# **Detailed Specifications & Technical Data**

METRIC MEASUREMENT VERSION



## 83320E Multi-Conductor - MIL-W-16878/4 (Type E), 2 Conductors Cabled



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.

2

# **Physical Characteristics (Overall)**

#### Conductor

#### AWG:

# Conductors	AWG	Stranding	Conductor Material
2	20	19x32	SPC - Silver Plated Copper

Total Number of Conductors:

#### Insulation

#### **Insulation Material:**

Insulation Trade Name	Insulation Material	Wall Thickness (mm)
Teflon®	TFE - Tetrafluoroethylene	0.254

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: 4.039 mm

## **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-65°C To +200°C
Bulk Cable Weight:	31.252 Kg/Km
Max. Recommended Pulling Tension:	243.761 N
Min. Bend Radius/Minor Axis:	44.450 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

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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		
enum/Non-Plenum			
Plenum (Y/N):	No		

### **Electrical Characteristics (Overall)**

Nom. Inductance:

Inductance (µH/m) 0.36091

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 104.008

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 167.331

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 29.2009

**Nominal Outer Shield DC Resistance:** 

DCR @ 20°C (Ohm/km) 20.6703

Max. Operating Voltage - 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
83320E 009100	30 MT	1.270 KG	WHITE	E	2 #20 TFE BRD TFE TAPE
83320E 0091000	305 MT	9.979 KG	WHITE	E	2 #20 TFE BRD TFE TAPE
83320E 009500	152 MT	5.216 KG	WHITE	E	2 #20 TFE BRD TFE TAPE

#### Notes:

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

Revision Number: 3 Revision Date: 08-14-2012

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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.

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