## L4P43A-PNMNR-4M

LDF4-50A SureFlex® Jumper with interface types 7-16 N Male and 7-16 N Male Right angle, 4 m



### **Product Classification**

**Product Type** Wireless transmission cable assembly

Product Series LDF4-50A

#### General Specifications

Attachment, Connector B Field attachment

Body Style, Connector A Straight

Body Style, Connector B Right angle
Interface, Connector A N Male
Interface, Connector B N Male

#### **Dimensions**

**Length** 4 m | 13.123 ft

Nominal Size 1/2 in

#### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
710-806 MHz	1.2	20.83
806-960 MHz	1.15	23.13
1700-2180 MHz	1.15	23.13
2535-2655 MHz	1.2	20.83

### Jumper Assembly Sample Label



## L4P43A-PNMNR-4M



### **Environmental Specifications**

**Immersion Test Method**Meets IEC 60529:2001, IP68 in mated condition

#### Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system



#### Included Products

LDF4-50A - LDF4-50A, HELIAX® Low Density Foam Coaxial Cable, corrugated copper, 1/2 in, black PE jacket (Halogen free jacketing non-fire-retardant)

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LDF4-50A, HELIAX® Low Density Foam Coaxial Cable, corrugated copper, 1/2 in, black PE jacket (Halogen free jacketing non-fire-retardant)

#### **Product Classification**

Product Type Coaxial wireless cable

Product Brand HELIAX®
Product Series LDF4-50A

Ordering Note CommScope® standard product (Global)

General Specifications

Flexibility Standard

Jacket Color Black

**Dimensions** 

 Diameter Over Dielectric
 12.954 mm | 0.51 in

 Diameter Over Jacket
 15.875 mm | 0.625 in

 Inner Conductor OD
 4.826 mm | 0.19 in

 Outer Conductor OD
 13.97 mm | 0.55 in

Nominal Size 1/2 in

**Electrical Specifications** 

**Cable Impedance** 50 ohm ±1 ohm

 $\textbf{Capacitance} \hspace{1.5cm} 75.8 \text{ pF/m} \hspace{0.1cm} | \hspace{0.1cm} 23.104 \text{ pF/ft}$ 

dc Resistance, Inner Conductor1.48 ohms/km | 0.451 ohms/kftdc Resistance, Outer Conductor2.69 ohms/km | 0.82 ohms/kft

dc Test Voltage 4000 V

**Inductance** 0.19  $\mu$ H/m | 0.058  $\mu$ H/ft

**Insulation Resistance** 100000 MOhms-km

Jacket Spark Test Voltage (rms) 8000 V

**COMMSCOPE®** 

Operating Frequency Band 1 – 8800 MHz

Peak Power40 kWVelocity88 %

### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
680-800 MHz	1.13	24.3
800-960 MHz	1.13	24.3
1700-2200 MHz	1.13	24.3
2300-2700 MHz	1.13	24.3
3400-3800 MHz	1.26	19

#### Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
<b>1.0</b> 0.	).211	0.064	36.11
<b>1.5</b> 0.	).259	0.079	29.46
<b>2.0</b> 0.	).299	0.091	25.5
<b>10.0</b> 0.	0.672	0.205	11.35
<b>20.0</b> 0.	).954	0.291	7.99
<b>30.0</b> 1.	1.172	0.357	6.51
<b>50.0</b> 1.	1.521	0.463	5.02
<b>85.0</b> 1.	1.995	0.608	3.82
<b>88.0</b> 2.	2.031	0.619	3.76
<b>100.0</b> 2.	2.169	0.661	3.52
<b>108.0</b> 2.	2.256	0.688	3.38
<b>150.0</b> 2.	2.673	0.815	2.85
<b>174.0</b> 2.	2.887	0.88	2.64
<b>200.0</b> 3.	3.103	0.946	2.46
<b>204.0</b> 3.	3.135	0.956	2.43
<b>300.0</b> 3.	3.835	1.169	1.99
<b>400.0</b> 4.	1.462	1.36	1.71
<b>450.0</b> 4.	1.749	1.447	1.61
<b>460.0</b> 4.	1.804	1.464	1.59
<b>500.0</b> 5.	5.021	1.53	1.52
<b>512.0</b> 5.	5.085	1.55	1.5

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600.0	5.533	1.686	1.38
700.0	6.009	1.831	1.27
800.0	6.456	1.968	1.18
824.0	6.56	1.999	1.16
894.0	6.855	2.089	1.11
960.0	7.124	2.171	1.07
1000.0	7.284	2.22	1.05
1218.0	8.11	2.472	0.94
1250.0	8.226	2.507	0.93
1500.0	9.093	2.771	0.84
1700.0	9.744	2.97	0.78
1794.0	10.039	3.06	0.76
1800.0	10.058	3.066	0.76
2000.0	10.666	3.251	0.72
2100.0	10.961	3.341	0.7
2200.0	11.251	3.429	0.68
2300.0	11.535	3.516	0.66
2500.0	12.09	3.685	0.63
2700.0	12.627	3.849	0.6
3000.0	13.407	4.086	0.57
3400.0	14.401	4.389	0.53
3600.0	14.882	4.536	0.51
3700.0	15.118	4.608	0.5
3800.0	15.353	4.679	0.5
3900.0	15.585	4.75	0.49
4000.0	15.815	4.82	0.48
4100.0	16.042	4.889	0.48
4200.0	16.268	4.958	0.47
4300.0	16.492	5.027	0.46
4400.0	16.714	5.094	0.46
4500.0	16.934	5.161	0.45
4600.0	17.153	5.228	0.44
4700.0	17.37	5.294	0.44
4800.0	17.585	5.36	0.43
4900.0	17.798	5.425	0.43

5000.0	18.01	5.489	0.42
6000.0	20.055	6.113	0.38
8000.0	23.826	7.262	0.32
8800.0	25.244	7.694	0.3

#### Material Specifications

**Dielectric Material** Foam PE

Jacket Material PE

Inner Conductor Material Copper-clad aluminum wire

Outer Conductor Material Corrugated copper

Mechanical Specifications

Minimum Bend Radius, multiple Bends127 mm | 5 inMinimum Bend Radius, single Bend50.8 mm | 2 in

Number of Bends, minimum15Number of Bends, typical50

 Tensile Strength
 113 kg | 249.122 lb

 Bending Moment
 3.8 N-m | 33.633 in lb

 Flat Plate Crush Strength
 2 kg/mm | 111.995 lb/in

### **Environmental Specifications**

Installation temperature  $-40 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  ( $-40 \,^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

Operating Temperature  $-55 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$  ( $-67 \,^{\circ}\text{F}$  to  $+185 \,^{\circ}\text{F}$ )

Storage Temperature  $-70 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$  ( $-94 \,^{\circ}\text{F}$  to  $+185 \,^{\circ}\text{F}$ )

Attenuation, Ambient Temperature68 °F | 20 °CAverage Power, Ambient Temperature104 °F | 40 °CAverage Power, Inner Conductor Temperature212 °F | 100 °C

Packaging and Weights

**Cable weight** 0.22 kg/m | 0.148 lb/ft

### Regulatory Compliance/Certifications

Agency Classification

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

CHINA-ROHS Below maximum concentration value

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ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system

**REACH-SVHC** 

Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant





