

# L4HF-D

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4.3-10 Female for 1/2 in AL4RPV-50, LDF4-50A, HL4RPV-50 cable

## Product Classification

<b>Product Type</b>	Wireless and radiating connector
<b>Product Brand</b>	HELIAX®
<b>Ordering Note</b>	CommScope® standard product (Global)

## General Specifications

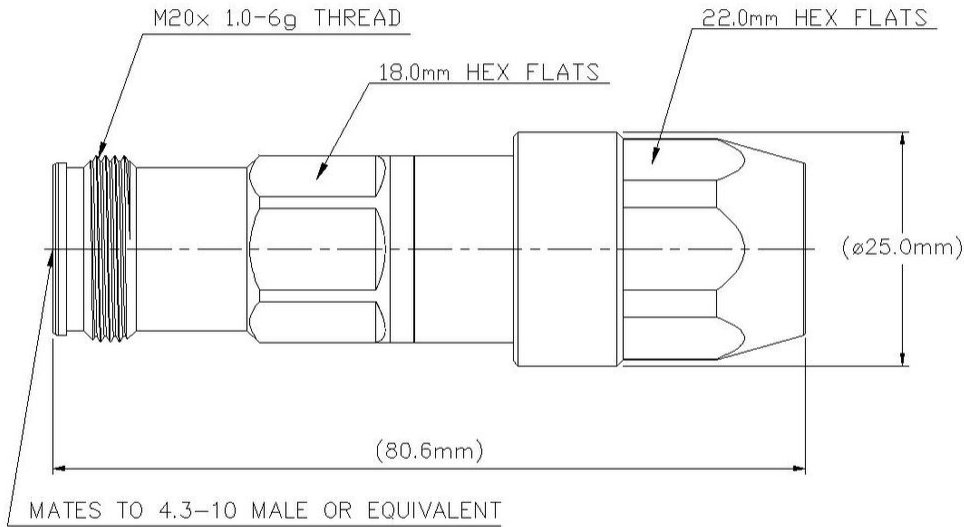
<b>Body Style</b>	Straight
<b>Cable Family</b>	LDF4-50A
<b>Inner Contact Attachment Method</b>	Captivated
<b>Inner Contact Plating</b>	Silver
<b>Interface</b>	4.3-10 Female
<b>Mounting Angle</b>	Straight
<b>Outer Contact Attachment Method</b>	Clamp
<b>Outer Contact Plating</b>	Trimetal

## Dimensions

<b>Length</b>	3.17 in   80.518 mm
<b>Diameter</b>	0.98 in   24.892 mm
<b>Nominal Size</b>	1/2 in

## Outline Drawing

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## Electrical Specifications

<b>3rd Order IMD at Frequency</b>	-116 dBm @ 910 MHz
<b>3rd Order IMD Dynamic Test Method</b>	Two +43 dBm carriers
<b>Insertion Loss, typical</b>	0.05 dB
<b>Average Power at Frequency</b>	600.0 W @ 900 MHz
<b>Cable Impedance</b>	50 ohm
<b>Connector Impedance</b>	50 ohm
<b>dc Test Voltage</b>	2500 V
<b>Inner Contact Resistance, maximum</b>	1 mOhm
<b>Insulation Resistance, minimum</b>	5000 MOhm
<b>Operating Frequency Band</b>	0 – 8800 MHz
<b>Outer Contact Resistance, maximum</b>	1 mOhm

# L4HF-D

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<b>Peak Power, maximum</b>	22.5 kW
<b>RF Operating Voltage, maximum (vrms)</b>	884 V
<b>Shielding Effectiveness</b>	-110 dB

## VSWR/Return Loss

<b>Frequency Band</b>	<b>VSWR</b>	<b>Return Loss (dB)</b>
<b>45–1000 MHz</b>	1.02	40.09
<b>1000–2700 MHz</b>	1.03	36.61
<b>2700–3800 MHz</b>	1.05	32.26
<b>3800–6000 MHz</b>	1.11	26

## Mechanical Specifications

<b>Attachment Durability</b>	25 cycles
<b>Connector Retention Tensile Force</b>	200 lbf   889.644 N
<b>Connector Retention Torque</b>	48 in lb   5.423 N-m
<b>Coupling Nut Proof Torque</b>	88.51 in lb   10 N-m
<b>Coupling Nut Retention Force</b>	101.16 lbf   449.982 N
<b>Interface Durability</b>	100 cycles
<b>Mechanical Shock Test Method</b>	IEC 60068-2-27

## Environmental Specifications

<b>Operating Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Storage Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Corrosion Test Method</b>	IEC 60068-2-11
<b>Immersion Depth</b>	1 m
<b>Immersion Test Mating</b>	Mated
<b>Immersion Test Method</b>	IEC 60529:2001, IP68
<b>Moisture Resistance Test Method</b>	IEC 60068-2-3
<b>Thermal Shock Test Method</b>	IEC 60068-2-14
<b>Vibration Test Method</b>	IEC 60068-2-6
<b>Water Jetting Test Mating</b>	Mated
<b>Water Jetting Test Method</b>	IEC 60529:2001, IP66

## Packaging and Weights

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**Weight, net**

101.75 g | 0.224 lb

## 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.commscope.com/ProductCompliance](http://www.commscope.com/ProductCompliance)

ROHS

Compliant



### \* Footnotes

**Immersion Depth**

Immersion at specified depth for 24 hours

**Insertion Loss, typical**

$0.05\sqrt{\text{freq}}$  (GHz) (not applicable for elliptical waveguide)