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 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	

Page 1 of 2 11-05-2015

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



83654 Multi-Conductor - Audio, Control and Instrumentation Cable

	EU Directive 2003/11/EC (BFR):	Yes
	CA Prop 65 (CJ for Wire & Cable):	Yes
	MII Order #39 (China RoHS):	Yes
Flar	ne Test	
	UL Flame Test:	NFPA 262
	CSA Flame Test:	FT6
Suit	ability	
	Suitability - Indoor:	Yes
	Suitability - Outdoor:	Yes
Plei	num/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	ĺ
10C Temperature Rise	4.3 Amps per conductor @ 25°C ambient	l

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.

Revision Date: 08-05-2013 Revision Number: 3

© 2015 Belden, Inc All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sales belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.

Page 2 of 2 11-05-2015