Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



83306E Multi-Conductor - MIL-W-16878/4 (Type E)

For more Information please call

1-800-Belden1



General Description:

20 AWG stranded (19x32) silver-plated copper conductors, cabled and color-coded, extruded TFE Teflon® insulation, silver-plated copper braid shield (85% coverage), TFE teflon tape-wrapped jacket.

1

Physical Characteristics (Overall)

Conductor

AWG:

| # Conductors | AWG | Stranding | Conductor Material |
|--------------|-----|-----------|----------------------------|
| 1 | 20 | 19x32 | SPC - Silver Plated Copper |

Total Number of Conductors:

Insulation

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 |

Outer Jacket

Outer Jacket Material:

| Outer Jacket Trade Name | Outer Jacket Material | Nom. Wall Thickness (in.) | |
|-------------------------|---------------------------|---------------------------|--|
| Teflon® | TFE - Tetrafluoroethylene | .010 | |

Overall Cable

Overall Cabling Color Code Chart:



Overall Nominal Diameter: 0.099 in.

Mechanical Characteristics (Overall)

| Operating Temperature Range: | -65°C To +200°C |
|-----------------------------------|-----------------|
| Bulk Cable Weight: | 12 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 27.800 lbs. |
| Min. Bend Radius/Minor Axis: | 1 in. |

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 |
| | |

Page 1 of 3 10-30-2013

Detailed Specifications & Technical Data





83306E Multi-Conductor - MIL-W-16878/4 (Type E)

| | 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 | | |
| | Military Specification: | MIL-W-16878/4 Type E (except stranding) (insulated conductors) | | |
| | Other Specification: | NEMA HP3 | | |
| Ple | enum/Non-Plenum | | | |
| | Plenum (Y/N): | No | | |
| | | | | |

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm) 21

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 8.9

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 12

Max. Operating Voltage - Non-UL:

Voltage 600 V RMS

Max. Recommended Current:

Current 6.5 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 |
|----------------|----------|-------------|-------|-------|------------------------|
| 83306E 009100 | 100 FT | 1.400 LB | WHITE | E | 1 #20 TFE BRD TFE TAPE |
| 83306E 0091000 | 1,000 FT | 15.000 LB | WHITE | E | 1 #20 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: 08-23-2012

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Page 2 of 3 10-30-2013

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



83306E Multi-Conductor - MIL-W-16878/4 (Type E)

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

Page 3 of 3 10-30-2013