

7-16 DIN Female Positive Stop™ for 7/8 in AL5-50 and AVA5-50 cable

#### **Product Classification**

**Product Type** Wireless and radiating connector

Product Brand HELIAX® | Positive Stop™

Ordering Note CommScope® non-standard product

#### General Specifications

Body Style Straight

Cable Family AL5-50 | AVA5-50

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

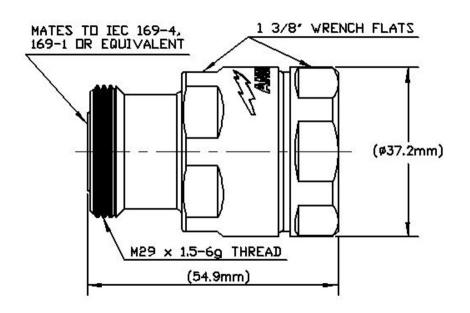
 Length
 54.86 mm | 2.16 in

 Diameter
 37.08 mm | 1.46 in

Nominal Size 7/8 in

### Outline Drawing





### **Electrical Specifications**

3rd Order IMD at Frequency-120 dBm @ 910 MHz3rd Order IMD Test MethodTwo +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 0.4 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 **Shielding Effectiveness** -130 dB

### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
824-1019 MHz	1.03	39

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1710-1044 MHz	1.03	39
1850-1990 MHz	1.03	38.8
1910-2200 MHz	1.03	37.5
2200-2700 MHz	1.04	35.6
3010-4000 MHz	1.13	24.6
4010-5200 MHz	1.21	20.6

#### 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 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 °C to +85 °C (-67 °F to +185 °F)Storage Temperature-55 °C to +85 °C (-67 °F to +185 °F)

Attenuation, Ambient Temperature  $20 \, ^{\circ}\text{C} \mid 68 \, ^{\circ}\text{F}$  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** 132 g | 0.291 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

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

ROHS Compliant



#### \* Footnotes

**Insertion Loss, typical** 0.05v<sup>-</sup>freq (GHz) (not applicable for elliptical waveguide)

**Immersion Depth** Immersion at specified depth for 24 hours

