# **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 <b>ce (Overall)</b> 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'

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