

**Product:** [70001NH](#) 

Profibus PA, 1PR #18 Str TC, PO ins, F/B, LSNH Jkt, 300 V



## Product Description

Profibus PA, 1 Pair AWG 18 Tinned Copper - Stranded, Polyolefin (PO, PE, PP) insulation, Foil + Braid(s) shielding, LSZH / FRNC jacket , 300 V

## Technical Specifications

### Product Overview

Suitable Applications:	Profibus PA or Foundation FieldBus PA
------------------------	---------------------------------------

### 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	Nominal Wall Thickness
PE - Polyethylene (Foam)	2.5 mm	0.05 mm	0.65 mm

#### Color Chart

Number	Color
Pair 1	Red & Green

#### Outer Shield Material

Type	Material	Thickness of Foil	Drainwire Material	Drainwire AWG	Drainwire Position	Min. Coverage [%]
Tape	Bi-Laminate (Alum+Poly)	9 / 23 µm	TC - Tinned Copper	AWG20/7	In contact with tape and braid	
Braid	Tinned Copper (TC)					85%

#### Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	8 mm	1.15 mm

### Construction and Dimensions

#### Cabling

Description	Filler
1 pair and 2 fillers twisted to cable core	Polyethylene (2x) (1.65 mm)

### Electrical Characteristics

#### Conductor DCR

Max. Conductor DCR	Max. Outer Shield DCR
20.5 Ohm/km	9 Ohm/km

#### Capacitance

Max. Capacitance Conductor to Conductor	Max. Capacitance Unbalance
80 pF/m	4 pF/m

#### Impedance

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

#### High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
0.039 MHz	0.3 dB/100m

#### Delay

Nominal Velocity of Propagation (VP) [%]
77%

#### Voltage

Voltage Rating [V]
300 V

#### Temperature Range

Installation Temp Range:	-15°C To +70°C
Storage Temp Range:	-45°C To +70°C
Operating Temp Range (Flexible Install):	-15°C To +70°C
Operating Temp Range (Fixed Install):	-45°C To +70°C

#### Mechanical Characteristics

Oil Resistance:	IEC 60811-2-1
Max. Pull Tension:	260 N
Min Bend Radius During Installation:	120 mm
Min Setting Radius:	80 mm

#### Standards

CENELEC Compliance:	EN 50290-2-27
Other Compliance:	BS 7655 section 6.1 table 1, LTS 3

#### Applicable Environmental and Other Programs

Environmental Space:	Indoor
EU RoHS Compliance Date (yyyy-mm-dd):	2015-10-28

#### Suitability

Suitability - Sunlight Resistance:	Yes
------------------------------------	-----

#### Flammability, LSOH, Toxicity Testing

IEC Flammability:	IEC 60332-3-24
IEC 60754-1 (EN50267-1)- Halogen Amount:	Zero
IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Max. Conductivity:	2.5 µS/mm
IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Min. pH:	4.3

#### Part Number

#### Variants

Item #	Color	Putup Type	Length	EAN
70001NH.02120	Black	Reel	120 m	8719605162809
70001NH.02500	Black	Reel	500 m	8719605009166
70001NH.021000	Black	Reel	1,000 m	8719605009159
70001NH.03500	Blue	Reel	500 m	8719605009180
70001NH.031000	Blue	Reel	1,000 m	8719605009173
70001NH.04500	Orange	Reel	500 m	8719605192394

#### History

Update and Revision:	Revision Number: 0.193 Revision Date: 12-18-2020
----------------------	--

© 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.