



Product: <u>83654</u> ♂

Electronic, 4 C #18 Str TC, FEP Ins, OS+TC Brd, FEP Jkt, CMP

Product Description

High Temperature Electronic, 4 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	4
Conductor Co	ount:		4	

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

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	0.195 in	0.014 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
5.8 Ohm/1000ft	4 Ohm/1000ft

Capacitance

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

Inductance

Nominal Inductance 0.128 µH/ft

Current

Element	Max. Recommended Current [A]
10C Temperature Rise	4.3 Amps per conductor @ 25°C ambient

Voltage

UL Voltage Rating 300 V RMS

Temperature Range

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

Mechanical Characteristics

Bulk Cable Weight:	42 lbs/1000ft
Max Recommended Pulling Tension:	96 lbs
Min Bend Radius/Minor Axis:	2 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		

Part Number

Variants

Item #	Color	Putup Type	Length	UPC
83654 002100	Red	Reel	100 ft	612825205319
83654 002500	Red	Reel	500 ft	612825205333
83654 0021000	Red	Reel	1,000 ft	612825205326

History

Update and Revision: Revision Number: 0.292 Revision Date: 05-05-2020

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