

# L4DF-F

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7-16 DIN Female for 1/2 in LDF4-50A cable

## Product Classification

<b>Product Type</b>	Wireless and radiating connector
<b>Product Brand</b>	HELIAX®
<b>Product Series</b>	LDF4-50A
<b>Ordering Note</b>	CommScope® standard product (Global)
<b>Warranty</b>	Five years

## General Specifications

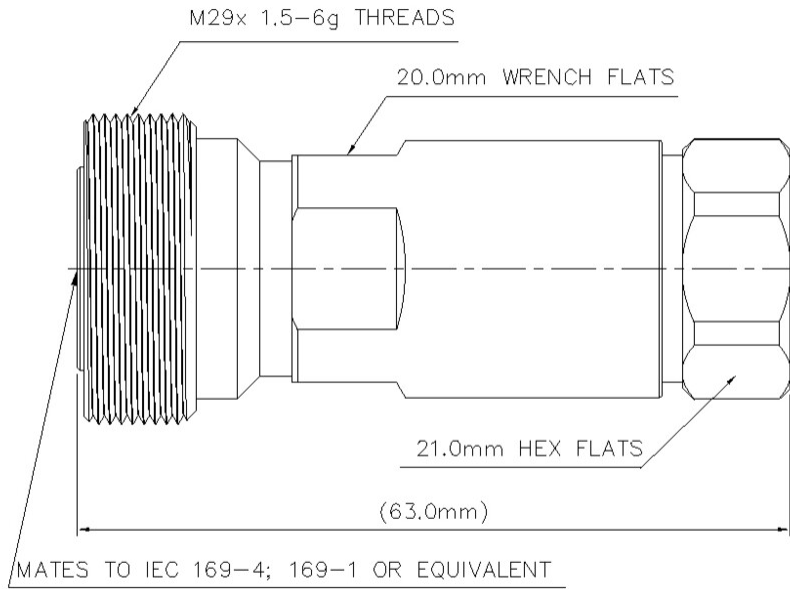
<b>Body Style</b>	Straight
<b>Cable Family</b>	LDF4-50A
<b>Inner Contact Attachment Method</b>	Captivated
<b>Inner Contact Plating</b>	Silver
<b>Interface</b>	7-16 DIN Female
<b>Mounting Angle</b>	Straight
<b>Outer Contact Attachment Method</b>	Clamp
<b>Outer Contact Plating</b>	Trimetal

## Dimensions

<b>Length</b>	63 mm   2.48 in
<b>Diameter</b>	29 mm   1.142 in
<b>Nominal Size</b>	1/2 in

## Outline Drawing

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## Electrical Specifications

<b>3rd Order IMD at Frequency</b>	-120 dBm @ 900 MHz
<b>3rd Order IMD Dynamic Test Method</b>	Tapping/Impact, no rotation
<b>3rd Order IMD Dynamic, typical</b>	-97 dBm
<b>3rd Order IMD Test Method</b>	Two +43 dBm carriers
<b>Insertion Loss Coefficient, typical</b>	0.05
<b>Average Power at Frequency</b>	1.1 kW @ 900 MHz
<b>Cable Impedance</b>	50 ohm
<b>Connector Impedance</b>	50 ohm
<b>dc Test Voltage</b>	4000 V
<b>Impedance</b>	50 ohm
<b>Inner Contact Resistance, maximum</b>	0.4 mOhm
<b>Insulation Resistance, minimum</b>	10000 mOhm
<b>Operating Frequency Band</b>	0 – 7500 MHz
<b>Outer Contact Resistance, maximum</b>	1.5 mOhm
<b>RF Operating Voltage, maximum (vrms)</b>	1415 V

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## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)	Gated VSWR	Gated Return Loss (dB)	VSWR, typical	Return Loss, typical (dB)
0–1000 MHz	1.06	30.7	1.023	39		
1000–2200 MHz	1.12	24.94	1.036	35		
2200–3000 MHz	1.15	23.13	1.041	34		
3000–4000 MHz	1.2	20.83	1.041	34		
4000–6000 MHz	1.25	19.08	1.065	30		
6000–7500 MHz			1.119	25	1.484	14.2
7000–8800 MHz			1.253	19	1.484	14.2

## Mechanical Specifications

<b>Attachment Durability</b>	25 cycles
<b>Connector Retention Tensile Force</b>	600 N   134.885 lbf
<b>Connector Retention Torque</b>	4.5 N-m   39.828 in lb
<b>Insertion Force</b>	200 N   44.962 lbf
<b>Insertion Force Method</b>	IEC 61169-4:9.3.5
<b>Interface Durability</b>	500 cycles
<b>Interface Durability Method</b>	IEC 61169-4:9.5
<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>Thermal Shock Test Method</b>	IEC 60068-2-14
<b>Vibration Test Method</b>	IEC 60068-2-6

## Packaging and Weights

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<b>Height, packed</b>	248.92 mm   9.8 in
<b>Width, packed</b>	266.7 mm   10.5 in
<b>Length, packed</b>	266.7 mm   10.5 in
<b>Packaging quantity</b>	50

## \* Footnotes

<b>Warranty</b>	For more information, please consult our Product Warranty guidelines
<b>Insertion Loss Coefficient, typical</b>	$0.05\sqrt{\text{freq (GHz)}}$ (not applicable for elliptical waveguide)
<b>Immersion Depth</b>	Immersion at specified depth for 24 hours