Detailed Specifications & Technical Data

METRIC 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:

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 (%)
1	Beldfoil®	Таре	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
4	Green

Overall Nominal Diameter:

4.953 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-70°C To +200°C
Bulk Cable Weight:	62.504 Kg/Km
Max. Recommended Pulling Tension:	427.027 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

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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/m) 0.419968

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) 13.124

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	С	4#18 FEP SH FEP
83654 002500	500 FT	22.500 LB	RED	С	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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Product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).

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