       |
|            | 12 <sup>3</sup>   | 0.045                             | 0.620                 | 275                                  | 20                                     | 25   | 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.

<sup>2</sup> 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

<sup>3</sup> Type TC-ER-JP **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

# TRAY CABLE - POWER & CONTROL - NO GROUND - 12 AWG - 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; 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

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 90°C 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. Nylon rip-cord is supplied for easy stripping.

### Color Coding

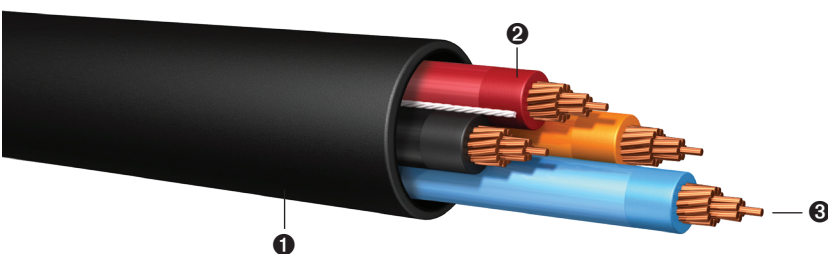
Color-coded insulation with ICEA Method 1

### 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 a sunlight-resistant rating is required. Cable 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.



- ❶ PVC Jacket
- ❷ PVC Insulation w/ Nylon Jacket
- ❸ 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) | Allowable Ampacity (Amps) <sup>1</sup> |      | Standard Packaging (ft) |
|------------|-------------------|-----------------------------------|-----------------------|--------------------------------------|--|------|-------------------------|
|            |                   |                                   |                       |                                      | 75°C                                   | 90°C |                         |
| 12 AWG     | 2 <sup>2</sup>    | 0.045                             | 0.250 X 0.380         | 78                                   | 25                                     | 30   | 1000' 5000' Reels       |
|            | 3 <sup>3</sup>    | 0.045                             | 0.390                 | 101                                  | 25                                     | 30   | 1000' 5000' Reels       |
|            | 4 <sup>3</sup>    | 0.045                             | 0.420                 | 130                                  | 25                                     | 30   | 1000' 5000' Reels       |
|            | 5 <sup>3</sup>    | 0.045                             | 0.470                 | 162                                  | 25                                     | 30   | 1000' 5000' Reels       |
|            | 6 <sup>3</sup>    | 0.045                             | 0.510                 | 194                                  | 25                                     | 30   | 1000' 5000' Reels       |
|            | 7 <sup>3</sup>    | 0.045                             | 0.540                 | 220                                  | 25                                     | 30   | 1000' 5000' Reels       |
|            | 8 <sup>3</sup>    | 0.045                             | 0.590                 | 272                                  | 25                                     | 30   | 1000' 5000' Reels       |
|            | 9 <sup>3</sup>    | 0.045                             | 0.630                 | 304                                  | 25                                     | 30   | 1000' 5000' Reels       |
|            | 10 <sup>3</sup>   | 0.045                             | 0.680                 | 336                                  | 25                                     | 30   | 1000' 5000' Reels       |
|            | 11 <sup>3</sup>   | 0.045                             | 0.700                 | 365                                  | 25                                     | 30   | 1000' 5000' Reels       |
|            | 12 <sup>3</sup>   | 0.045                             | 0.710                 | 393                                  | 25                                     | 30   | 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.

<sup>2</sup> 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

<sup>3</sup> Type TC-ER-JP **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

# TRAY CABLE - POWER & CONTROL - NO GROUND - 10 AWG - 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, 725; 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

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 90°C 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. Nylon rip-cord is supplied for easy stripping.

#### Color Coding

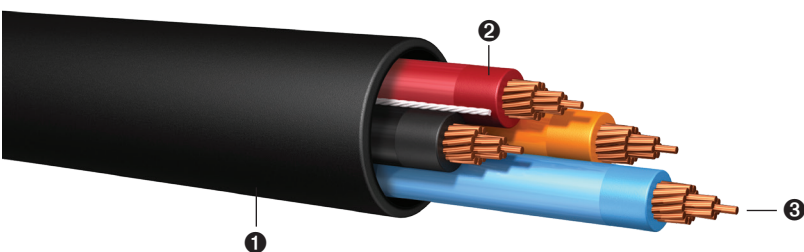
Color-coded insulation with ICEA Method 1

#### Overall Jacket

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

### APPLICATIONS

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- 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) | Allowable Ampacity (Amps) <sup>1</sup> |      | Standard Packaging (ft) |
|------------|-------------------|-----------------------------------|-----------------------|--------------------------------------|--|------|-------------------------|
|            |                   |                                   |                       |                                      | 75°C                                   | 90°C |                         |
| 10 AWG     | 2 <sup>3</sup>    | 0.045                             | 0.260 x 0.430         | 115                                  | 35                                     | 40   | 1000' 5000' Reels       |
|            | 3 <sup>3</sup>    | 0.045                             | 0.460                 | 152                                  | 35                                     | 40   | 1000' 5000' Reels       |
|            | 4 <sup>3</sup>    | 0.045                             | 0.500                 | 207                                  | 35                                     | 40   | 1000' 5000' Reels       |
|            | 5 <sup>3</sup>    | 0.045                             | 0.585                 | 260                                  | 35                                     | 40   | 1000' 5000' Reels       |
|            | 6 <sup>3</sup>    | 0.045                             | 0.650                 | 320                                  | 35                                     | 40   | 1000' 5000' Reels       |
|            | 7 <sup>3</sup>    | 0.045                             | 0.655                 | 362                                  | 35                                     | 40   | 1000' 5000' Reels       |
|            | 8 <sup>3</sup>    | 0.045                             | 0.705                 | 412                                  | 35                                     | 40   | 1000' 5000' Reels       |
|            | 9 <sup>3</sup>    | 0.045                             | 0.755                 | 459                                  | 35                                     | 40   | 1000' 5000' Reels       |
|            | 10 <sup>3</sup>   | 0.045                             | 0.820                 | 512                                  | 35                                     | 40   | 1000' 5000' Reels       |
|            | 11 <sup>3</sup>   | 0.045                             | 0.850                 | 558                                  | 35                                     | 40   | 1000' 5000' Reels       |
|            | 12 <sup>3</sup>   | 0.045                             | 0.855                 | 572                                  | 35                                     | 40   | 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.

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