# **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:

# Conductors	AWG	Stranding	Conductor Material
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:

	Layer # Outer Shield Trade Name		Type	Outer Shield Material	Coverage (%)
ľ	1	Beldfoil®	Таре	Aluminum Foil-Polyester Tape	100
ľ	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
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

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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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