



**Product:** [3076F](#)

Fieldbus, 1 Pr #18 Str TC, PO Ins, OS, PVC Jkt, Flexible SUN RES OIL RES

[Request Sample](#)

## Product Description

Fieldbus, 1 Pair 18AWG (7x26) Tinned Copper, PO Insulation, Overall Beldfoil® Shield, Orange PVC Outer Jacket, Flexible SUN RES OIL RES

## Technical Specifications

### Product Overview

Suitable Applications:	exposure to rodent, crush, or cut through force, 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

AWG	Stranding	Material	Nominal Diameter	No. of Pairs
18	7x26	TC - Tinned Copper	0.045 in	1

Conductor Count: 2

#### Insulation

Material
PP - Polypropylene

#### Outer Shield Material

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

#### Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.28 in

### Construction and Dimensions

#### Cabling

Twists	Filler
5.3 twist/ft	Polypropylene

### Electrical Characteristics

#### Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
5.86 Ohm/1000ft	7.5 Ohm/1000ft

#### Capacitance

Max. Capacitance Unbalance	Nom. Capacitance Conductor to Shield	Nom. Mutual Capacitance
1.2 pF/ft	45 pF/ft	24 pF/ft

#### Inductance

Nominal Inductance
0.19 µH/ft

## Impedance

### Nominal Characteristic Impedance

100 Ohm

## High Frequency (Nominal/Typical)

### Nom. Insertion Loss

0.08 dB/100ft

## Delay

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

66%

## High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Max./Min. Input Impedance (unFitted)
0.031 MHz	0.091 dB/100ft	100 Ohm

## Current

### Element

### Max. Recommended Current [A]

Per Conductor 5.2 Amps per Conductor

## Voltage

### UL Voltage Rating

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

UL Temp Rating: 105°C

Operating Temp Range: -40°C To +105°C

## Mechanical Characteristics

Oil Resistance: Yes

UV Resistance: Yes

Bulk Cable Weight: 38 lbs/1000ft

Max. Pull Tension: 60 lbs

Min Bend Radius/Minor Axis: 2.5 in

## Standards

NEC Articles: Article 725, Article 727, Article 800

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

CEC/C(UL) Compliance: CMG

IEC Compliance: IEC 61158-2

CPR Euroclass: Eca

IEEE Compliance: 1202, IEEE 383 Vertical Tray Flame Test (70,000 BTU)

Other Compliance: ISA/SP-50 Type A

## Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2003/96/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

EU RoHS Compliance Date (yyyy-mm-dd): 2004-01-01

MII Order #39 (China RoHS):	Yes
-----------------------------	-----

## Suitability

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

## Flammability, LS0H, Toxicity Testing

C(UL) Flammability:	FT4
UL Flammability:	UL1666 Riser
IEC Flammability:	IEC 60332-1-2
IEEE Flammability:	1202
UL voltage rating:	300 V RMS

## Plenum/Non-Plenum

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

## Part Number

### Variants

Item #	Color	Putup Type	Length	UPC
3076F 0061000	Blue, Light	Reel	1,000 ft	612825140269
3076F 00310000	Orange			612825140214
3076F 003250	Orange	Reel	250 ft	612825140221
3076F 003500	Orange	Reel	500 ft	612825140245
3076F 0031000	Orange	Reel	1,000 ft	612825140207
3076F 0032500	Orange	Reel	2,500 ft	612825140238
3076F 0035000	Orange	Reel	5,000 ft	612825140252

Footnote:	C - CRATE REEL PUT-UP.
Footnote:	N - FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

## Product Notes

Notes:	Fieldbus: Orange jacket. Profibus PA: Intrinsically Safe Blue jacket. Jacket diameter tolerance: +/- .010
--------	---

## History

Update and Revision:	Revision Number: 0.338 Revision Date: 06-08-2020
----------------------	--

© 2020 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.