



Product: [2118Z](#)

Fieldbus, 1 Pr #18 Str TC, XLPO Ins, OS, LSZH-TS Jkt, 600V TC

Product Description

Fieldbus, 1 Pair 18AWG (7x26) Tinned Copper, XLPO Insulation, Overall Beldfoil® Shield, LSZH-TS Outer Jacket, 600V TC

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

Element	AWG	Stranding	Material	Nominal Diameter	No. of Pairs
Pair(s)	18	7x26	TC - Tinned Copper	0.046 in	1

Conductor Count: 2

Total Number of Pairs: 1

Insulation

Material	Nominal Diameter	Nominal Wall Thickness
XLPE - Cross-Linked Polyethylene (Thermoset)	0.110 in	0.032 in

Color Chart

Number	Color
1	Blue & Orange

Outer Shield

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

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant, Thermoset)	0.348 in	0.047 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
5.86 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor
22.0 pF/ft

Inductance

Nominal Inductance
0.22 µH/ft

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
39 kHz	0.08 dB/100ft

Delay

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

High Frequency

Max. Insertion Loss (Attenuation)
0.091 dB/100ft

Voltage

UL Description	UL Voltage Rating
TC	600 V
UL1309	1000 V RMS

Temperature Range

Installation Temperature Range:	-25°C To +90°C
UL Temp Rating:	90°C Wet/Dry
Operating Temperature Range:	-40°C to +90°C

Mechanical Characteristics

Bulk Cable Weight:	56 lbs/1000ft
Max. Pull Tension:	57 lbs
Min Bend Radius (Overall):	3.5 in

Standards

NEC/(UL) Compliance:	TC
CPR Euroclass:	Fca
Other Specification:	IEEE 1580-2010TP18OSPL-1 or UL1309 TP18OSX90XP-1
Other Standards:	IEC 61158-2 (ISA/SP-50) Type A, ABS Type Certificate 13-HS1085604

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2002/95/EC (RoHS); EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes

Suitability

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

Flammability, LSOH, Toxicity Testing

IEEE Flammability:	1202, IEEE 383 Vertical Tray Flame Test (70,000 BTU)
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Plenum/Non-Plenum

Plenum (Y/N):	No
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Related Part Numbers

Variants

Item #	Color	UPC
2118Z 0105000	Black	612825129509

Product Notes

Notes:	Impedance 100 Ohm @ 31.25 kHz
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History

Update and Revision:	Revision Number: 0.184 Revision Date: 04-08-2022
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