# **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



#### 83319E Multi-Conductor - MIL-W-16878/4 (Type E), 2 Conductors Cabled

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For more Information please call

1-800-Belden1



#### **General Description:**

22 AWG stranded (19x34) silver-plated copper conductors, cabled and color-coded, extruded TFE Teflon® insulation, silver-plated copper braid shield (85% coverage), TFE teflon tape-wrapped jacket.

| Physical Characteristics (Overall)   |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| Conductor AWG:   |  |  |  |  |  |  |
| # Conductors AWG Stranding Conductor Material 2   22   19x34   SPC - Silver Plated Copper  |  |  |  |  |  |  |
| Total Number of Conductors:  | 2  |  |  |  |  |  |
| Insulation<br>Insulation Material:   |  |  |  |  |  |  |
| Insulation Material:  Insulation Trade Name Insulation Material  Wall Thickness  | (in)   |  |  |  |  |  |
| Teflon® TFE - Tetrafluoroethylene .010   | (***)  |  |  |  |  |  |
| Insulation Resistance:   | 100, 000 Megaohms/1000 ft. @ 500 V DC  |  |  |  |  |  |
| Outer Shield   |  |  |  |  |  |  |
| Outer Shield Material:   |  |  |  |  |  |  |
| Type Outer Shield Material Coverage (%)  |  |  |  |  |  |  |
| Braid SPC - Silver Plated Copper 85.000  |  |  |  |  |  |  |
| Outer Jacket   |  |  |  |  |  |  |
| Outer Jacket Material:   |  |  |  |  |  |  |
|  | Outer Jacket Trade Name Outer Jacket Material Nom. Wall Thickness (in.)                                  |  |  |  |  |  |
| Teflon® TFE - Tetrafluoroethylene 0.011  |  |  |  |  |  |  |
| Overall Cable  |  |  |  |  |  |  |
| Overall Cabling Color Code Chart:  |  |  |  |  |  |  |
| Number Color   |  |  |  |  |  |  |
| 1 White  |  |  |  |  |  |  |
| 2 Black  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Overall Nominal Diameter:  | 0.143 in.  |  |  |  |  |  |
| Overall Nominal Diameter:  Mechanical Characteristics (Overall)  | 0.143 in.  |  |  |  |  |  |
|  | 0.143 in65°C To +200°C   |  |  |  |  |  |
| Mechanical Characteristics (Overall)   |  |  |  |  |  |  |
| Mechanical Characteristics (Overall)  Operating Temperature Range:  Bulk Cable Weight:  Max. Recommended Pulling Tension:  | -65°C To +200°C<br>17 lbs/1000 ft.<br>43.800 lbs.  |  |  |  |  |  |
| Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight:   | -65°C To +200°C<br>17 lbs/1000 ft.   |  |  |  |  |  |
| Mechanical Characteristics (Overall)  Operating Temperature Range:  Bulk Cable Weight:  Max. Recommended Pulling Tension:  | -65°C To +200°C<br>17 lbs/1000 ft.<br>43.800 lbs.<br>1.500 in.   |  |  |  |  |  |
| Mechanical Characteristics (Overall)  Operating Temperature Range:  Bulk Cable Weight:  Max. Recommended Pulling Tension:  Min. Bend Radius/Minor Axis:  | -65°C To +200°C<br>17 lbs/1000 ft.<br>43.800 lbs.<br>1.500 in.   |  |  |  |  |  |
| Mechanical Characteristics (Overall)  Operating Temperature Range:  Bulk Cable Weight:  Max. Recommended Pulling Tension:  Min. Bend Radius/Minor Axis:  Applicable Specifications and Agency Compliance (Compliance)  | -65°C To +200°C<br>17 lbs/1000 ft.<br>43.800 lbs.<br>1.500 in.   |  |  |  |  |  |
| Mechanical Characteristics (Overall)  Operating Temperature Range:  Bulk Cable Weight:  Max. Recommended Pulling Tension:  Min. Bend Radius/Minor Axis:  Applicable Specifications and Agency Compliance (Capplicable Standards & Environmental Programs   | -65°C To +200°C  17 lbs/1000 ft.  43.800 lbs.  1.500 in.   |  |  |  |  |  |
| Mechanical Characteristics (Overall)  Operating Temperature Range:  Bulk Cable Weight:  Max. Recommended Pulling Tension:  Min. Bend Radius/Minor Axis:  Applicable Specifications and Agency Compliance (Capplicable Standards & Environmental Programs  EU Directive 2011/65/EU (ROHS II):   | -65°C To +200°C  17 lbs/1000 ft.  43.800 lbs.  1.500 in.  Verall)  |  |  |  |  |  |
| Mechanical Characteristics (Overall)  Operating Temperature Range:  Bulk Cable Weight:  Max. Recommended Pulling Tension:  Min. Bend Radius/Minor Axis:  Applicable Specifications and Agency Compliance (CApplicable Standards & Environmental Programs  EU Directive 2011/65/EU (ROHS II):  EU CE Mark:  | -65°C To +200°C  17 lbs/1000 ft.  43.800 lbs.  1.500 in.  Verall)  Yes  Yes                              |  |  |  |  |  |
| Mechanical Characteristics (Overall)  Operating Temperature Range:  Bulk Cable Weight:  Max. Recommended Pulling Tension:  Min. Bend Radius/Minor Axis:  Applicable Specifications and Agency Compliance (Capplicable Standards & Environmental Programs  EU Directive 2011/65/EU (ROHS II):  EU CE Mark:  EU Directive 2000/53/EC (ELV):  | -65°C To +200°C  17 lbs/1000 ft.  43.800 lbs.  1.500 in.  Verall)  Yes  Yes  Yes                         |  |  |  |  |  |
| Mechanical Characteristics (Overall)  Operating Temperature Range:  Bulk Cable Weight:  Max. Recommended Pulling Tension:  Min. Bend Radius/Minor Axis:  Applicable Specifications and Agency Compliance (CApplicable Standards & Environmental Programs  EU Directive 2011/65/EU (ROHS II):  EU CE Mark:  EU Directive 2000/53/EC (ELV):  EU Directive 2002/95/EC (ROHS):   | -65°C To +200°C  17 lbs/1000 ft.  43.800 lbs.  1.500 in.  Verall)  Yes  Yes  Yes  Yes                    |  |  |  |  |  |
| Mechanical Characteristics (Overall)  Operating Temperature Range:  Bulk Cable Weight:  Max. Recommended Pulling Tension:  Min. Bend Radius/Minor Axis:  Applicable Specifications and Agency Compliance (Capplicable Standards & Environmental Programs  EU Directive 2011/65/EU (ROHS II):  EU CE Mark:  EU Directive 2000/53/EC (ELV):  EU Directive 2002/95/EC (ROHS):  EU RoHS Compliance Date (mm/dd/yyyy):  | -65°C To +200°C  17 lbs/1000 ft.  43.800 lbs.  1.500 in.  Verall)  Yes  Yes  Yes  Yes  O1/01/2005        |  |  |  |  |  |
| Mechanical Characteristics (Overall)  Operating Temperature Range:  Bulk Cable Weight:  Max. Recommended Pulling Tension:  Min. Bend Radius/Minor Axis:  Applicable Specifications and Agency Compliance (CAPPLICAN Example Standards & Environmental Programs  EU Directive 2011/65/EU (ROHS II):  EU CE Mark:  EU Directive 2000/53/EC (ELV):  EU Directive 2002/95/EC (ROHS):  EU ROHS Compliance Date (mm/dd/yyyy):  EU Directive 2002/96/EC (WEEE):                           | -65°C To +200°C  17 lbs/1000 ft.  43.800 lbs.  1.500 in.  Verall)  Yes  Yes  Yes  Yes  Ol/01/2005  Yes   |  |  |  |  |  |
| Mechanical Characteristics (Overall)  Operating Temperature Range:  Bulk Cable Weight:  Max. Recommended Pulling Tension:  Min. Bend Radius/Minor Axis:  Applicable Specifications and Agency Compliance (CApplicable Standards & Environmental Programs  EU Directive 2011/65/EU (ROHS II):  EU CE Mark:  EU Directive 2000/53/EC (ELV):  EU Directive 2002/95/EC (RoHS):  EU RoHS Compliance Date (mm/dd/yyyy):  EU Directive 2002/96/EC (WEEE):  EU Directive 2003/11/EC (BFR): | -65°C To +200°C  17 lbs/1000 ft.  43.800 lbs.  1.500 in.  Verall)  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye |  |  |  |  |  |

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## **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



#### 83319E Multi-Conductor - MIL-W-16878/4 (Type E), 2 Conductors Cabled

|   | Other Specification:                 | NEMA HP3 |  |  |  |  |  |
|---|--------------------------------------|----------|--|--|--|--|--|
| Ple   | num/Non-Plenum                       |          |  |  |  |  |  |
|   | Plenum (Y/N):                        | No       |  |  |  |  |  |
| Ele   | ctrical Characteristics (Overall)    |          |  |  |  |  |  |
| Nor   | n. Inductance:                       |          |  |  |  |  |  |
|   | inductance (μH/ft)<br>138            |          |  |  |  |  |  |
| Nom. Capacitance Conductor to Conductor:            |                                      |          |  |  |  |  |  |
|   | Capacitance (pF/ft)<br>29.9          |          |  |  |  |  |  |
| Nom. Capacitance Cond. to Other Conductor & Shield: |                                      |          |  |  |  |  |  |
|   | Capacitance (pF/ft) 49.2             |          |  |  |  |  |  |
| Nor   | n. Conductor DC Resistance:          |          |  |  |  |  |  |
|   | DCR @ 20°C (Ohm/1000 ft)<br>14.6     |          |  |  |  |  |  |
| Nominal Outer Shield DC Resistance:                 |                                      |          |  |  |  |  |  |
|   | DCR @ 20°C (Ohm/1000 ft)<br>5.7      |          |  |  |  |  |  |
| Max. Operating Voltage - Non-UL:                    |                                      |          |  |  |  |  |  |
|   | Voltage<br>600 V RMS                 |          |  |  |  |  |  |
| Max. Recommended Current:                           |                                      |          |  |  |  |  |  |
|   | Current 5 Amps per conductor at 25°C |          |  |  |  |  |  |

### Notes (Overall)

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

#### **Put Ups and Colors:**

| Item #         | Putup    | Ship Weight | Color | Notes | Item Desc              |
|----------------|----------|-------------|-------|-------|------------------------|
| 83319E 009100  | 100 FT   | 1.600 LB    | WHITE | E     | 2 #22 TFE BRD TFE TAPE |
| 83319E 0091000 | 1,000 FT | 17.000 LB   | WHITE | E     | 2 #22 TFE BRD TFE TAPE |
| 83319E 009500  | 500 FT   | 9.500 LB    | WHITE | E     | 2 #22 TFE BRD TFE TAPE |

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

Revision Number: 4 Revision Date: 08-14-2012

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