

Product: [3076ENH](#) 

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



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

Environmental Space:	Indoor - Euroclass Eca
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
PO - Polyolefin	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	Aluminum/Polyester	9 / 23 µm	TC - Tinned Copper	AWG20/7

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
LSZH / FRNC (UV stabilised)	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 Recommended Pulling Tension:	50 N
Min Bend Radius During Installation:	100 mm

Standards

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

Applicable Environmental and Other Programs

EU RoHS Compliance Date (yyyy-mm-dd):	2005-01-01
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Flammability, LS0H, Toxicity Testing

ISO/IEC Flammability:	IEC 60332-1-2 and IEC 60332-3-24
Amount of Halogen acc. to IEC 60754-1 & EN50267-1:	Zero

Part Number

Variants

Item #	Color	Length
3076ENH.001000	Blue	1,000 m
3076ENH.00500	Blue	500 m
3076ENH.041000	Blue	1,000 m
3076ENH.011000	Orange	1,000 m
3076ENH.012050	Orange	2,050 m
3076ENH.01500	Orange	500 m
3076ENH.K11000	Orange	1,000 m
3076ENH.K1500	Orange	500 m

History

Update and Revision:	Revision Number: 0.177 Revision Date: 02-14-2020
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