Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

83335E 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.

Dhualaal Ohanaataniatiaa (Oursus II)	
Physical Characteristics (Overall)	
Conductor AWG:	
# Conductors AWG Stranding Conductor Material	
3 20 19x32 SPC - Silver Plated Copper	
Total Number of Conductors:	3
Insulation	
Insulation Material:	
	kness (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 (%)	
Type Outer Shield Material Coverage (%) Braid SPC - Silver Plated Copper 85	
Outer Jacket Outer Jacket Material:	
	/all Thickness (mm)
Teflon® TFE - Tetrafluoroethylene 0.254	
Overall Cable	
Overall Cabling Color Code Chart:	
Number Color	
1 White	
2 Black 3 Red	
Overall Nominal Diameter:	4.267 mm
Overall Nominal Diameter:	4.267 mm
	4.267 mm -65°C To +200°C
Overall Nominal Diameter: Mechanical Characteristics (Overall)	
Overall Nominal Diameter: Mechanical Characteristics (Overall) Operating Temperature Range:	-65°C To +200°C
Overall Nominal Diameter: Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight:	-65°C To +200°C 41.670 Kg/Km
Overall Nominal Diameter: Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight: Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis:	-65°C To +200°C 41.670 Kg/Km 332.725 N 44.450 mm
Overall Nominal Diameter: Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight: Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis: Applicable Specifications and Agency Compliance	-65°C To +200°C 41.670 Kg/Km 332.725 N 44.450 mm
Overall Nominal Diameter: Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight: Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis:	-65°C To +200°C 41.670 Kg/Km 332.725 N 44.450 mm
Overall Nominal Diameter: Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight: Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis: Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs	-65°C To +200°C 41.670 Kg/Km 332.725 N 44.450 mm te (Overall)
Overall Nominal Diameter: Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight: Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis: Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs EU Directive 2011/65/EU (ROHS II):	-65°C To +200°C 41.670 Kg/Km 332.725 N 44.450 mm te (Overall) Yes
Overall Nominal Diameter: Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight: Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis: Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs EU Directive 2011/65/EU (ROHS II): EU CE Mark:	-65°C To +200°C 41.670 Kg/Km 332.725 N 44.450 mm ce (Overall) Yes Yes
Overall Nominal Diameter: Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight: Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis: Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs EU Directive 2011/65/EU (ROHS II): EU Directive 2000/53/EC (ELV):	-65°C To +200°C 41.670 Kg/Km 332.725 N 44.450 mm ce (Overall) Yes Yes Yes
Overall Nominal Diameter: Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight: Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis: Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs EU Directive 2011/65/EU (ROHS II): EU Directive 2000/53/EC (ELV): EU Directive 2002/95/EC (RoHS):	-65°C To +200°C 41.670 Kg/Km 332.725 N 44.450 mm te (Overall) Yes Yes Yes Yes
Overall Nominal Diameter: Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight: Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis: Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs EU Directive 2011/65/EU (ROHS II): EU Directive 2000/53/EC (ELV): EU Directive 2000/53/EC (RoHS): EU RoHS Compliance Date (mm/dd/yyyy):	-65°C To +200°C 41.670 Kg/Km 332.725 N 44.450 mm ce (Overall) Yes Yes Yes Yes Yes 01/01/2005
Overall Nominal Diameter: Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight: Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis: Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs EU Directive 2011/65/EU (ROHS II): EU Directive 2000/53/EC (ELV): EU Directive 2000/53/EC (ROHS): EU RoHS Compliance Date (mm/dd/yyyy): EU Directive 2002/96/EC (WEEE):	-65°C To +200°C 41.670 Kg/Km 332.725 N 44.450 mm ce (Overall) Yes Yes Yes Yes Yes Yes Yes
Overall Nominal Diameter: Mechanical Characteristics (Overall) Operating Temperature Range: Bulk Cable Weight: Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis: Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs EU Directive 2011/65/EU (ROHS II): EU Directive 2000/53/EC (ELV): EU Directive 2000/53/EC (ROHS): EU Directive 2002/95/EC (ROHS): EU Directive 2002/95/EC (WEEE): EU Directive 2003/11/EC (BFR):	-65°C To +200°C 41.670 Kg/Km 332.725 N 44.450 mm te (Overall) Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes

Military Specification:

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

Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

83335E Multi-Conductor - MIL-W-16878/4 (Type E)

Other Specification:	NEMA HP3
Plenum/Non-Plenum	
Plenum (Y/N):	No
Electrical Characteristics (Overall)	
Nom. Inductance:	
Inductance (µH/m) 0.406844	
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) 23.9513	
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
83335E 009100	100 FT	3.400 LB	WHITE	E	3 #20 TFE BRD TFE TAPE
83335E 0091000	1,000 FT	29.000 LB	WHITE	E	3 #20 TFE BRD TFE TAPE
83335E 009500	500 FT	15.000 LB	WHITE	E	3 #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: 08-31-2012

© 2015 Belden, Inc

All Rights Reserved.

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 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.

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.