# L4A-HPHMKM-7M-SGW



LDF4-50A SureFlex® Jumper with interface types 4.3-10 Male and 4.1-9.5 Male with HELIAX® SureGuard weatherproofing, 7 m

- If there are threads along the entire device port length, the HELIAX® SureGuard weatherproofing solutions will only seal properly if the HSG-M29-ADPT adapter is installed on the device port
- WARNING: DO NOT MATE WITH 4.1-9.5 DIN

#### Product Classification

680-960 MHz

Product Type	SureFlex® HP, HELIAX® p	performance
Product Brand	HELIAX®   SureFlex®	
Product Series	LDF4-50A	
Ordering Note	CommScope® standard p	product in the United States and Canada
General Specifications		
Body Style, Connector A	Straight	
Body Style, Connector B	Straight	
Interface, Connector A	4.3-10 Male	
Interface, Connector B	4.1-9.5 DIN Male	
Specification Sheet Revision Level	А	
Dimensions		
Length	7 m   22.966 ft	
Nominal Size	1/2 in	
Electrical Specifications		
3rd Order IMD Static Test Method	Two +43 dBm carriers	
3rd Order IMD, typical	-119 dBm	
DTF, Connector A	-34 dB	
DTF, Connector B	-34 dB	
VSWR/Return Loss		
Frequency Band	VSWR, typical	Return Loss, typical (dB)

26.36

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1.101



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1700–2200 MHz	1.101	26.36
2200–2700 MHz	1.135	23.98
3400-3800 MHz	1.222	20.01

### Jumper Assembly Sample Label



#### **Environmental Specifications**

Immersion Test Method

Meets IEC 60529:2001, IP68 in mated condition

Weatherproofing Method

HELIAX® SureGuard weatherproofing boot

#### Regulatory Compliance/Certifications

#### Classification

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

#### Included Products

LDF4-50A

Agency

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

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**COMMSCOPE**°

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

### Product Classification

Product Type	Coaxial wireless cable
Product Brand	HELIAX®
Product Series	LDF4-50A
Ordering Note	CommScope® standard product (Global)
General Specifications	
Product Number	520094002/00   SZ520094902/00
Flexibility	Standard
Jacket Color	Black
Performance Note	Attenuation values typical, guaranteed within 5%
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
Capacitance	75.8 pF/m   23.104 pF/ft
dc Resistance, Inner Conductor	1.48 ohms/km   0.451 ohms/kft
dc Resistance, Outer Conductor	2.69 ohms/km   0.82 ohms/kft
dc Test Voltage	4000 V

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Inductance	0.19 µH/m   0.058 µH/ft
Insulation Resistance	100000 MOhms-km
Jacket Spark Test Voltage (rms)	8000 V
Operating Frequency Band	1 – 8800 MHz
Peak Power	40 kW
Velocity	88 %

### 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

### Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
1.0	0.211	0.064	36.11
1.5	0.259	0.079	29.46
2.0	0.299	0.091	25.5
10.0	0.672	0.205	11.35
20.0	0.954	0.291	7.99
30.0	1.172	0.357	6.51
50.0	1.521	0.463	5.02
85.0	1.995	0.608	3.82
88.0	2.031	0.619	3.76
100.0	2.169	0.661	3.52
108.0	2.256	0.688	3.38
150.0	2.673	0.815	2.85
174.0	2.887	0.88	2.64
200.0	3.103	0.946	2.46
204.0	3.135	0.956	2.43
300.0	3.835	1.169	1.99
400.0	4.462	1.36	1.71
450.0	4.749	1.447	1.61
460.0	4.804	1.464	1.59

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500.0	5.021	1.53	1.52
512.0	5.085	1.55	1.5
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

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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 Bends	127 mm   5 in
Minimum Bend Radius, single Bend	50.8 mm   2 in
Number of Bends, minimum	15
Number of Bends, typical	50
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 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)
Attenuation, Ambient Temperature	68 °F   20 °C
Average Power, Ambient Temperature	104 °F   40 °C
Average Power, Inner Conductor Temperature	212 °F   100 °C

#### Packaging and Weights

Cable weight

0.22 kg/m | 0.148 lb/ft

## Regulatory Compliance/Certifications

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#### Agency

CENELECEN 505CHINA-ROHSBelowISO 9001:2015DesignREACH-SVHCComplROHSComplUK-ROHSCompl



Classification
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EN 50575 compliant, Declaration of Performance (DoP) available Below maximum concentration value Designed, manufactured and/or distributed under this quality management system Compliant as per SVHC revision on www.commscope.com/ProductCompliance Compliant Compliant



