



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

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

## 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 , 300V SWA

## Technical Specifications

### Product Overview

Suitable Applications:	Profibus PA or Foundation FieldBus PA
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### Physical Characteristics (Overall)

#### Conductor

AWG	Stranding	Material
18	7x26	TC - Tinned Copper

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
Option .00 with blue inner- and outerjacket	White & Black
Option .02 with yellow inner- and outerjacket	White & Black
Option .03 with orange inner- and outerjacket	White & Black
Option .05 with blue inner- and orange outer jacket	White & Black
Option .07 with orange inner- and black outer jacket	Orange & Blue

#### Inner Shield Material

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

#### Inner Jacket Material

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

#### Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	13 mm	1.85 mm

### Construction and Dimensions

#### Armor

Type of Armor	Material	Thickness of Armoring Wires	Coverage Percentage
Steel Wire Armoring	Galvanized steel wire	0.9 mm	Min. 95%

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	Max. Capacitance Unbalance
80 pF/m	155 pF/m	4 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
Min Bend Radius During Installation:	170 mm

Standards

IEC Compliance:	IEC 61158-2
CPR Euroclass:	Eca
CENELEC Compliance:	EN 50290-2-27, EN50288-7

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, LS0H, 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

Part Number

Variants

Item #	Color	Putup Type	Length	EAN
3076ELS.07500	Black	Reel	500 m	8719605180131
3076ELS.00500	Blue	Reel	500 m	8719605005397
3076ELS.001000	Blue	Reel	1,000 m	8719605005380
3076ELS.03320	Orange	Reel	320 m	8719605005441
3076ELS.03500	Orange	Reel	500 m	8719605005458
3076ELS.031000	Orange	Reel	1,000 m	8719605005434
3076ELS.051000	Orange	Reel	1,000 m	8719605005465
3076ELS.031150	Orange	Reel	1,150 m	8719605179968
3076ELS.02500	Yellow	Reel	500 m	8719605005427
3076ELS.021000	Yellow	Reel	1,000 m	8719605005403
3076ELS.021100	Yellow	Reel	1,100 m	8719605005410

History

Update and Revision:

Revision Number: 0.197 Revision Date: 12-18-2020

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