

7-16 DIN Female Positive Stop™ for 7/8 in AVA5-50 cable

OBSOLETE

This product was discontinued on: January 17, 2008

Product Classification

 Product Type
 Wireless and radiating connector

 Product Brand
 HELIAX® | Positive Stop™

General Specifications

Body Style Straight

Cable Family AVA5-50

Inner Contact Attachment Method Captivated

Inner Contact Plating Silver

Interface 7-16 DIN Female

Mounting AngleStraightOuter Contact Attachment MethodRing-flareOuter Contact PlatingTrimetalPressurizableNo

Dimensions

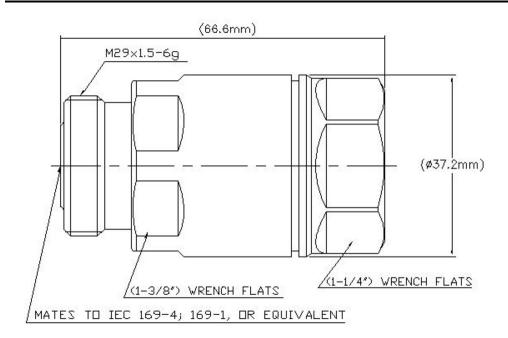
 Length
 67.06 mm | 2.64 in

 Diameter
 37.34 mm | 1.47 in

Nominal Size 7/8 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 Coefficient, typical 0.05

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 - 5200 MHz **Outer Contact Resistance, maximum** 1.5 m0hm Peak Power, maximum 40 kW RF Operating Voltage, maximum (vrms) 1415 V

VSWR/Return Loss

Shielding Effectiveness

Frequency Band VSWR Return Loss (dB)

824–1019 MHz 1.023 38.89

COMMSCOPE®

-130 dB

1044-1710 MHz	1.023	38.89
1850-1990 MHz	1.023	38.89
1910-2200 MHz	1.027	37.51
2200-2700 MHz	1.034	35.54
3010-4000 MHz	1.125	24.61
4010-5200 MHz	1.206	20.59

Mechanical Specifications

Attachment Durability 25 cycles

Connector Retention Tensile Force1,334.47 N | 300 lbfConnector Retention Torque8.14 N-m | 72.001 in lb

Insertion Force200.17 N | 45 lbfInsertion Force MethodIEC 61169-1:15.2.4

Interface Durability 500 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 $-55 \,^{\circ}\text{C}$ 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 259 g | 0.571 lb

Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

* Footnotes

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

Immersion Depth Immersion at specified depth for 24 hours

