



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'.

Product Notes

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

History

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

© 2020 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.