Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



83709 Multi-Conductor - Audio, Control and Instrumentation Cable



For more Information please call

1-800-Belden1



General Description:

16 AWG stranded (19x29) TC conductors, conductors cabled, plenum, FEP insulation, overall Beldfoil® (100% coverage) + TC braid shield (85% coverage) FEP jacket.

9

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
9	16	19x29	TC - Tinned Copper

Total Number of Conductors:

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Wall Thickness (mm)
Teflon®	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 Trade Name	Outer Jacket Material	Nom. Wall Thickness (mm)	
Teflon®	FEP - 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
7	White/Black
8	Red/Black
9	Green/Black

Overall Nominal Diameter:

7.798 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-70°C To +200°C
Bulk Cable Weight:	171.143 Kg/Km
Max. Recommended Pulling Tension:	1214.359 N
Min. Bend Radius/Minor Axis:	82.550 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
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

Page 1 of 2 11-05-2015

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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	
CSA Flame Test:	FT6
Plenum/Non-Plenum	
Plenum (Y/N):	Yes

Electrical Characteristics (Overall)

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 114.835

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 206.703

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 8.76027

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

Current 4.5 Amps per conductor @ 25°C

Notes (Overall)

Notes: Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
83709 0021000	1,000 FT	120.000 LB	RED	С	9#16 FEP SH FEP
83709 002500	500 FT	61.000 LB	RED	С	9#16 FEP SH FEP

C = CRATE REEL PUT-UP.

Revision Date: 09-04-2012 Revision Number: 2

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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