



Product: [83335E](#) 

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

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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 & voltage control
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Construction Details

Conductor

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

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	PTFE - Polytetrafluoroethylene	0.010 in (0.25 mm)	0.058 in (1.5 mm)	White, Black, Red

Outer Shield

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

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PTFE - Polytetrafluoroethylene	0.010 in (0.25 mm)	0.168 in (4.27 mm)

Overall Cable Diameter (Nominal):	0.168 in (4.27 mm)
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Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Inductance	Max. Current
Conductor(s)	7.3 Ohm/1000ft	31.7 pF/ft (104 pF/m)	51 pF/ft (170 pF/m)	0.124 µH/ft (0.407 µH/m)	6.5 Amps per conductor @ 25°C
Nom Outer Shield DCR:		8 Ohm/1000ft (26 Ohm/km)			

Voltage

Voltage Rating
600 V

Mechanical Characteristics

Temperature

Operating
-65°C to +200°C

Bend Radius

Stationary Min.	Installation Min.
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1.68 in (42.7 mm)	1.68 in (42.7 mm)
Max. Pull Tension:	45 lbs (20 kg)
Bulk Cable Weight:	28 lbs/1000ft

Standards and Compliance

Sustainability:	CA Prop 65
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
CEC / C(UL) Compliance:	.
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: 0.659 Revision Date: 09-07-2025
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
83335E 009100	White	Reel	100 ft	612825204213	E
83335E 009500	White	Reel	500 ft	612825204237	E
83335E 0091000	White	Reel	1,000 ft	612825204220	E

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