

Product: 3076F

Fieldbus, 1 Pr #18 Str TC, PP Ins, OS, PVC Jkt, Flexible SUN RES OIL RES, PLTC-ER, ITC-ER, CMX-Outdoor, CM

Request Sample

Product Description

Fieldbus, 1 Pair 18AWG (7x26) Tinned Copper, PP Insulation, Overall Beldfoil® Shield, PVC Outer Jacket, Flexible SUN RES OIL RES, PLTC-ER, ITC-ER, CMX-Outdoor, CM

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.

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Pair(s)	1	18 AWG	7x26	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Pair(s)	PP - Polypropylene	0.022 in (0.56 mm)	0.088 in (2.2 mm)	Blue & Orange

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	20 AWG (7x28) TC

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.050 in (1.3 mm)	0.280 in (7.11 mm)

Table Notes:	Jacket OD +/- 0.010
Overall Cable Diameter (Nominal):	0.280 in (7.11 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Max. Capacitance Unbalance	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedence	Nom. Velocity of Prop.	Max. Current
Pair(s)	7.2 Ohm/1000ft	1.2 pF/ft (3.9 pF/m)	45 pF/ft	100 Ohm	66%	5.2 Amps per Conductor at 25ºC

Nom. Outer Shield DCR:	8.5 Ohm/1000ft (28 Ohm/km)

High Frequency (Nominal/Typical)

Element	Frequency [MHz]	Nom. Insertion Loss (Attenuation)
Pair(s)	0.039	0.08 dB/100ft

High Frequency

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

Voltage

UL Voltage Rating
300 V (CM, PLTC-ER), 150 V (ITC-ER)

Mechanical Characteristics

Temperature

UL Temperature	Operating
105°C	-40°C to +105°C

Bend Radius

Stationary Min.	Installation Min.
6.5 in (170 mm)	2.80 in (71.1 mm)

Max. Pull Tension:	60 lbs (27 kg)
Bulk Cable Weight:	44 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Oil Resistance, Burial
Flammability / Reaction to Fire:	UL 1685 UL Loading, FT4, IEEE 1202, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 725, Article 727, Article 800, CMG, ITC, PLTC, TC
CEC / C(UL) Compliance:	CMG
ISO/IEC Compliance:	IEC 61158-2
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark
Other Standard Compliance(s):	ISA/SP-50 Type A

Product Notes

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

History

Update and Revision:	Revision Number: 0.533 Revision Date: 02-15-2024

Part Numbers

Variants

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

© 2024 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.