



**Product: 28110A** ☑

TC VN/PVC, 3 C #12 Str BC, PVC-NYL Ins E2, Blk PVC Jkt, 600V TC-ER 150V NPLF 90C Dry/Wet SUN RES DIR BUR

## **Product Description**

UL Type TC (1277) PVC-Nylon/PVC, 3 Conductor 12AWG (7x20) Bare Copper, PVC-NYL Insulation E2 Color Code, Black PVC Outer Jacket, 600V TC-ER 150V NPLF 90C Dry/Wet SUN RES DIR BUR

## **Technical Specifications**

### **Physical Characteristics (Overall)**

#### Conductor

| Element     | AWG    | Stranding | Material         | No. of Conductors |
|-------------|--------|-----------|------------------|-------------------|
|             | 12     | 7x20      | BC - Bare Copper | 3                 |
| No Ground   |        |           |                  |                   |
| Conductor ( | Count: |           | 3                |                   |

#### Insulation



### **Color Chart**

| Number | Color |
|--------|-------|
| 1      | Black |
| 2      | Red   |
| 3      | Blue  |

## Outer Shield Material



#### **Outer Jacket Material**

| Material                 | Nominal Diameter | Nominal Wall Thickness |
|--------------------------|------------------|------------------------|
| PVC - Polyvinyl Chloride | 0.382 in         | 0.047 in               |

### **Electrical Characteristics**

#### **Conductor DCR**



## Current



### Voltage

| <b>UL Description</b> | UL Voltage Rating     | Voltage Rating [V]  |  |
|-----------------------|-----------------------|---------------------|--|
| TC-ER                 | 600 V RMS (Type TC)   | 600 V RMS (Type TC) |  |
| NPLF                  | 150 V RMS (Type NPLF) |                     |  |

### **Temperature Range**

| UL Temp Rating:       | 90°C Dry, 90°C Wet     |
|-----------------------|------------------------|
| Operating Temp Range: | Wet/Dry: -30°C to 90°C |
| Wet Temp Range:       | -30°C To +90 °C        |
| Dry Temp Range:       | -30°C To +90 °C        |

## **Mechanical Characteristics**

| Bulk Cable Weight:               | 110 lbs/1000ft |
|----------------------------------|----------------|
| Max Recommended Pulling Tension: | 154 lbs        |
| Min Bend Radius/Minor Axis:      | 1.53 in        |

### **Standards**

| NEC/(UL) Specification: | NPLF, TC-ER, THWN-2 Singles       |
|-------------------------|-----------------------------------|
| Other Specification:    | ICEA S-73-532, S-95-658, S-61-402 |

### **Applicable Environmental and Other Programs**

| EU Directive 2000/53/EC (ELV):        | Yes                           |
|---------------------------------------|-------------------------------|
| EU Directive 2003/96/EC (BFR):        | Yes                           |
| EU Directive 2011/65/EU (ROHS II):    | Yes                           |
| EU Directive Compliance:              | EU Directive 2003/11/EC (BFR) |
| EU CE Mark:                           | Yes                           |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2005-04-01                    |
| CA Prop 65 (CJ for Wire & Cable):     | Yes                           |
| MII Order #39 (China RoHS):           | Yes                           |

### Suitability

| Suitability - Burial:              | Yes |
|------------------------------------|-----|
| Suitability - Indoor:              | Yes |
| Suitability - Outdoor:             | Yes |
| Suitability - Sunlight Resistance: | Yes |

## Flammability, LS0H, Toxicity Testing

| UL Flammability:   | UL1685 Vertical Tray Flame Test |
|--------------------|---------------------------------|
| CSA Flammability:  | FT4                             |
| IEEE Flammability: | 1202                            |
| UL voltage rating: | 600 V RMS (Type TC)             |

### Plenum/Non-Plenum

| Plenum (Y/N): | No |
|---------------|----|

## **Part Number**

### Variants

| Item #         | Color    | UPC          | Length    | Footnote |
|----------------|----------|--------------|-----------|----------|
| 28110A 0102500 | 00       | 612825330356 |           |          |
| 28110A 0101000 | 00 Black | 612825135272 | 10,000 ft | CZ       |
| 28110A 0105000 | Black    | 612825135289 | 5,000 ft  | CZ       |

| Footnote: | C - CRATE REEL PUT-UP.   |
|-----------|--|
| Footnote: | Z - FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN. |

#### **History**

| Update and Revision: | Revision Number: 0.315 Revision Date: 09-10-2019 |
|----------------------|--|

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