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SENDING ALL THE RIGHT SIGNALS



Part Number: 2121A

Fieldbus, 8 Pr #18 Str TC, XLPO Ins, IS/OS, TPE Jkt, 600V TC-ER

Request Sample

Product Description

Fieldbus, 8 Pair 18AWG (7x26) Tinned Copper, XLPO Insulation, Individual & Overall Beldfoil® Shield, Orange TPE Outer Jacket, 600V TC-ER

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
18	7x26	TC - Tinned Copper	8

Conductor Count:	16

Insulation

Material	Nominal Wall Thickness
XLP - Cross Linked Polyolefin	0.038 in

Color Chart

Number	Color
1	Blue and Orange Numbered 1
2	Blue and Orange Numbered 2
3	Blue and Orange Numbered 3
4	Blue and Orange Numbered 4
5	Blue and Orange Numbered 5
6	Blue and Orange Numbered 6
7	Blue and Orange Numbered 7
8	Blue and Orange Numbered 8

Inner Shield Material

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Aluminum Foil-Polyester Tape	Beldfoil®	100 %	TC - Tinned Copper	20	7x28

Outer Shield Material

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

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness	Ripcord
TPE - Thermoplastic Elastomer	0.8 in	0.063 in	Yes

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
5.86 Ohm/1000ft

Capacitance

Max. Capacitance Unbalance	Nom. Capacitance Conductor to Conductor

1.2 pF/ft	22 pF/ft

Inductance

Nominal Inductance
0.22 µH/ft

Impedance

Nominal Characteristic Impedance
100 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
0.039 MHz	0.08 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	7.6 Amps per Conductor

Voltage

Description	UL Voltage Rating
CSA CIC type TC	600 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
Operating Temp Range:	-40°C To 90°C

Mechanical Characteristics

Oil Resistance:	Yes
Bulk Cable Weight:	313 lbs/1000ft
Max Recommended Pulling Tension:	481 lbs
Min Bend Radius/Minor Axis:	8 in

Standards

NEC/(UL) Specification:	TC-ER
CSA AWM Specification:	AWM I A/B II A/B

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/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
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Burial:	Yes
Suitability - Indoor:	Yes

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

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1581 Vertical Tray
CSA Flammability:	FT4
ISO/IEC Flammability:	60332-3-24 (Category C)
UL voltage rating:	600 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No

Part Number

Variants

Item #	Color	UPC	Length
2121A 0061000	Blue, Light	612825129660	1,000 ft
2121A 0065000	Blue, Light	612825129677	5,000 ft
2121A 0031000	Orange	612825129646	1,000 ft
2121A 0035000	Orange	612825129653	5,000 ft

History

Update and Revision:	Revision Number: 0.345 Revision Date: 08-22-2019

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