



**Product:** [83320E](#)

Electronic, 2 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, 2 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 |
|------------------------|---|

Construction Details

Conductor

| Element      | No. of Elements | Size   | Stranding | Material             |
|--------------|-----------------|--------|-----------|----------------------|
| Conductor(s) | 2               | 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 |

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) | 0.159 in (4.04 mm) |

|                                   |                    |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.159 in (4.04 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

Electricals

| Element      | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Max. Current                  |
|--------------|--------------------|-------------------------------|---|-------------------------------|
| Conductor(s) | 8.9 Ohm/1000ft     | 31.7 pF/ft (104 pF/m)         | 51 pF/ft (170 pF/m)                             | 6.5 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. |
|-------------------|-------------------|
| 1.59 in (40.4 mm) | 1.59 in (40.4 mm) |

|                    |                |
|--------------------|----------------|
| Max. Pull Tension: | 30 lbs (14 kg) |
| Bulk Cable Weight: | 21 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

|        |   |
|--------|---|
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History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.545 Revision Date: 02-15-2024 |
|----------------------|--|

Part Numbers

Variants

| Item #         | Color | Putup Type | Length   | UPC          | Footnote |
|----------------|-------|------------|----------|--------------|----------|
| 83320E 009100  | White | Reel       | 100 ft   | 612825204022 | E        |
| 83320E 009500  | White | Reel       | 500 ft   | 612825204046 | E        |
| 83320E 0091000 | White | Reel       | 1,000 ft | 612825204039 | E        |

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