# **Detailed Specifications & Technical Data**



### 83349E Multi-Conductor - MIL-W-16878/4 (Type E)



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.

| hysical Characteristics (Overall)  |   |  |  |  |
|--|---|--|--|--|
| Conductor  |   |  |  |  |
| AWG:<br># Conductors AWG Stranding Conductor Material  |   |  |  |  |
| 4 22 19x34 SPC - Silver Plated Copper  |   |  |  |  |
| Total Number of Conductors:  | 4   |  |  |  |
| nsulation  |   |  |  |  |
| Insulation Material:   |   |  |  |  |
| Insulation Trade Name   Insulation Material   Wall Thicknes     Teflon®   TFE - Tetrafluoroethylene   .010   | ss (in.)  |  |  |  |
|  |   |  |  |  |
| Insulation Resistance:   | 100,000 Megaohms/1000 ft. @ 500 V DC  |  |  |  |
| Outer Shield<br>Outer Shield Material:   |   |  |  |  |
| Type Outer Shield Material Coverage (%)  |   |  |  |  |
| Braid SPC - Silver Plated Copper 85  |   |  |  |  |
| Duter Jacket   |   |  |  |  |
| Outer Jacket Material:   |   |  |  |  |
| Outer Jacket Trade Name   Outer Jacket Material   Nom. Wall     Teflon®   TFE - Tetrafluoroethylene   .011   | Thickness (in.)   |  |  |  |
|  |   |  |  |  |
| Overall Cable<br>Overall Cabling Color Code Chart:   |   |  |  |  |
| Number Color   |   |  |  |  |
| 1 White  |   |  |  |  |
| 2 Black  |   |  |  |  |
| 3 Red<br>4 Green   |   |  |  |  |
|  |   |  |  |  |
| Overall Nominal Diameter:  | 0.163 in.   |  |  |  |
|  | 0.163 in.   |  |  |  |
| Overall Nominal Diameter:<br>lechanical Characteristics (Overall)<br>Operating Temperature Range:  | 0.163 in.<br>-65°C To +200°C  |  |  |  |
| lechanical Characteristics (Overall)   |   |  |  |  |
| lechanical Characteristics (Overall)<br>Operating Temperature Range:   | -65°C To +200°C   |  |  |  |
| lechanical Characteristics (Overall)<br>Operating Temperature Range:<br>Bulk Cable Weight:   | -65°C To +200°C<br>26 lbs/1000 ft.  |  |  |  |
| Iechanical Characteristics (Overall)   Operating Temperature Range:   Bulk Cable Weight:   Max. Recommended Pulling Tension:   Min. Bend Radius/Minor Axis:  | -65°C To +200°C<br>26 lbs/1000 ft.<br>67.800 lbs.<br>1.750 in.  |  |  |  |
| International Characteristics (Overall)   Operating Temperature Range:   Bulk Cable Weight:   Max. Recommended Pulling Tension:  | -65°C To +200°C<br>26 lbs/1000 ft.<br>67.800 lbs.<br>1.750 in.  |  |  |  |
| Iechanical Characteristics (Overall)   Operating Temperature Range:   Bulk Cable Weight:   Max. Recommended Pulling Tension:   Min. Bend Radius/Minor Axis:   pplicable Specifications and Agency Compliance (   | -65°C To +200°C<br>26 lbs/1000 ft.<br>67.800 lbs.<br>1.750 in.  |  |  |  |
| International Characteristics (Overall)   Operating Temperature Range:   Bulk Cable Weight:   Max. Recommended Pulling Tension:   Min. Bend Radius/Minor Axis:   upplicable Specifications and Agency Compliance (Applicable Standards & Environmental Programs)   | -65°C To +200°C<br>26 lbs/1000 ft.<br>67.800 lbs.<br>1.750 in.<br>(Overall)   |  |  |  |
| Iechanical Characteristics (Overall)   Operating Temperature Range:   Bulk Cable Weight:   Max. Recommended Pulling Tension:   Min. Bend Radius/Minor Axis:   Opplicable Specifications and Agency Compliance (Applicable Standards & Environmental Programs   EU Directive 2011/65/EU (ROHS II):  | -65°C To +200°C<br>26 lbs/1000 ft.<br>67.800 lbs.<br>1.750 in.<br>(Overall)<br>Yes  |  |  |  |
| Iechanical Characteristics (Overall)   Operating Temperature Range:   Bulk Cable Weight:   Max. Recommended Pulling Tension:   Min. Bend Radius/Minor Axis:   pplicable Specifications and Agency Compliance (Applicable Standards & Environmental Programs   EU Directive 2011/65/EU (ROHS II):   EU CE Mark:   | -65°C To +200°C<br>26 lbs/1000 ft.<br>67.800 lbs.<br>1.750 in.<br>(Overall)<br>Yes<br>Yes   |  |  |  |
| Iechanical Characteristics (Overall)   Operating Temperature Range:   Bulk Cable Weight:   Max. Recommended Pulling Tension:   Min. Bend Radius/Minor Axis:   pplicable Specifications and Agency Compliance (Applicable Standards & Environmental Programs   EU Directive 2011/65/EU (ROHS II):   EU Directive 2000/53/EC (ELV):  | -65°C To +200°C<br>26 lbs/1000 ft.<br>67.800 lbs.<br>1.750 in.<br>(Overall)<br>Yes<br>Yes<br>Yes                                    |  |  |  |
| International Characteristics (Overall)   Operating Temperature Range:   Bulk Cable Weight:   Max. Recommended Pulling Tension:   Min. Bend Radius/Minor Axis:   Opplicable Specifications and Agency Compliance (Applicable Standards & Environmental Programs   EU Directive 2011/65/EU (ROHS II):   EU Directive 2000/53/EC (ELV):   EU Directive 2002/95/EC (RoHS):  | -65°C To +200°C<br>26 lbs/1000 ft.<br>67.800 lbs.<br>1.750 in.<br>(Overall)<br>Yes<br>Yes<br>Yes<br>Yes                             |  |  |  |
| Iechanical Characteristics (Overall)   Operating Temperature Range:   Bulk Cable Weight:   Max. Recommended Pulling Tension:   Min. Bend Radius/Minor Axis:   pplicable Specifications and Agency Compliance (Applicable Standards & Environmental Programs   EU Directive 2011/65/EU (ROHS II):   EU Directive 2000/53/EC (ELV):   EU Directive 2000/53/EC (ROHS):   EU RoHS Compliance Date (mm/dd/yyyy):                                    | -65°C To +200°C<br>26 lbs/1000 ft.<br>67.800 lbs.<br>1.750 in.<br>(Overall)<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>01/01/2005        |  |  |  |
| Iechanical Characteristics (Overall)   Operating Temperature Range:   Bulk Cable Weight:   Max. Recommended Pulling Tension:   Min. Bend Radius/Minor Axis:   Applicable Specifications and Agency Compliance (Applicable Standards & Environmental Programs   EU Directive 2011/65/EU (ROHS II):   EU Directive 2000/53/EC (ELV):   EU Directive 2000/53/EC (ROHS):   EU RoHS Compliance Date (mm/dd/yyyy):   EU Directive 2002/96/EC (WEEE): | -65°C To +200°C<br>26 lbs/1000 ft.<br>67.800 lbs.<br>1.750 in.<br>(Overall)<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>01/01/2005<br>Yes |  |  |  |

# **Detailed Specifications & Technical Data**



#### ENGLISH MEASUREMENT VERSION

### 83349E Multi-Conductor - MIL-W-16878/4 (Type E)

| Military Specification:                                     | MIL-W-16878/4 (Type E, except stranding, insulated conductors) |  |  |  |  |
|---|--|--|--|--|--|
| Other Specification:  | NEMA HP3   |  |  |  |  |
| Plenum/Non-Plenum   |  |  |  |  |  |
| Plenum (Y/N):   | No   |  |  |  |  |
| Electrical Characteristics (Overall)                        |  |  |  |  |  |
| Nom. Inductance:  |  |  |  |  |  |
| Inductance (µH/ft)<br>.158                                  |  |  |  |  |  |
| Nom. Capacitance Conductor to Conductor:                    |  |  |  |  |  |
| Capacitance (pF/ft)<br>27.4                                 |  |  |  |  |  |
| Nom. Capacitance Cond. to Other Conductor & Shield:         |  |  |  |  |  |
| Capacitance (pF/ft)<br>45.7                                 |  |  |  |  |  |
| Nom. Conductor DC Resistance:                               |  |  |  |  |  |
| DCR @ 20°C (Ohm/1000 ft)<br>14.7                            |  |  |  |  |  |
| Nominal Outer Shield DC Resistance:                         |  |  |  |  |  |
| DCR @ 20°C (Ohm/1000 ft)<br>5.5                             |  |  |  |  |  |
| Max. Operating Voltage - UL:                                |  |  |  |  |  |
| Voltage<br>600 V RMS  |  |  |  |  |  |
| Max. Recommended Current:                                   |  |  |  |  |  |
| Current<br>5 Amps per conductor at 25°C                     |  |  |  |  |  |
| Notes (Overall)   |  |  |  |  |  |
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#### Put Ups and Colors:

| Item #         | Putup    | Ship Weight | Color | Notes | Item Desc              |
|----------------|----------|-------------|-------|-------|------------------------|
| 83349E 009100  | 100 FT   | 3.400 LB    | WHITE | E     | 4 #22 TFE BRD TFE TAPE |
| 83349E 0091000 | 1,000 FT | 27.000 LB   | WHITE | E     | 4 #22 TFE BRD TFE TAPE |

Notes:

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

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