

Detailed Specifications & Technical Data



ENGLISH MEASUREMENT VERSION

83654 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
4	18	19x30	TC - Tinned Copper

Total Number of Conductors: 4

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
FEP - Fluorinated Ethylene Propylene	.007

Outer Shield

Outer Shield Material:

Layer #	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 (in.)
FEP - Fluorinated Ethylene Propylene	.014

Overall Cable

Overall Cabling Color Code Chart:

Number	Color
1	Black
2	White
3	Red
4	Green

Overall Nominal Diameter: 0.195 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -70°C To +200°C

Bulk Cable Weight: 42 lbs/1000 ft.

Max. Recommended Pulling Tension: 96 lbs.

Min. Bend Radius/Minor Axis: 2 in.

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

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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/ft)

.128

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

33

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)

60

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

5.8

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

4

Max. Operating Voltage - UL:

Voltage

300 V RMS

Max. Recommended Current:

Description	Current
10C Temperature Rise	4.3 Amps per conductor @ 25°C ambient

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
83654 002100	100 FT	6.100 LB	RED		4#18 FEP SH FEP
83654 0021000	1,000 FT	45.000 LB	RED	C	4#18 FEP SH FEP
83654 002500	500 FT	22.500 LB	RED	C	4#18 FEP SH FEP
83654 0025000	5,000 FT	215.000 LB	RED		4#18 FEP SH FEP

Notes:

C = CRATE REEL PUT-UP.

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