



Product: [3079ALS](#)

Profibus DP, 1PR #22 Sol BC, PO ins, F/B, LSNH Jkt, 300 V

Product Description

Profibus DP, 1 Pair AWG 22 Bare Copper - Solid, Polyolefin (PO, PE, PP) insulation, Foil + Braid(s) shielding, LSZH / FRNC jacket , 300 V

Technical Specifications

Product Overview

Suitable Applications:	exposure to rodent, crush, or cut through force, harsh environment, outdoors, where multiple cable runs are required, data transmission applications such as Profibus DP or PA, Instrumentation and computer cable, etc. exposure to temperature extremes, humidity/moisture, dust, and oil.
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
22	Solid	BC - Bare Copper	1

Conductor Count:	2
Total Number of Pairs:	1

Insulation

Material	Nominal Diameter	Diameter +/- Tolerance
PE - Polyethylene (Foam)	2.51 mm	0.09 mm

Color Chart

Number	Color
Pair 1	Red & Green

Inner Shield

Type	Material	Material Trade Name	Coverage [%]
Tape	Bi-Laminate (Alum+Poly)	Beldfoil®	
Braid	Tinned Copper (TC)		65%

Inner Jacket

Material	Color	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	Chrome (RAL 7037)	8 mm	1.1 mm

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	12.4 mm	1.3 mm

Construction and Dimensions

Cabling

Description	Filler
1 pair and 2 fillers twisted to cable core	Flame retardant Polypropylene (2x) (2.54 mm)

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

Nominal Conductor DCR

52 Ohm/km

Capacitance

Max. Capacitance Unbalance	Nom. Capacitance Conductor to Conductor
1 pF/m	27.9 pF/m

Impedance

Frequency [MHz]	Nominal Characteristic Impedance	Nominal Characteristic Tolerance
3 - 20 MHz	150 Ohm	15 Ohm

Delay

Nominal Velocity of Propagation (VP) [%]

78%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)
0.2 MHz	0.9 dB/100m
4 MHz	2.2 dB/100m
16 MHz	4.5 dB/100m

Voltage

Voltage Rating [V]

300 V

Temperature Range

Installation Temperature Range:	-15°C To +80°C
Storage Temperature 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:	186 mm

Standards

CPR Euroclass:	Eca
CENELEC Compliance:	EN 50290-2-20

Applicable Environmental and Other Programs

Environmental Space:	Indoor/Outdoor - Euroclass Eca
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Suitability

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

IEC Flammability:	IEC 60332-1-2, IEC 60332-3-24
IEC 60754-1 - Halogen Amount:	Zero
IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity:	2.5 µS/mm
IEC 60754-2 - Halogen Acid Gas Amount - Min. pH:	4.3
IEC 61034-2 - Smoke Density Min. Transmittance:	60%

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	EAN
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3079ALS.00152	Black	Reel	152 m	8719605005625
3079ALS.00305	Black	Reel	305 m	8719605005632
3079ALS.00310	Black	Reel	310 m	8719605005649
3079ALS.00385	Black	Reel	385 m	8719605005656
3079ALS.00400	Black	Reel	400 m	8719605005663
3079ALS.00410	Black	Reel	410 m	8719605005670
3079ALS.00500	Black	Reel	500 m	8719605005687
3079ALS.00510	Black	Reel	510 m	8719605005694
3079ALS.001000	Black	Reel	1,000 m	8719605005618
3079ALS.02305	Violet	Reel	305 m	8719605172709
3079ALS.02500	Violet	Reel	500 m	8719605005724
3079ALS.011000	Violet	Reel	1,000 m	8719605005700
3079ALS.021000	Violet	Reel	1,000 m	8719605005717

History

Update and Revision:	Revision Number: 0.228 Revision Date: 02-15-2024
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