

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.

## **Product Specifications**

## **Technical Specifications**

### **Construction and Dimensions**

#### Conductor:

AWG	Stranding	Material	No. of Conductors
18	19×30	TC - Tinned Copper	9

Total Number of Conductors:	9

#### Insulation:

Material	Nominal Wall Thickness
FEP - Fluorinated Ethylene Propylene	0.007 in

#### Color Chart 1:

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

#### Outershield 1:

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

### Outerjacket 1:

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

#### **Current:**

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

#### Inductance:

Nominal Inductance		
0.14 μH/ft		

#### Voltage:

UL Voltage Rating	
300 V RMS	

## Use

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Max Recommended Pulling Tension:	216 lbs

# Safety

CSA Flammability:	FT6
UL Flammability:	NFPA 262

### **Temperature Range**

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

Min Bend Radius/Minor Axis:	2.75 in
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#### **Part Number**

Diamum (V / N)	Voc
Plenum (Y/N):	Yes

### **Standards**

CA Prop 65 (CJ for Wire & Cable):	CA Prop 65 (CJ for Wire & Cable)	
CEC/C(UL) Specification:	CEC/C(UL) Specification	
MII Order #39 (China RoHS):	MII Order #39 (China RoHS)	
NEC Articles:	NEC Articles	
NEC/(UL) Specification:	NEC/(UL) Specification	
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)	

#### **History**

#### **Product Variants**

Part Number	Color	Put-Up Type	Length
83659 0021000	RED	Reel	1000 ft
83659 002100	RED	Reel	100 ft
83659 0025000	RED	Reel	5000 ft
83659 002500	RED	Reel	500 ft

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