

7-16 DIN Female Positive Stop™ for 1-5/8 in cable

Product Classification

Product Type Wireless and radiating connector

Product Brand HELIAX® | Positive Stop™

Product Series AVA7-50 | AVA7RK-50

Ordering Note CommScope® standard product in Europe, the Middle East, and

Africa | CommScope® standard product in the United States and Canada

General Specifications

Body Style Straight

Inner Contact Attachment Method Captivated

Inner Contact Plating Silver

Interface 7-16 DIN Female

Mounting Angle Straight

Outer Contact Attachment Method Ring-flare

Outer Contact Plating Trimetal

Pressurizable No

Dimensions

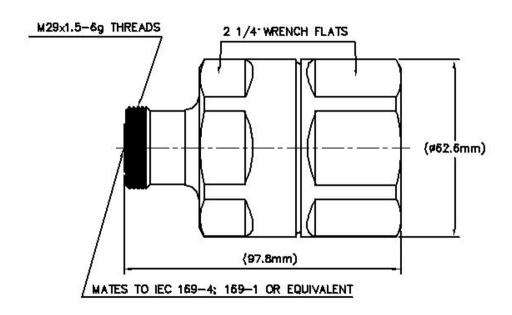
Length 97.79 mm | 3.85 in

Diameter 62.74 mm | 2.47 in

Nominal Size 1-5/8 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 3.0 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 - 2700 MHz **Outer Contact Resistance, maximum** 1.5 m0hm Peak Power, maximum 40 kW RF Operating Voltage, maximum (vrms) 1415 V **Shielding Effectiveness** -130 dB

VSWR/Return Loss

45-1000 MHz

Frequency Band VSWR Return Loss (dB)

39

1.03

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1010–2200 MHz 1.03 38 **2210–2500 MHz** 1.04 35

Mechanical Specifications

Attachment Durability 25 cycles

Connector Retention Tensile Force 2,224.11 N | 500 lbf

Connector Retention Torque 13.56 N-m | 119.998 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-202F, Method 213B, Test Condition C

Environmental Specifications

Operating Temperature $-55 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-67 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$

Storage Temperature $-55 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ (-67 $^{\circ}\text{F}$ to $+185 \,^{\circ}\text{F}$)

Attenuation, Ambient Temperature $20 \, ^{\circ}\text{C} \mid 68 \, ^{\circ}\text{F}$ Average Power, Ambient Temperature $40 \, ^{\circ}\text{C} \mid 104 \, ^{\circ}\text{F}$

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 722 g | 1.592 lb

Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Below maximum concentration value

COMMSCOPE®

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system

REACH-SVHC

ROHS

Compliant as per SVHC revision on www.commscope.com/ProductCompliance

Compliant



* Footnotes

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

Immersion Depth Immersion at specified depth for 24 hours

