L4A-HMDM-2M-P

LDF4-50A SureFlex® Jumper with interface types 4.3-10 Male and 7-16 DIN Male 2 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

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 2 m | 6.562 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)
2.2-2.7 GHz	1.135	23.98
698-960 MHz	1.101	26.36
1700-2200 MHz	1.101	26.36



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L4A-HMDM-2M-P

Jumper Assembly Sample Label



Environmental Specifications

Immersion Test MethodMeets IEC 60529:2001, IP68 in mated condition

Packaging and Weights

Included Weatherproofing boot

Regulatory Compliance/Certifications

ssification

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.andrew.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



Included Products

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

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

ANDREW®
an Amphenol company

L4A-HMDM-2M-P

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



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 ANDREW® non-standard product

General Specifications

Application Provides additional moisture seal for cable connections

Applications per KitOne 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



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 ANDREW® standard product (Global)

General Specifications

Product Number 520094002/00 | SZ520094902/00

Flexibility Standard

Jacket Color Black

Performance NoteAttenuation values typical, quaranteed 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 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 μ H/m | 0.058 μ H/ft

Insulation Resistance 100000 MOhms-km

Jacket Spark Test Voltage (rms) 8000 V



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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

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
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
3000.0	10.01	0.409	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 Temperature $68 \, ^{\circ}\text{F} \mid 20 \, ^{\circ}\text{C}$ Average Power, Ambient Temperature $104 \, ^{\circ}\text{F} \mid 40 \, ^{\circ}\text{C}$ Average Power, Inner Conductor Temperature $212 \, ^{\circ}\text{F} \mid 100 \, ^{\circ}\text{C}$

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

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

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REACH-SVHC Compliant as per SVHC revision on www.andrew.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



