



Product: [83335E](#)

Electronic, 3 C #20 Str SPC, TFE Ins, OA SPC Brd, TFE Jkt, MIL-W-16878/4 (Type E)

[Request Sample](#)

Product Description

High Temperature Electronic, 3 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
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Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
Conductor(s)	20	19x32	SC - Silvered Copper	3

Conductor Count:	3
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Insulation

Element	Material	Material Trade Name	Nominal Wall Thickness
Conductor(s)	PTFE - Polytetrafluoroethylene	Teflon®	0.01 in

Color Chart

Number	Color
1	White
2	Black
3	Red

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®	0.168 in	0.01 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
7.3 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
0.124 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: 28 lbs/1000ft

Max Recommended Pulling Tension: 74.8 lbs

Min Bend Radius/Minor Axis: 1.75 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
83335E 009100	White	Reel	100 ft	612825204213
83335E 009500	White	Reel	500 ft	612825204237
83335E 0091000	White	Reel	1,000 ft	612825204220

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

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