# **Detailed Specifications & Technical Data**

### METRIC MEASUREMENT VERSION





## 83653 Multi-Conductor - Audio, Control and Instrumentation Cable

For more Information please call

1-800-Belden1



# **General Description:**

18 AWG stranded (19x30) TC conductors, conductors cabled, plenum, FEP insulation, overall Beldfoil® (100% coverage) + TC braid shield (85% coverage), FEP jacket.

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## **Physical Characteristics (Overall)**

#### Conductor

#### AWG:

ı	# Conductors	AWG	Stranding	<b>Conductor Material</b>
ı	3	18	19x30	TC - Tinned Copper

Total Number of Conductors:

#### Insulation

#### **Insulation Material:**

Insulation Material	Wall Thickness (mm)
FEP - Fluorinated Ethylene Propylene	0.1778

#### **Outer Shield**

### **Outer Shield Material:**

La	yer#	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1		Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
2			Braid	TC - Tinned Copper	85

### **Outer Jacket**

#### **Outer Jacket Material:**

Outer	Jacket Material	Nom. Wall Thickness (mm)
FEP -	Fluorinated Ethylene Propylene	0.3556

## **Overall Cable**

### **Overall Cabling Color Code Chart:**

Number	Color
1	Black
2	White
3	Red

Overall Nominal Diameter: 4.572 mm

# **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-70°C To +200°C
Bulk Cable Weight:	63.993 Kg/Km
Max. Recommended Pulling Tension:	320.270 N
Min. Bend Radius/Minor Axis:	50.800 mm

# **Applicable Specifications and Agency Compliance (Overall)**

### **Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	CMP
NEC Articles:	800
CEC/C(UL) Specification:	CMP

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## 83653 Multi-Conductor - Audio, Control and Instrumentation Cable

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
EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005
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
Flame Test	
UL Flame Test:	NFPA 262
CSA Flame Test:	FT6
Suitability	
Suitability - Indoor:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	Yes

## **Electrical Characteristics (Overall)**

Nom. Inductance:

Inductance (µH/m) 0.406844

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 108.273

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 196.86

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 19.0298

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 12.7959

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

 Description
 Current

 10C temperature rise
 5 Amps per conductor @ 25°C ambient

# **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
83653 002100	100 FT	5.300 LB	RED	С	3#18 FEP SH FEP
83653 0021000	1,000 FT	38.000 LB	RED	С	3#18 FEP SH FEP
83653 002500	500 FT	19.000 LB	RED	С	3#18 FEP SH FEP
83653 0025000	5,000 FT	180.000 LB	RED		3 #18 FEP SH FEP

Notes

C = CRATE REEL PUT-UP.

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### 83653 Multi-Conductor - Audio, Control and Instrumentation Cable

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