



Product: [83656](#)

Electronic, 6 C #18 Str TC, FEP Ins, OS+TC Brd, FEP Jkt, CMP

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Product Description

High Temperature Electronic, 6 Conductor 18AWG (19x30) Tinned Copper, FEP Insulation, Overall Beldfoil®+Tinned Copper Braid(85%) Shield, FEP Outer Jacket, CMP

Technical Specifications

Product Overview

Suitable Applications:	extreme high/low temperature environments; chemical resistant; outdoor and burial applications; low voltage analog signals (4-20ma, 0-10v, ...); low voltage control (24v, ...); line level audio; voice communications; panel wiring
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Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
Conductor(s)	18	19x30	TC - Tinned Copper	6

Conductor Count:	6
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Insulation

Element	Material	Nominal Wall Thickness
Conductor(s)	FEP - Fluorinated Ethylene Propylene	0.0065 in

Color Chart

Number	Color
1	Black
2	White
3	Red
4	Green
5	Orange
6	Blue

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Alum / Poly	Beldfoil®	100 %
Braid	2	TC - Tinned Copper		85 %

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
FEP - Fluorinated Ethylene Propylene	0.228 in	0.014 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
5.8 Ohm/1000ft	3.1 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

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:	58 lbs/1000ft
Max Recommended Pulling Tension:	144 lbs
Min Bend Radius/Minor Axis:	2.5 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 CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-04-01
CA Prop 65:	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

Flammability, LS0H, 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	Putup Type	Length	UPC
83656 002100	Red	Reel	100 ft	612825205357
83656 002500	Red	Reel	500 ft	612825205388

83656 0021000	Red	Reel	1,000 ft	612825205364
83656 0024000	Red	Reel	4,000 ft	612825205371

Footnote: C - CRATE REEL PUT-UP.

History

Update and Revision: Revision Number: 0.295 Revision Date: 05-05-2020

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