# **Detailed Specifications & Technical Data**



# 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.

Physical Characteristics (Overall)	
Conductor	
AWG: # Conductors AWG Stranding Conductor Material	
3 18 19x30 TC - Tinned Copper	
Total Number of Conductors:	3
Insulation	
Insulation Material: Insulation Material Wall Thickness (mm)	
Insulation Material Wall Thickness (mm)   FEP - Fluorinated Ethylene Propylene 0.1778	
Outer Shield Outer Shield Material:	
Layer # Outer Shield Trade Name Type Outer Shield Materi	ial Coverage (%)
1 Beldfoil® Tape Aluminum Foil-Polye	ster Tape 100
2 Braid TC - Tinned Copper	85
Outer Jacket Outer Jacket Material:	
Outer Jacket Material Nom. Wall Thickness (n	nm)
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	e (Overall)
Applicable Standards & Environmental Programs	
NEC/(UL) Specification:	CMP
	800
CEC/C(UL) Specification:	CMP
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV): EU Directive 2002/95/EC (RoHS):	Yes Yes
EU Directive 2002/95/EC (KOHS): EU RoHS Compliance Date (mm/dd/yyyy):	
	04/01/2005
EU Directive 2002/96/EC (WEEE): EU Directive 2003/11/EC (BFR):	Yes
	Yes

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## METRIC MEASUREMENT VERSION

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

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.	Inc	uc	tan	ce:

In	ductance (µH/ı	m
0.4	406844	
m	Canacitanco	~

#### 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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