



Product: 9182LS ☑

Twinax , 1PR #22 Str TC, PO ins, OS, LSNH Jkt, 300V, SWA

# **Product Description**

Twinax, 1 Pair AWG 22 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:			Twinaxial instrumentation and computer cable; For data transmission applications	
Physical Characteristics (Overall)				
Conductor				
AWG	Stranding	Material	No. of Pairs	
22	19x34	TC - Tinned Copper	1	
Conductor Count:			2	
Total Number of Pairs:			1	

#### Insulation

Material	Nominal Diameter	Diameter +/- Tolerance
PE - Polyethylene (Foam)	3.45 mm	0.1 mm

#### **Color Chart**

Number	Color
Pair 1	Black & Yellow

### Inner Shield

Type	Material	Material Trade Name	Thickness of Foil	Drainwire Material	Drainwire AWG
Tape	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	9 / 23 / 9 µm	TC - Tinned Copper	AWG22/19

### Inner Jacket

Material	Color	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	Black	8.8 mm	0.89 mm

### Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	14.25 mm	1.4 mm

# **Construction and Dimensions**

### Cabling

Description	Filler
1 pair and 2 fillers twisted to cable core	Foamed Fibrillated Polypropylene (2x) (White, 2.92 mm)

#### Armor

Type of Armor	Material	Thickness of Armoring Wires	Coverage Percentage
Steel Wire Armoring	Galvanized steel wire	1.25 mm	Min. 95%

# **Electrical Characteristics**

### Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
45.9 Ohm/km	20.7 Ohm/km

#### Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Shield
28.9 pF/m	45.1 pF/m

#### Inductance

Nominal Inductance 0.96 µH/m

#### Impedance

Nominal Characteristic Impedance
150 Ohm

### High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	1.31 dB/100m
5 MHz	2.79 dB/100m
10 MHz	3.94 dB/100m
20 MHz	5.58 dB/100m
50 MHz	8.86 dB/100m
100 MHz	14.11 dB/100m
200 MHz	20.34 dB/100m
400 MHz	28.87 dB/100m

#### Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
430 ns/ft	78%

#### Voltage

Voltage Rating [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:	213.8 mm

### **Standards**

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

# **Applicable Environmental and Other Programs**

Environmental Space:	Indoor, Indoor/Outdoor, Outdoor, Indoor/Outdoor - Euroclass Eca
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# Suitability

Suitability - Sunlight Resistance:	Yes

# Flammability, LS0H, Toxicity Testing

IEC Flammability:	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
9182LS.001000	Black	Reel	1,000 m	8719605020161

#### History

Update and Revision:	Revision Number: 0.250 Revision Date: 02-03-2025

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