



Product: [2100A](#)

Fieldbus, 1 Pr #18 Str TC, XLPO Ins, OS, TPE Jkt, CMG

[Request Sample](#)

Product Description

Fieldbus, 1 Pair 18AWG (7x26) Tinned Copper, XLPO Insulation, Overall Beldfoil® Shield, Orange TPE Outer Jacket, CMG

Technical Specifications

Product Overview

Suitable Applications:	harsh environment digital and serial two-way communication, oil and gas extraction and refining sites, petrochemical, Profibus process automation or Foundation FieldBus process automation, extreme temperature environments, exposure to humidity/moisture, dust, and oil, remote locations long distance applications, etc.
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
18	7x26	TC - Tinned Copper	1

Conductor Count:	2
Total Number of Pairs:	1

Insulation

Material
XLPE - Cross-Linked Polyethylene (Thermoset)

Color Chart

Number	Color
1	Blue, Orange and Numbered

Inner Shield Material

Type	Material	Material Trade Name	Coverage [%]	Drainwire AWG	Drainwire Construction n x D
Tape	Bi-Laminate (Alum+Poly)	Beldfoil®	100%	20	7x28
	Tinned Copper (TC)				

Outer Shield Material

Material
Bi-Laminate (Alum+Poly)

Outer Jacket Material

Material	Nominal Diameter	Ripcord
TPE - Thermoplastic Elastomer	0.319 in	Yes

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
5.86 Ohm/1000ft

Capacitance

Max. Capacitance Unbalance	Nom. Capacitance Conductor to Shield
1.2 pF/ft	22 pF/ft

Inductance

Nominal Inductance

0.22 µH/ft

Impedance

Nominal Characteristic Impedance

100 Ohm

High Frequency (Nominal/Typical)

Nom. Insertion Loss

0.08 dB/100ft

High Freq

Max. Insertion Loss (Attenuation)	Max./Min. Input Impedance (unFitted)
0.091 dB/100ft	100 Ohm

Current

Element Max. Recommended Current [A]

Per Conductor 8.7 Amps per Conductor

Voltage

Description	UL Voltage Rating	Voltage Rating [V]
CSA CIC type TC	300 V	300 V RMS

Electrical Characteristics Notes: Max Propagation Delay Change From 7.812 kHz to 39.06 kHz: 518 pS/ft

Other Electrical Characteristic 2: 31.25 KBits/sec

Temperature Range

Installation Temp Rating:	-25°C
Installation Temp Range:	-25°C
UL Temp Rating:	90°C Wet/Dry
Operating Temp Range:	-25°C Cold Impact -40°C to +90°C -55°C Cold Bend

Mechanical Characteristics

Bulk Cable Weight:	51 lbs/1000ft
Max. Pull Tension:	57 lbs
Min Bend Radius/Minor Axis:	3.25 in

Standards

NEC Articles:	Article 725, Article 727, Article 800
NEC/(UL) Compliance:	CMG, ITC, PLTC-ER
CSA AWM Compliance:	AWM I A/B II A/B, C22.2 #230 Type TC; C22.2#239 Type CIC

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	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):	2004-01-01
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
Suitability - Oil Resistance:	Yes
Suitability - Outdoor:	Yes

Suitability - Sunlight Resistance:	Yes
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Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1685 FT4 Loading
CSA Flammability:	FT4
IEC Flammability:	60332-3-24 (Category C)
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	Putup Type	Length	UPC
2100A 0065000	Blue, Light	Reel	5,000 ft	612825128786
2100A 0031000	Orange	Reel	1,000 ft	612825128755
2100A 0035000	Orange	Reel	5,000 ft	612825128762

History

Update and Revision:	Revision Number: 0.358 Revision Date: 08-25-2020
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