



**Part Number:** 83659

Electronic, 9 C #18 Str TC, FEP Ins, OS+TC Brd, FEP Jkt, CMP

[Request Sample](#)

## Product Description

High Temperature Electronic, 9 Conductor 18AWG (19x30) Tinned Copper, FEP Insulation, Overall Beldfoil®+Tinned Copper Braid(85%) Shield, FEP Outer Jacket, CMP

## 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/Polyester	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
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33 pF/ft	60 pF/ft
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#### Inductance

<b>Nominal Inductance</b>
0.14 µH/ft

#### Current

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

#### Voltage

<b>UL Voltage Rating</b>
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
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

#### Plenum/Non-Plenum

Plenum (Y/N):	Yes
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#### Part Number

#### Variants

Item #	Color	UPC	Length	Footnote
83659 002100	Red	612825205395	100 ft	
83659 0021000	Red	612825205401	1,000 ft	C
83659 002500	Red	612825205418	500 ft	C
83659 0025000	Red	612825205425	5,000 ft	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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