

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

#### OBSOLETE

#### This product was discontinued on: June 2, 2014

Replaced By: L4DR-PS

7-16 DIN Male Right Angle Positive Stop™ for 1/2 in LDF4-50A cable

### Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX®
General Specifications	
Body Style	Right angle
Cable Family	LDF4-50A
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	7-16 DIN Male
Mounting Angle	Right angle
Outer Contact Attachment Method	Self-flare
Outer Contact Plating	Trimetal
Pressurizable	No
Dimensions	
Width	49.02 mm   1.93 in
Length	74.93 mm   2.95 in
Right Angle Length	71.12 mm   2.8 in

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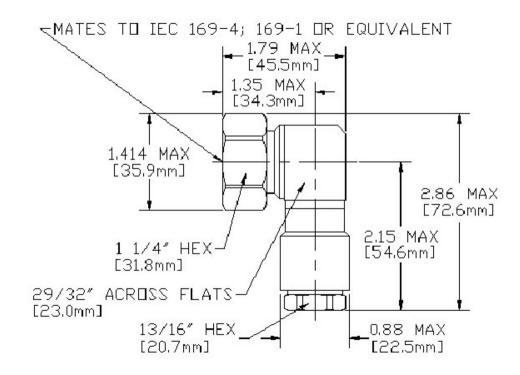
Diameter

36.07 mm | 1.42 in

**Nominal Size** 

1/2 in

### Outline Drawing



### **Electrical Specifications**

3rd Order IMD at Frequency	-120 dBm @ 910 MHz
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
Inner Contact Resistance, maximum	0.8 m0hm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 4000 MHz
Outer Contact Resistance, maximum	1.5 m0hm
Peak Power, maximum	40 kW

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RF Operating Voltage, maximum (vrms)	1415 V
Shielding Effectiveness	-110 dB

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–1000 MHz	1.023	38.89
1000–2500 MHz	1.065	30.04
2500-2800 MHz	1.106	25.96
2800–4000 MHz	1.33	17

### Mechanical Specifications

Attachment Durability	25 cycles
Connector Retention Tensile Force	889.64 N   200 lbf
Connector Retention Torque	5.42 N-m   47.998 in lb
Coupling Nut Proof Torque	25 N-m   221.269 in lb
Coupling Nut Retention Force	1000 N   224.81 lbf
Coupling Nut Retention Force Method	MIL-C-39012C-3.25, 4.6.22
Insertion Force	200.17 N   45 lbf
Insertion Force Method	IEC 61169-1:15.2.4
Interface Durability	50 cycles
Interface Durability Method	IEC 61169-4:9.5
Mechanical Shock Test Method	MIL-STD-202, Method 213, Test Condition I

## 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)
Attenuation, Ambient Temperature	20 °C   68 °F
Average Power, Ambient Temperature	40 °C   104 °F
Corrosion Test Method	MIL-STD-1344A, Method 1001.1, Test Condition A
Immersion Depth	1 m
Immersion Test Mating	Mated
Immersion Test Method	IEC 60529:2001, IP68
Moisture Resistance Test Method	MIL-STD-202F, Method 106F

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Thermal Shock Test Method	MIL-STD-202F, Method 107G, Test Condition A-1, Low Temperature -55 $^\circ$ C
Vibration Test Method	MIL-STD-202F, Method 204D, Test Condition B
Water Jetting Test Mating	Mated
Water Jetting Test Method	IEC 60529:2001, IP66
Packaging and Weights	
Weight, net	205 g   0.452 lb
* Footnotes	
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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