



**Product:** [70100E](#)

Profibus DP, 1PR #18 Str TC, PO ins, OS, PVC jkt, 300V



## Product Description

Profibus DP, 1 Pair AWG 18 Tinned Copper - Stranded, Polyolefin (PO, PE, PP) insulation, Foil(s) or Copper Tape(s) shielding, PVC jacket , 300V

## Technical Specifications

### Product Overview

Suitable Applications:	Instrumentation and computer cable; For data transmission applications
------------------------	--

### Physical Characteristics (Overall)

#### Conductor

AWG	Stranding	Material	No. of Pairs
18	7x26	TC - Tinned Copper	1

Conductor Count:	2
Total Number of Pairs:	1

#### Insulation

Material	Nominal Diameter	Diameter +/- Tolerance
PE - Polyethylene	2.55 mm	0.05 mm

#### Color Chart

Number	Color
Pair 1	Blue & Orange

#### Outer Shield

Type	Material	Drainwire Material	Drainwire AWG
Tape	Bi-Laminate (Alum+Poly)	TC - Tinned Copper	AWG20/7

#### Outer Jacket

Material	Nominal Diameter
PVC - Polyvinyl Chloride	7.5 mm

### Electrical Characteristics

#### Conductor DCR

Max. Conductor DCR	Max. Shield DCR
20.5 Ohm/km	26 Ohm/km

#### Capacitance

Max. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
80 pF/m	155 pF/m

#### Impedance

Frequency [MHz]	Nominal Characteristic Impedance	Nominal Characteristic Tolerance
0.03125	100 Ohm	20 Ohm

#### Delay

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

66%

**High Frequency**

Frequency [MHz]	Max. Insertion Loss (Attenuation)
0.01 MHz	0.2 dB/100m
0.039 MHz	0.3 dB/100m
0.1 MHz	0.6 dB/100m
0.5 MHz	2.8 dB/100m
1 MHz	3.7 dB/100m

**Voltage****Voltage Rating [V]**

300 V

**Temperature Range**

Installation Temperature Range:	-5°C To +70°C
Storage Temperature Range:	-30°C to +70°C
Operating Temp Range (Fixed Install):	-30°C To +70°C

**Mechanical Characteristics**

Max. Pull Tension:	50 N
Min. Bend Radius During Installation:	100 mm

**Standards**

CPR Euroclass:	Eca
----------------	-----

**Applicable Environmental and Other Programs**

Environmental Space:	Indoor
----------------------	--------

**Flammability, LSOH, Toxicity Testing**

IEC Flammability:	IEC 60332-1-2
-------------------	---------------

**Related Part Numbers****Variants**

Item #	Color	Put-Up Type	Length	EAN
70100E.01500	Blue	Reel	500 m	8719605011824
70100E.011000	Blue	Reel	1,000 m	8719605011817
70100E.00500	Orange	Reel	500 m	8719605011800
70100E.02500	Orange	Reel	500 m	8719605011848
70100E.001000	Orange	Reel	1,000 m	8719605011794
70100E.021000	Orange	Reel	1,000 m	8719605011831

**History**

Update and Revision:	Revision Number: 0.213 Revision Date: 02-15-2024
----------------------	--

© 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.