

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

Profibus PA, 1PR #18 Str TC, PO ins, OS, LSNH Jkt, 300 V



 [Request Sample](#)

## Product Description

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

## 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.
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### 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	2.55 mm	0.05 mm	0.67 mm

#### Color Chart

Number	Color
Pair 1	White & Black

#### Outer Shield Material

Type	Material	Thickness of Foil	Drainwire Material	Drainwire AWG
Tape	Bi-Laminate (Alum+Poly)	9 / 23 µm	TC - Tinned Copper	AWG20/7

#### Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	7.5 mm	1.15 mm

### Electrical Characteristics

#### Conductor DCR

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

#### Capacitance

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

#### Inductance

Nominal Inductance
0.62 uH/m

## Impedance

Frequency [MHz]	Nominal Characteristic Impedance	Nominal Characteristic Tolerance
0.03125 MHz	100 Ohm	5 Ohm

## Delay

Nominal Velocity of Propagation (VP) [%]
66%

## High Freq

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 Temp Range:	-15°C To +80°C
Storage Temp Range:	-45°C To +80°C
Operating Temp Range (Flexible Install):	-15°C To +80°C
Operating Temp Range (Fixed Install):	-45°C To +80°C

## Mechanical Characteristics

Oil Resistance:	IEC 60811-404
Max. Pull Tension:	50 N
Min Bend Radius During Installation:	100 mm

## Standards

IEC Compliance:	IEC 61158-2
CPR Euroclass:	Eca
GENELEC Compliance:	EN 50290-2-27

## Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Eca
EU RoHS Compliance Date (yyyy-mm-dd):	2005-01-01

## Suitability

Suitability - Sunlight Resistance:	Yes
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## Flammability, LSOH, Toxicity Testing

IEC Flammability:	IEC 60332-1-2 and 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
IEC 61034-2 (EN 61034-2) (VDE 0482-1034) - Smoke Density Min. Transmittance:	60%

## Part Number

### Variants

Item #	Color	Putup Type	Length	EAN
3076ENH.00500	Blue	Reel	500 m	8719605005519
3076ENH.001000	Blue	Reel	1,000 m	8719605005502
3076ENH.041000	Blue	Reel	1,000 m	8719605005557
3076ENH.01500	Orange	Reel	500 m	8719605005540
3076ENH.011000	Orange	Reel	1,000 m	8719605005526

## History

Update and Revision:	Revision Number: 0.200 Revision Date: 12-18-2020
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