



Part Number: 83659

Audio/Control/Instrumentation, (9) 18 AWG (19x30) TC, FEP/FEP, Foil+TC Braid Shld, CMP

Product Description

Nine 18 AWG stranded (19x30) tinned copper conductors, plenum, Teflon® (FEP) insulation, overall Beldfoil® shield (100% coverage) plus tinned copper braid shield (85% coverage), Teflon® (FEP) jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Conductors
18	19x30	TC - Tinned Copper	9

Conductor Count:	9
Conductor Size:	18 AWG

Insulation

Material	Nominal Wall Thickness
FEP - Fluorinated Ethylene Propylene	0.0065 in

Color Chart

Number	Color
1	Black
2	White
3	Red
4	Green
5	Orange
6	Blue
7	White/Black
8	Red/Black
9	Green/Black

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum Foil-Polyester Tape	Beldfoil®	100 %
Braid	2	TC - Tinned Copper		85 %

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
FEP - Fluorinated Ethylene Propylene	0.265 in	0.015 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
5.8 Ohm/1000ft	2.7 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
33 pF/ft	60 pF/ft

Shielding:	Foil + Braid(s)
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Inductance

Nominal Inductance

0.14 µH/ft

Current

Element	Max. Recommended Current [A]
10C Temperature Rise	3.8 Amps per conductor @ 25°C ambient

Voltage

UL Voltage Rating

300 V RMS

Temperature Range

Operating Temp Range:	-70°C To +200°C
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Mechanical Characteristics

Bulk Cable Weight:	81 lbs/1000ft
Max Recommended Pulling Tension:	216 lbs
Min Bend Radius/Minor Axis:	2.75 in

Standards

NEC Articles:	800
NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
CPR Euroclass:	Eca

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU RoHS Compliance Date (yyyy-mm-dd):	2005-04-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

Flammability, LSOH, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes
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Part Number

Variants

Item #	Color	Footnote
83659 002100	Red	
83659 0021000	Red	C
83659 002500	Red	C
83659 0025000	Red	C Z

Footnote:	C - CRATE REEL PUT-UP.
Footnote:	Z - FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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