

# AL6DF-PSA

7-16 DIN Female Positive Stop™ for 1-1/4 in AVA6-50 cable



## Product Classification

**Brand** HeliAx® | Positive Stop™  
**Product Type** Wireless and radiating connector

## General Specifications

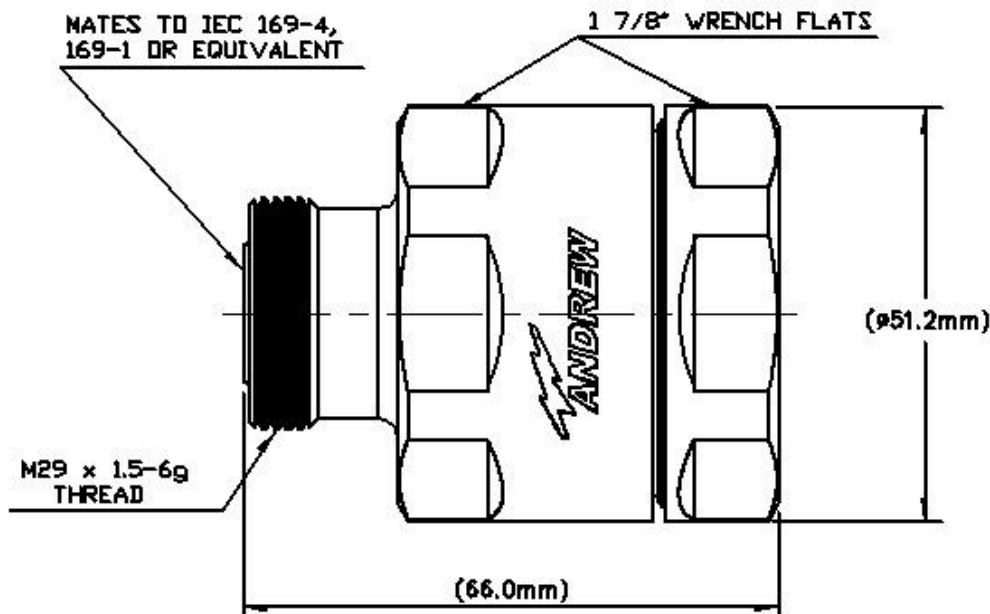
**Interface** 7-16 DIN Female  
**Body Style** Straight  
**Mounting Angle** Straight  
**Ordering Note** CommScope® standard product in Europe, the Middle East, and Africa

## Electrical Specifications

**Connector Impedance** 50 ohm  
**Operating Frequency Band** 0 – 3700 MHz  
**Cable Impedance** 50 ohm  
**3rd Order IMD, typical** -116 dBm @ 1800 MHz  
**3rd Order IMD Test Method** Two +43 dBm carriers  
**RF Operating Voltage, maximum (vrms)** 1415.00 V  
**dc Test Voltage** 4000 V  
**Outer Contact Resistance, maximum** 1.50 mOhm  
**Inner Contact Resistance, maximum** 0.80 mOhm  
**Insulation Resistance, minimum** 5000 MOhm  
**Average Power** 3.0 kW @ 900 MHz  
**Peak Power, maximum** 40.00 kW  
**Insertion Loss, typical** 0.05 dB  
**Shielding Effectiveness** -130 dB

# AL6DF-PSA

## Outline Drawing



## Mechanical Specifications

Outer Contact Attachment Method	Ring-flare
Inner Contact Attachment Method	Captivated
Outer Contact Plating	Trimetal
Inner Contact Plating	Silver
Attachment Durability	25 cycles
Interface Durability	50 cycles
Interface Durability Method	IEC 61169-16:9.5
Connector Retention Tensile Force	1779 N   400 lbf
Connector Retention Torque	10.85 N-m   96.00 in lb
Insertion Force	200.17 N   45.00 lbf
Insertion Force Method	IEC 61169-1:15.2.4
Pressurizable	No

## Dimensions

Nominal Size	1-1/4 in
Diameter	51.21 mm   2.02 in
Length	66.00 mm   2.60 in
Weight	362.00 g   0.80 lb

## Environmental Specifications

<b>Operating Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Storage Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Immersion Depth</b>	1 m
<b>Immersion Test Mating</b>	Unmated
<b>Immersion Test Method</b>	IEC 60529:2001, IP68
<b>Water Jetting Test Mating</b>	Unmated
<b>Water Jetting Test Method</b>	IEC 60529:2001, IP66
<b>Moisture Resistance Test Method</b>	MIL-STD-202F, Method 106F
<b>Mechanical Shock Test Method</b>	MIL-STD-202F, Method 213B, Test Condition C
<b>Thermal Shock Test Method</b>	MIL-STD-202F, Method 107G, Test Condition A-1, Low Temperature -55 °C
<b>Vibration Test Method</b>	MIL-STD-202F, Method 204D, Test Condition B
<b>Corrosion Test Method</b>	MIL-STD-1344A, Method 1001.1, Test Condition A

## Standard Conditions

<b>Attenuation, Ambient Temperature</b>	20 °C   68 °F
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F

## Return Loss/VSWR

<b>Frequency Band</b>	<b>VSWR</b>	<b>Return Loss (dB)</b>
45–1000 MHz	1.04	35.00
1010–2200 MHz	1.05	32.00
2210–2700 MHz	1.07	29.00
2710–3300 MHz	1.11	26.00

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
RoHS 2011/65/EU	Compliant by Exemption
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
China RoHS SJ/T 11364-2014	Above Maximum Concentration Value (MCV)



## \* Footnotes

<b>Immersion Depth</b>	Immersion at specified depth for 24 hours
<b>Insertion Loss, typical</b>	0.05v/freq (GHz) (not applicable for elliptical waveguide)