Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



83350E 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.

4

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
4	20	19x32	SPC - Silver Plated Copper

Total Number of Conductors:

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Wall Thickness (mm)
Teflon®	TFE - Tetrafluoroethylene	0.279

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: 4.648 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-65°C To +200°C	
Bulk Cable Weight:	52.087 Kg/Km	
Max. Recommended Pulling Tension:	421.245 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	

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	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
	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. Inductance:

Inductance (µH/m) 0.475745

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) 25.5918

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 14.4364

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
83350E 009100	30 MT	1.905 KG	WHITE	E	4 #20 TFE BRD TFE TAPE
83350E 0091000	305 MT	17.237 KG	WHITE	E	4 #20 TFE BRD TFE TAPE
83350E 009500	152 MT	8.618 KG	WHITE	E	4 #20 TFE BRD TFE TAPE

Notes:

 ${\sf E} = {\sf MAY} \; {\sf CONTAIN} \; {\sf MORE} \; {\sf THAN} \; {\sf 1} \; {\sf PIECE}. \; {\sf MINIMUM} \; {\sf LENGTH} \; {\sf OF} \; {\sf ANY} \; {\sf ONE} \; {\sf PIECE} \; {\sf IS} \; {\sf 25}'$

Revision Number: 4 Revision Date: 08-31-2012

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Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications

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