



Part Number: 2109A

Fieldbus, 1 Pr #16 Str TC, XLPO Ins, OS, TPE Jkt, CMG

[Request Sample](#)

Product Description

Fieldbus, 1 Pair 16AWG (7x24H) Tinned Copper, XLPO Insulation, Overall Beldfoil® Shield, Orange TPE Outer Jacket, CMG

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
16	7x24	TC - Tinned Copper	1

Conductor Count:	2
Total Number of Pairs:	1

Insulation

Material
XLP - Cross Linked Polyolefin

Color Chart

Number	Color
1	Blue & Orange Numbered 1

Inner Shield Material

Type	Material	Material Trade Name	Coverage [%]	Drainwire AWG	Drainwire Construction n x D
Tape	Aluminum Foil-Polyester Tape	Beldfoil®	100 %	18	7x26
	TC - Tinned Copper				

Outer Shield Material

Material
Aluminum/Polyester

Outer Jacket Material

Material	Nominal Diameter	Ripcord
TPE - Thermoplastic Elastomer	0.365 in	Yes

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
4.2 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
120 Ohm

High Frequency (Nominal/Typical)

Nom. Insertion Loss
0.065 dB/100ft

Delay

Nominal Velocity of Propagation (VP) [%]
64 %

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	11.6 Amps

Voltage

Description	UL Voltage Rating	Voltage Rating [V]
CSA CIC type TC	300 V RMS	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
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:	67 lbs/1000ft
Max Recommended Pulling Tension:	93 lbs
Min Bend Radius/Minor Axis:	3.75 in

Standards

NEC/(UL) Specification:	CMG, ITC, PLTC-ER
CSA AWM Specification:	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
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

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

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 FT4 Loading
CSA Flammability:	FT4

ISO/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	UPC	Length
2109A 0061000	Blue, Light	612825129172	1,000 ft
2109A 0065000	Blue, Light	612825129189	5,000 ft
2109A 0035000	Orange	612825129165	5,000 ft

History

Update and Revision:	Revision Number: 0.343 Revision Date: 08-22-2019
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