## L4DM-F



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

Product Type	Wireless and radiating connector
Product Brand	HELIAX®
Product Series	LDF4-50A
Ordering Note	CommScope® standard product (Global)
Warranty	Five years
General Specifications	
Body Style	Straight
Cable Family	LDF4-50A
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	7-16 DIN Male
Mounting Angle	Straight
Outer Contact Attachment Method	Clamp
Outer Contact Plating	Trimetal
Dimensions	
Length	61 mm   2.402 in
Diameter	35 mm   1.378 in

## Outline Drawing

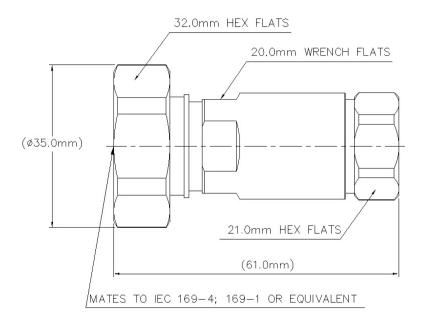
**Nominal Size** 

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1/2 in





### **Electrical Specifications**

3rd Order IMD at Frequency	-120 dBm @ 900 MHz
3rd Order IMD Dynamic Test Method	Tapping/Impact, no rotation
3rd Order IMD Dynamic, typical	-97 dBm
3rd Order IMD Test Method	Two +43 dBm carriers
Insertion Loss Coefficient, typical	0.05
Average Power at Frequency	1.1 kW @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	4000 V
Impedance	50 ohm
Inner Contact Resistance, maximum	0.4 mOhm
Insulation Resistance, minimum	10000 mOhm
Operating Frequency Band	0 – 7500 MHz
Outer Contact Resistance, maximum	1.5 m0hm
RF Operating Voltage, maximum (vrms)	1415 V

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## VSWR/Return

#### Loss

VSWR	Return Loss (dB)	Gated VSWR	Gated Return Loss (dB)	VSWR, typical	Return Loss, typical (dB)
1.05	32.26	1.02	40		
1.1	26.44	1.023	39		
1.12	24.94	1.052	32		
1.15	23.13	1.065	30		
1.2	20.83	1.106	26		
		1.173	22	1.484	14.2
		1.377	16	1.484	14.2
	1.05 1.1 1.12 1.15	1.0532.261.126.441.1224.941.1523.13	1.05 32.26 1.02   1.1 26.44 1.023   1.12 24.94 1.052   1.15 23.13 1.065   1.2 20.83 1.106   1.173 1.173	1.0532.261.02401.126.441.023391.1224.941.052321.1523.131.065301.220.831.106261.17322	1.126.441.023391.1224.941.052321.1523.131.065301.220.831.106261.173221.484

## Mechanical Specifications

Attachment Durability	25 cycles
Connector Retention Tensile Force	600 N   134.885 lbf
Connector Retention Torque	4.5 N-m   39.828 in lb
Coupling Nut Proof Torque	25 N-m   221.269 in lb
Coupling Nut Retention Force	1000 N   224.809 lbf
Coupling Nut Retention Force Method	MIL-C-39012C-3.25, 4.6.22
Insertion Force	200 N   44.962 lbf
Insertion Force Method	IEC 61169-4:9.3.5
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-4:9.5
Mechanical Shock Test Method	IEC 60068-2-27

### **Environmental Specifications**

Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Corrosion Test Method	IEC 60068-2-11
Immersion Depth	1 m
Immersion Test Mating	Mated
Immersion Test Method	IEC 60529:2001, IP68
Thermal Shock Test Method	IEC 60068-2-14

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# L4DM-F

Vibration Test Method	IEC 60068-2-6	
Packaging and $V$	Veights	
Height, packed		248.92 mm   9.8 in
Width, packed		266.7 mm   10.5 in
Length, packed		266.7 mm   10.5 in
Packaging quantity		50
Regulatory Compliance/Certifications		
Agency	Classification	
CHINA-ROHS	Below maximum concentration value	
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance	
ROHS	Compliant	
UK-ROHS	Compliant	

## \* Footnotes

Warranty	For more information, please consult our Product Warranty guidelines
Insertion Loss Coefficient, typical	0.05√ <sup>-</sup> freq (GHz) (not applicable for elliptical waveguide)
Immersion Depth	Immersion at specified depth for 24 hours

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