




Product: [83350E](#) 

Electronic, 4 C #20 Str SPC, TFE Ins, OA SPC Brd, TFE Jkt, MIL-W-16878/4 (Type E)

 [Request Sample](#)

Product Description

High Temperature Electronic, 4 Conductor 20AWG (19x32) Silver Plated Copper, TFE Insulation, Overall Silver Plated Copper Braid(85%) Shield, TFE 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 ; up to 600V voltage control |
|------------------------|--|

Physical Characteristics (Overall)

Conductor

| Element | AWG | Stranding | Material | No. of Conductors |
|--------------|-----|-----------|----------------------|-------------------|
| Conductor(s) | 20 | 19x32 | SC - Silvered Copper | 4 |

| | |
|------------------|---|
| Conductor Count: | 4 |
|------------------|---|

Insulation

| Element | Material | Material Trade Name | Nominal Wall Thickness |
|--------------|--------------------------------|---------------------|------------------------|
| Conductor(s) | PTFE - Polytetrafluoroethylene | Teflon® | 0.0105 in |

Color Chart

| Number | Color |
|--------|-------|
| 1 | White |
| 2 | Black |
| 3 | Red |
| 4 | Green |

Outer Shield Material

| Type | Material | Coverage [%] |
|-------|----------------------|--------------|
| Braid | SC - Silvered Copper | 85 % |

Outer Jacket Material

| Material | Material Trade Name | Nominal Diameter | Nominal Wall Thickness |
|--------------------------------|---------------------|------------------|------------------------|
| PTFE - Polytetrafluoroethylene | Teflon® | 0.183 in | 0.011 in |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR | Nominal Outer Shield DCR |
|-----------------------|--------------------------|
| 7.8 Ohm/1000ft | 4.4 Ohm/1000ft |

Capacitance

| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to Shield |
|---|---|
| 31.7 pF/ft | 51 pF/ft |

Inductance

| Nominal Inductance |
|--------------------|
|--------------------|

| |
|-------------|
| 0.145 µH/ft |
|-------------|

Current

| Max. Recommended Current [A] |
|-------------------------------|
| 6.5 Amps per conductor @ 25°C |

Voltage

| UL Voltage Rating |
|-------------------|
| 600 V RMS |

Temperature Range

| | |
|-----------------------|-----------------|
| Operating Temp Range: | -65°C To +200°C |
|-----------------------|-----------------|

Mechanical Characteristics

| | |
|----------------------------------|---------------|
| Bulk Cable Weight: | 35 lbs/1000ft |
| Max Recommended Pulling Tension: | 94.7 lbs |
| Min Bend Radius/Minor Axis: | 2 in |

Standards

| | |
|-------------------------|---|
| CPR Euroclass: | Eca |
| Military Specification: | MIL-W-16878/4 (Type E except stranding), (insulated conductors) |
| Other Specification: | NEMA HP3 |

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 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU: | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2005-01-01 |
| CA Prop 65: | Yes |
| MII Order #39 (China RoHS): | Yes |

Flammability, LS0H, Toxicity Testing

| | |
|-----------------------|---------------|
| ISO/IEC Flammability: | IEC 60332-1-2 |
| UL voltage rating: | 600 V RMS |

Plenum/Non-Plenum

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

Part Number

Variants

| Item # | Color | Putup Type | Length | UPC |
|----------------|-------|------------|----------|--------------|
| 83350E 009500 | White | | | 612825204442 |
| 83350E 009100 | White | Reel | 100 ft | 612825204428 |
| 83350E 0091000 | White | Reel | 1,000 ft | 612825204435 |

| | |
|-----------|--|
| Footnote: | E - MAY CONTAIN MORE THAN 1 PIECE. MINIMUM LENGTH OF ANY ONE PIECE IS 25'. |
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Product Notes

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| 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

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| Update and Revision: | Revision Number: 0.301 Revision Date: 05-05-2020 |
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