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

- 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 | А |
| Dimensions | |
| Length | 9 m 29.528 ft |
| Nominal Size | 1/2 in |
| Electrical Specifications | |
| 3rd Order IMD Static | -116 dBm |
| 3rd Order IMD Static Test MethodTwo +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 |

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L4A-HMDM-9M-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 |
|---------------|--|
| 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 |

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

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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 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, maximum | 16.26 mm 0.64 in |
| Cable Diameter for Seal, minimum | 15.59 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 °C to +65 °C (-40 °F to +149 °F) |
| Operating Temperature | -40 °C to +85 °C (-40 °F to +185 °F) |
| Storage Temperature | -55 °C to +85 °C (-67 °F to +185 °F) |
| UV Resistance Test Method | ASTM G154-12a |

UV Resistance, minimum with no degradation

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≥1000 hours

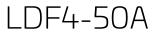
HSG-LDF4

| Weather Resistance Test Method | IEC 60068-2-11 IEC 60529:2001, IP68 |
|--------------------------------|---------------------------------------|
| Packaging and Weight | S |
| Height, packed | 41 mm 1.614 in |
| Width, packed | 120 mm 4.724 in |
| Length, packed | 140 mm 5.512 in |
| Packaging quantity | 1 |
| Weight, gross | 27 g 0.06 lb |
| | |

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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 (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 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 |
| Inductance | 0.19 μH/m 0.058 μH/ft |
| Insulation Resistance | 100000 MOhms-km |
| Jacket Spark Test Voltage (rms) | 8000 V |

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| 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 |
| 500.0 | 5.021 | 1.53 | 1.52 |
| 512.0 | 5.085 | 1.55 | 1.5 |
| 600.0 | 5.533 | 1.686 | 1.38 |

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| 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 |
| | | | |

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| 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

| 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

ROHS

UK-ROHS



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

Compliant

Compliant

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