



**Product:** [83654](#)

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

[Request Sample](#)

## 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 Count:	4
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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

#### 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
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## 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, 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	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

83654 0025000	Red	Reel	5,000 ft	612825205340
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Footnote:	C - CRATE REEL PUT-UP.
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## History

Update and Revision:	Revision Number: 0.293 Revision Date: 05-11-2020
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