7-16 DIN Male Positive Stop™ for 1/2 in AL4RPV-50, LDF4-50A, HL4RPV-50 cable

Product Classification

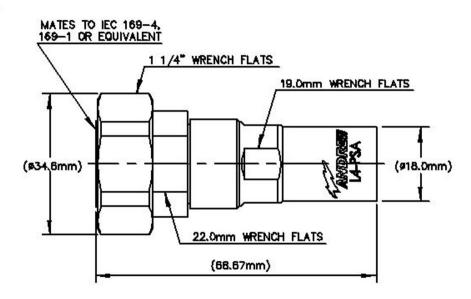
Product Type	Wireless and radiating connector
Product Brand	HELIAX® Positive Stop™
Product Series	LDF4-50A
Ordering Note	CommScope® standard product (Global)
General Specifications	
Body Style	Straight
Cable Family	AL4-50
Harmonized System (HS) Code	85366910 (Coaxial cable and other coaxial electric conductors)
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	7-16 DIN Male
Mounting Angle	Straight
Outer Contact Attachment Method	Ring-flare
Outer Contact Plating	Trimetal
Dimensions	
Length	68.58 mm 2.7 in
Diameter	34.54 mm 1.36 in
Nominal Size	1/2 in

Outline Drawing

Page 1 of 4

©2024 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: March 26, 2024





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 – 8800 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
45–1000 MHz	1.023

Page 2 of 4

©2024 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: March 26, 2024

Return Loss (dB)

38.89



1010-2200 MHz	1.029	36.9
2200-3000 MHz	1.046	32.96
3010-4000 MHz	1.074	28.95
4010-6000 MHz	1.106	25.96
6010-8000 MHz	1.152	23.02

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	500 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)
Corrosion Test Method	MIL-STD-1344A, Method 1001.1, Test Condition A
Immersion Depth	1 m
Immersion Test Mating	Unmated
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	Unmated
Water Jetting Test Method	IEC 60529:2001, IP66

Packaging and Weights

Page 3 of 4

©2024 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: March 26, 2024



Weight, net

120.09 g | 0.265 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above 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
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted
50	

* Footnotes

Insertion Loss Coefficient, typical 0.05^{√-}freq (GHz) (not applicable for elliptical waveguide)

Immersion Depth

Immersion at specified depth for 24 hours

Page 4 of 4

©2024 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: March 26, 2024

