



Part Number: 83320E

MIL-W-16878/4 (Type E), (2) 20 AWG (19x32) SPC, TFE/TFE, SPC Braid Shld

[Request Sample](#)

Product Description

Two 20 AWG stranded (19x32) silver-plated copper conductors, Teflon® (TFE) insulation, silver plated copper braid shield (85% coverage), Teflon® (TFE) jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | No. of Conductors |
|-----|-----------|--|-------------------|
| 20 | 19x32 | SPCCS - Silver Plated Copper Covered Steel | 2 |

| | |
|------------------------|--------|
| Conductor Count: | 2 |
| Total Number of Pairs: | 1 |
| Conductor Size: | 20 AWG |

Insulation

| Material | Material Trade Name | Nominal Wall Thickness |
|---------------------------|---------------------|------------------------|
| TFE - Tetrafluoroethylene | Teflon® | 0.01 in |

Color Chart

| Number | Color |
|--------|-------|
| 1 | White |
| 2 | Black |

Outer Shield Material

| Type | Material | Coverage [%] |
|-------|----------------------------|--------------|
| Braid | SPC - Silver Plated Copper | 85 % |

Outer Jacket Material

| Material | Material Trade Name | Nominal Diameter | Nominal Wall Thickness |
|---------------------------|---------------------|------------------|------------------------|
| TFE - Tetrafluoroethylene | Teflon® | 0.159 in | 0.011 in |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR | Nominal Outer Shield DCR |
|-----------------------|--------------------------|
| 8.9 Ohm/1000ft | 6.3 Ohm/1000ft |

Capacitance

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

| | |
|------------|----------|
| Shielding: | Braid(s) |
|------------|----------|

Inductance

| Nominal Inductance |
|--------------------|
| 0.11 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: | 21 lbs/1000ft |
| Max Recommended Pulling Tension: | 54.8 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 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |

Flammability, LSOH, Toxicity Testing

| | |
|--------------------|-----------|
| UL voltage rating: | 600 V RMS |
|--------------------|-----------|

Plenum/Non-Plenum

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

Part Number

Variants

| Item # | Color | Footnote |
|----------------|-------|----------|
| 83320E 009100 | White | E |
| 83320E 0091000 | White | E |
| 83320E 009500 | White | E |

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