



Product: [2101A](#)

Fieldbus, 2 Pr #18 Str TC, XLPO Ins, IS/OS, TPE Jkt, CMG

[Request Sample](#)

Product Description

Fieldbus, 2 Pair 18AWG (7x26) Tinned Copper, XLPO Insulation, Individual & 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.
------------------------	--

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Pairs
Pair(s)	18	7x26	TC - Tinned Copper	2

Conductor Count:	4
------------------	---

Insulation

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

Color Chart

Number	Color
1	Blue, Orange and Numbered
2	

Inner Shield

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

Outer Shield

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Bi-Laminate (Alum+Poly)	Beldfoil®	100%	TC - Tinned Copper	18	7x26

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness	Ripcord
TPE - Thermoplastic Elastomer	0.512 in	0.047 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 Frequency

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

CSA CIC type TC | 300 V

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: 109 lbs/1000ft

Max. Pull Tension: 137 lbs

Min. Bend Radius/Minor Axis: 5.25 in

Standards

NEC Articles: Article 725, Article 727, Article 800

NEC/(UL) Compliance: CMG, ITC, PLTC-ER

CEC/C(UL) Compliance: CIC, TC

CSA AWM Compliance: AWM I A/B II A/B

ISO/IEC Compliance: IEC 61158-2

Other Standards: ISA/SP-50 Type A

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 2): Yes

EU Directive 2012/19/EU (WEEE): Yes

EU Directive 2015/863/EU (RoHS 2 amendment): Yes

EU Directive Compliance: EU Directive 2003/11/EC (BFR)

EU CE Mark: 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, LSOH, Toxicity Testing

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

Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

Part Number

Variants

Item #	Color	Put-Up Type	Length	UPC
2101A 0061000	Blue, Light	Reel	1,000 ft	612825128816
2101A 0065000	Blue, Light	Reel	5,000 ft	612825128823
2101A 0031000	Orange	Reel	1,000 ft	612825128793
2101A 0035000	Orange	Reel	5,000 ft	612825128809

History

Update and Revision:	Revision Number: 0.468 Revision Date: 11-23-2021
----------------------	--

© 2021 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.