## L4A-HMDM-8M-P

# DIN Male 8m

LDF4-50A SureFlex® Jumper with interface types 4.3-10 Male and 7-16 DIN Male 8m

- 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**

Product Type SureFlex® Premium, static PIM

Product Brand HELIAX® | SureFlex®

Product Series LDF4-50A

#### General Specifications

Body Style, Connector A Straight

Body Style, Connector B Straight

Interface, Connector A 4.3-10 Male

Interface, Connector B 7-16 DIN Male

Specification Sheet Revision Level A

#### **Dimensions**

**Length** 8 m | 26.247 ft

Nominal Size 1/2 in

## **Electrical Specifications**

**3rd Order IMD Static** -116 dBm

**3rd Order IMD Static Test Method** Two +43 dBm carriers

DTF, Connector A -34 dB

DTF, Connector B -34 dB

#### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
698-960 MHz	1.101	26.4
1700-2200 MHz	1.101	26.4
2200-2700 MHz	1.135	24

Page 1 of 9



## \_4A-HMDM-8M-P

#### Jumper Assembly Sample Label



#### **Environmental Specifications**

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

Packaging and Weights

Included Weatherproofing boot

### Regulatory Compliance/Certifications

Agency Classification

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

#### Included Products

HSG-LDF4 HELIAX® SureGuard® Boot for 1/2 in jumpers to antennas or devices

LDF4-50A, HELIAX® Low Density Foam Coaxial Cable, corrugated copper, 1/2 in, black PE LDF4-50A

jacket Halogen free jacketing non-fire-retardant (General propose cable for outdoor use only)

**COMMSCOPE®** 

# HSG-LDF4



#### HELIAX® SureGuard® Boot for 1/2 in jumpers to antennas or devices

• 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

#### **Product Classification**

**Product Type** Weatherproofing boot

Product Brand HELIAX® | SureGuard®

Ordering Note CommScope® non-standard product

General Specifications

**Application** Provides additional moisture seal for cable connections

**Applications per Kit**One 1/2 in to antenna or device connection

**Color** Black

**Dimensions** 

**Width** 55 mm | 2.165 in

**Length** 99 mm | 3.898 in

Cable Diameter for Seal, maximum16.26 mm | 0.64 inCable Diameter for Seal, minimum15.59 mm | 0.614 in

**Inner Diameter** 14.35 mm | 0.565 in

Nominal Size 1/2 in

Material Specifications

Material Type Silicone rubber

### **Environmental Specifications**

Installation temperature  $-40 \,^{\circ}\text{C}$  to  $+65 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+149 \,^{\circ}\text{F}$ )

Operating Temperature  $-40 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+185 \,^{\circ}\text{F}$ )

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

UV Resistance Test Method ASTM G154-12a

**UV Resistance, minimum with no degradation** ≥1000 hours

**COMMSCOPE®** 

# HSG-LDF4

Weather Resistance Test Method IEC 60068-2-11 | IEC 60529:2001, IP68

Packaging and Weights

 Height, packed
 41 mm | 1.614 in

 Width, packed
 120 mm | 4.724 in

 Length, packed
 140 mm | 5.512 in

Packaging quantity

Weight, gross  $27 \text{ g} \mid 0.06 \text{ lb}$ 



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 Dielectric12.954 mm | 0.51 inDiameter Over Jacket15.875 mm | 0.625 inInner Conductor OD4.826 mm | 0.19 inOuter Conductor OD13.97 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 Conductor1.48 ohms/km | 0.451 ohms/kftdc Resistance, Outer Conductor2.69 ohms/km | 0.82 ohms/kft

dc Test Voltage 4000 V

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 $\label{eq:local_potential} \mbox{Inductance} \qquad \qquad 0.19 \ \mu\mbox{H/m} \ \mid \ 0.058 \ \mu\mbox{H/ft}$ 

**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

Page 6 of 9



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

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 MaterialFoam PEJacket MaterialPE

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

 $\textbf{Cable weight} \hspace{1.5cm} 0.22 \text{ kg/m} \hspace{0.2cm} \mid \hspace{0.2cm} 0.148 \text{ lb/ft}$ 

Regulatory Compliance/Certifications



#### Agency Classification

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

CHINA-ROHS Below maximum concentration value

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 UK-ROHS Compliant

