

7-16 DIN Female 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™

Ordering Note CommScope® standard product (Global)

General Specifications

Body Style Straight

Cable Family AL4-50

Harmonized System (HS) Code 854420 (Coaxial cable and other coaxial electric conductors)

Inner Contact Attachment Method Captivated

Inner Contact Plating Silver

Interface 7-16 DIN Female

Mounting AngleStraightOuter Contact Attachment MethodRing-flareOuter Contact PlatingTrimetal

Dimensions

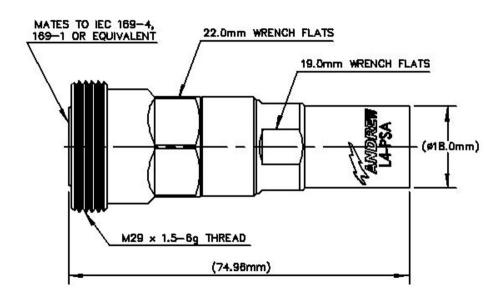
 Length
 28.96 mm | 1.14 in

 Diameter
 74.93 mm | 2.95 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, typical 0.05 dB

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	Return Loss (dB)
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45–1000 MHz 1.03 39

COMMSCOPE°

1000-2200 MHz	1.03	39
2210-3000 MHz	1.05	34
3010-5000 MHz	1.09	28

Mechanical Specifications

Attachment Durability 25 cycles

Connector Retention Tensile Force889.64 N | 200 lbfConnector Retention Torque5.42 N-m | 47.998 in lb

Insertion Force200.17 N | 45 lbfInsertion Force MethodIEC 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 $-55 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ (-67 $^{\circ}\text{F}$ to $+185 \,^{\circ}\text{F}$)Storage Temperature $-55 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ (-67 $^{\circ}\text{F}$ to $+185 \,^{\circ}\text{F}$)

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 °C

Vibration Test Method IEC 60068-2-6

Water Jetting Test Mating Unmated

Water Jetting Test Method IEC 60529:2001, IP66

Packaging and Weights

Weight, net 109.17 g | 0.241 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

COMMSCOPE®

ROHS

Compliant/Exempted





Insertion Loss, typical 0.05v⁻freq (GHz) (not applicable for elliptical waveguide)

Immersion Depth Immersion at specified depth for 24 hours

