Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION





83656 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.

6

Physical Characteristics (Overall)

Conductor

AWG:

# Conductor	AWG	Stranding	Conductor Material
6	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:

Laye	er # 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:

Ou	ter Jacket Material	Nom. Wall Thickness (mm)
FE	P - Fluorinated Ethylene Propylene	0.3556

Overall Cable

Overall Cabling Color Code Chart:

Number	Color
1	Black
2	White
3	Red
4	Green
5	Orange
6	Blue

Overall Nominal Diameter: 5.791 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-70°C To +200°C
Bulk Cable Weight:	86.316 Kg/Km
Max. Recommended Pulling Tension:	640.541 N
Min. Bend Radius/Minor Axis:	63.500 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL)	Specification:	CMP

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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
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
Suitability - Outdoor:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	Yes

Electrical Characteristics (Overall)

Nom. Inductance:

Inductance (µH/m) 0.459

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) 10.1711

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

 Description
 Current

 10C Temperature Rise
 3.8 Amps per conductor @ 25°C ambient

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
83656 002100	100 FT	8.000 LB	RED		6#18 FEP SH FEP
83656 0021000	1,000 FT	62.000 LB	RED	С	6#18 FEP SH FEP
83656 0024000	4,000 FT	240.000 LB	RED	С	6 #18 FEP SH FEP
83656 002500	500 FT	30.500 LB	RED	С	6#18 FEP SH FEP

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Notes:

C = CRATE REEL PUT-UP.

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