

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION

BELDEN
SENDING ALL THE RIGHT SIGNALS

83351E Multi-Conductor - MIL-W-16878/4 (Type E)



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
4	18	19x30	SPC - Silver Plated Copper

Total Number of Conductors: 4

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
3	Red
4	Green

Overall Nominal Diameter: 5.258 mm

Mechanical Characteristics (Overall)

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

Bulk Cable Weight: 69.945 Kg/Km

Max. Recommended Pulling Tension: 616.076 N

Min. Bend Radius/Minor Axis: 57.150 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

MII Order #39 (China RoHS): Yes

Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

83351E 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/m)
0.413406

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)
18.7017

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
13.4521

Max. Operating Voltage - 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
83351E 009100	100 FT	5.400 LB	WHITE	E	4 #18 TFE BRD TFE TAPE
83351E 0091000	1,000 FT	54.000 LB	WHITE	E	4 #18 TFE BRD TFE TAPE
83351E 009500	500 FT	25.000 LB	WHITE	E	4 #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: 08-31-2012

© 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.