

## 83321E Multi-Conductor - MIL-W-16878/4 (Type E), 2 Conductors Cabled

For more Information  
please call

1-800-Belden1



### General Description:

18 AWG stranded (19x30) 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	18	19x30	SPC - Silver Plated Copper

Total Number of Conductors: 2

#### Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Wall Thickness (mm)
Teflon®	TFE - Tetrafluoroethylene	0.2794

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

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material	Nom. Wall Thickness (mm)
Teflon®	TFE - Tetrafluoroethylene	0.2794

#### Overall Cable

Overall Cabling Color Code Chart:

Number	Color
1	White
2	Black

Overall Nominal Diameter: 4.547 mm

### Mechanical Characteristics (Overall)

Operating Temperature Range: -65°C To +200°C

Bulk Cable Weight: 40.181 Kg/Km

Max. Recommended Pulling Tension: 352.297 N

Min. Bend Radius/Minor Axis: 50.800 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

EU Directive 2011/65/EU (ROHS II): Yes

EU CE Mark: Yes

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 01/01/2005

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire & Cable): Yes

MIL Order #39 (China RoHS): Yes

Military Specification: MIL-W-16878/4 (Type E except stranding) (insulated conductors)

## METRIC MEASUREMENT VERSION

### 83321E Multi-Conductor - MIL-W-16878/4 (Type E), 2 Conductors Cabled

Other Specification: NEMA HP3

#### Plenum/Non-Plenum

Plenum (Y/N): No

#### Electrical Characteristics (Overall)

##### Nom. Characteristic Impedance:

Impedance (Ohm)

40

##### Nom. Inductance:

Inductance (µH/m)

0.337943

##### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

101.711

##### Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m)

173.237

##### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

18.1111

##### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

17.3893

##### Max. Operating Voltage - Non-UL:

Voltage

600 V RMS

##### Max. Recommended Current:

Current

8.1 Amps per conductor @ 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
83321E 009100	100 FT	3.700 LB	WHITE	E	2 #18 TFE BRD TFE TAPE
83321E 0091000	1,000 FT	29.000 LB	WHITE	E	2 #18 TFE BRD TFE TAPE
83321E 009500	500 FT	15.000 LB	WHITE	E	2 #18 TFE BRD TFE TAPE

##### Notes:

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

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

© 2015 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.