## L4PDF-BHC



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

Product Classification
------------------------

**Product Type** Wireless and radiating connector Product Brand **HELIAX® Product Series** LDF4-50A **General Specifications Body Style** Bulkhead LDF4-50A **Cable Family Inner Contact Attachment Method** Captivated **Inner Contact Plating** Silver Interface 7-16 DIN Female **Mounting Angle** Straight **Outer Contact Attachment Method** Self-flare **Outer Contact Plating** Silver Pressurizable No Dimensions

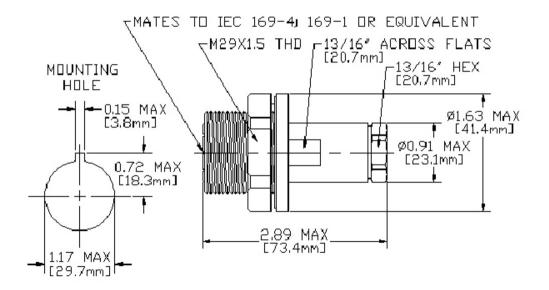
Length	73.66 mm   2.9 in
Diameter	40.64 mm   1.6 in
Nominal Size	1/2 in

### Outline Drawing

Page 1 of 4

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: April 13, 2023





## **Electrical Specifications**

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

### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
45–1000 MHz	1.029	36.9
1010-3000 MHz	1.065	30.04
3010–4000 MHz	1.222	20.01

Page 2 of 4

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: April 13, 2023

**COMMSCOPE**°

# L4PDF-BHC

### 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
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
Thermal Shock Test Method	MIL-STD-202F, Method 107G, Test Condition A-1, Low Temperature -55 $^\circ\mathrm{C}$
Vibration Test Method	IEC 60068-2-6
Water Jetting Test Mating	Mated
Water Jetting Test Method	IEC 60529:2001, IP66

#### Packaging and Weights

Weight, net

318 g | 0.701 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
ROHS	Compliant

Page 3 of 4

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: April 13, 2023



## L4PDF-BHC



Compliant

\* 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

Page 4 of 4

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: April 13, 2023

