

**Part Number:** 83321E

MIL-W -16878/4 (Type E), (2) 18 AWG (19x30) SPC,  
TFE/TFE, SPC Braid Shld

## Product Description

Two 18 AWG stranded (19x30) silver-plated copper conductors, Teflon® (TFE) insulation, silver plated copper braid shield (85% coverage), Teflon® (TFE) jacket.

## Product Specifications

## Technical Specifications

### Construction and Dimensions

#### Conductor:

| AWG                         | Stranding | Material                   | No. of Conductors |
|-----------------------------|-----------|----------------------------|-------------------|
| 18                          | 19x30     | SPC - Silver Plated Copper | 2                 |
| Total Number of Conductors: |           |                            | 2                 |

#### Insulation:

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

#### Color Chart 1:

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

#### Outershield 1:

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

#### Outerjacket 1:

| Material                  | Material Trade Name | Nominal Diameter | Nominal Wall Thickness |
|---------------------------|---------------------|------------------|------------------------|
| TFE - Tetrafluoroethylene | Teflon®             | 0.179 in         | 0.011 in               |

## Electrical Characteristics

### Conductor DCR:

| Nominal Conductor DCR | Nominal Outer Shield DCR |
|-----------------------|--------------------------|
| 5.52 Ohm/1000ft       | 5.3 Ohm/1000ft           |

### Capacitance:

| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to Shield |
|-----------------------------------------|---------------------------------------------------------|
| 31 pF/ft                                | 52.8 pF/ft                                              |
| Min Insulation Resistance:              | 100,000 Megaohms/1000 ft. @ 500 V DC MOhm*1000ft        |

### Impedance:

| Nominal Characteristic Impedance |
|----------------------------------|
| 40 Ohm                           |

### Current:

| Max. Recommended Current [A]  |
|-------------------------------|
| 8.1 Amps per conductor @ 25°C |

### Inductance:

| Nominal Inductance |
|--------------------|
| 0.103 µH/ft        |

### Voltage:

| Non-UL Voltage Rating |
|-----------------------|
| 600 V RMS             |

## Use

|                                  |          |
|----------------------------------|----------|
| Max Recommended Pulling Tension: | 79.2 lbs |
|----------------------------------|----------|

## Safety

## Temperature Range

|                       |                 |
|-----------------------|-----------------|
| Operating Temp Range: | -65°C To +200°C |
|-----------------------|-----------------|

## Mechanical Characteristics

|                             |      |
|-----------------------------|------|
| Min Bend Radius/Minor Axis: | 2 in |
|-----------------------------|------|

Part Number

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

Standards

|                                   |                                  |
|-----------------------------------|----------------------------------|
| CA Prop 65 (CJ for Wire & Cable): | CA Prop 65 (CJ for Wire & Cable) |
| MII Order #39 (China RoHS):       | MII Order #39 (China RoHS)       |
| Military Specification:           | Military Specification           |
| Other Specification:              | Other Specification              |
| EU Directive Compliance:          | EU Directive 2003/11/EC (BFR)    |
| EU CE Mark:                       | EU CE Mark                       |

History

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

Product Variants

| Part Number    | Color | Put-Up Type | Length  |
|----------------|-------|-------------|---------|
| 83321E 0091000 | WHITE | Reel        | 1000 ft |
| 83321E 009100  | WHITE | Reel        | 100 ft  |
| 83321E 009500  | WHITE | Reel        | 500 ft  |

© 2016 Belden, Inc.  
All Rights Reserved

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.