



**Product:** <u>83337E</u> ☑

Electronic, 3 C #16 Str SPC, TFE Ins, OA SPC Brd, TFE Tape Jkt, MIL-W-16878/4 (Type E)

## **Product Description**

High Temperature Electronic, 3 Conductor 16AWG (19x29) Silver Plated Copper, TFE Insulation, Overall Silver Plated Copper Braid(85%) Shield, TFE Tape Outer Jacket, MIL-W-16878/4 (Type E)

## **Technical Specifications**

## **Product Overview**

| Suitable Applications: | MIL-W-16878/4 (Type E) Spec; Extreme High/Low Temperature Environments; up to 600V analog signals & voltage control |
|------------------------|---|
|                        |   |

## **Construction Details**

#### Conductor

| Element      | No. of Elements | Size   | Stranding | Material             |
|--------------|-----------------|--------|-----------|----------------------|
| Conductor(s) | 3               | 16 AWG | 19x29     | SC - Silvered Copper |

#### Insulation

| Element      | Material                       | Nom. Thickness     | Nom. Insulation Diameter | Color Code        |
|--------------|--------------------------------|--------------------|--------------------------|-------------------|
| Conductor(s) | PTFE - Polytetrafluoroethylene | 0.011 in (0.28 mm) | 0.077 in (2.0 mm)        | White, Black, Red |

## Outer Shield

| Shield Type | Material             | Coverage |
|-------------|----------------------|----------|
| Braid       | Silvered Copper (SC) | 85%      |

## Outer Jacket

| Material                       | Nom. Thickness        | Nom. Diameter      |
|--------------------------------|-----------------------|--------------------|
| PTFE - Polytetrafluoroethylene | 0.011 in (0.28 mm)    | 0.209 in (5.31 mm) |
| Overall Cable Diameter (Nomina | al): 0.209 in (5.31 m | m)                 |

## **Electrical Characteristics**

## Electricals

| Element      | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Max. Current                 |
|--------------|--------------------|-------------------------------|---|------------------------------|
| Conductor(s) | 4.4 Ohm/1000ft     | 30.7 pF/ft (101 pF/m)         | 53 pF/ft (170 pF/m)                             | 11 Amps per conductor @ 25°C |

# Voltage

Voltage Rating 600 V

## **Mechanical Characteristics**

## Temperature

| UL Temperature | Operating       |
|----------------|-----------------|
| 200°C          | -65°C to +200°C |

## Bend Radius

| Stationary Min.   | Installation Min. |
|-------------------|-------------------|
| 2.09 in (53.1 mm) | 2.09 in (53.1 mm) |

| Max. Pull Tension: | 130.9 lbs (59.38 kg) |
|--------------------|----------------------|
| Bulk Cable Weight: | 45 lbs/1000ft        |

## **Standards and Compliance**

| Sustainability:                | CA Prop 65  |
|--------------------------------|---|
| CPR Compliance:                | CPR Euroclass: Eca  |
| NEMA Compliance:               | NEMA HP3  |
| Military Compliance:           | MIL-W-16878/4 (Type E except stranding), (insulated conductors)   |
| European Directive Compliance: | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| UK Regulation Compliance:      | UKCA Mark   |
| APAC Compliance:               | China RoHS II (GB/T 26572-2011)   |

## **Product Notes**

| Notes: | Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc. |  |
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#### History

| Update and Revision: | Revision Number: 0.520 Revision Date: 01-20-2023 |
|----------------------|--|

## **Part Numbers**

#### Variants

| Item #         | Color | Putup Type | Length   | UPC          | Footnote |
|----------------|-------|------------|----------|--------------|----------|
| 83337E 009100  | White | Reel       | 100 ft   | 612825204268 | E        |
| 83337E 009500  | White | Reel       | 500 ft   | 612825204282 | E        |
| 83337E 0091000 | White | Reel       | 1,000 ft | 612825204275 | E        |

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