

# 78EZDM

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7-16 DIN Male EZfit® for 7/8 in FXL-780, AVA5-50, and AVA5-50FX cable

## Product Classification

<b>Product Type</b>	Wireless and radiating connector
<b>Product Brand</b>	EZfit®
<b>Product Series</b>	AVA5-50   AVA5RK-50
<b>Ordering Note</b>	CommScope® non-standard product

## General Specifications

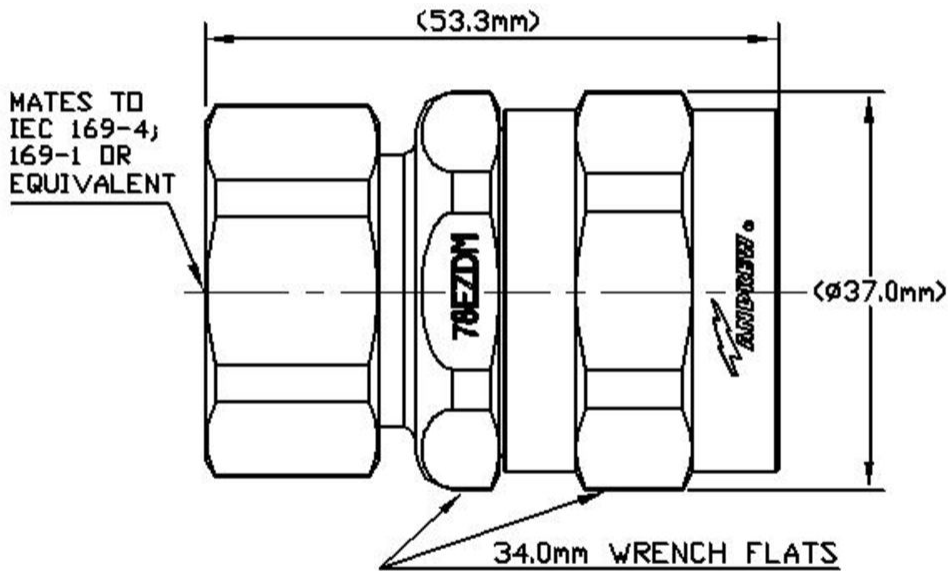
<b>Body Style</b>	Straight
<b>Cable Family</b>	AVA5-50   AVA5-50FX   FXL-780
<b>Harmonized System (HS) Code</b>	854420 (Coaxial cable and other coaxial electric conductors)
<b>Inner Contact Attachment Method</b>	Captivated
<b>Inner Contact Plating</b>	Silver
<b>Interface</b>	7-16 DIN Male
<b>Mounting Angle</b>	Straight
<b>Outer Contact Attachment Method</b>	Clamp
<b>Outer Contact Plating</b>	Trimetal
<b>Pressurizable</b>	No

## Dimensions

<b>Length</b>	53.34 mm   2.1 in
<b>Diameter</b>	37.08 mm   1.46 in
<b>Nominal Size</b>	7/8 in

## Outline Drawing

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## Electrical Specifications

<b>3rd Order IMD at Frequency</b>	-116 dBm @ 1800 MHz
<b>3rd Order IMD Test Method</b>	Two +43 dBm carriers
<b>Insertion Loss, typical</b>	0.05 dB
<b>Cable Impedance</b>	50 ohm
<b>Connector Impedance</b>	50 ohm
<b>dc Test Voltage</b>	4000 V
<b>Inner Contact Resistance, maximum</b>	0.4 mOhm
<b>Insulation Resistance, minimum</b>	5000 MOhm
<b>Operating Frequency Band</b>	0 – 5000 MHz
<b>Outer Contact Resistance, maximum</b>	1.5 mOhm
<b>Peak Power, maximum</b>	40 kW

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**RF Operating Voltage, maximum (vrms)** 1415 V

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
50–1000 MHz	1.03	40
1000–1900 MHz	1.03	38
1900–2200 MHz	1.04	36
2200–2700 MHz	1.06	32
2700–3600 MHz	1.07	30
3600–5000 MHz	1.1	27

## Mechanical Specifications

<b>Attachment Durability</b>	25 cycles
<b>Connector Retention Tensile Force</b>	1,334.47 N   300 lbf
<b>Connector Retention Torque</b>	8.14 N-m   72.001 in lb
<b>Coupling Nut Proof Torque</b>	24.86 N-m   220.003 in lb
<b>Coupling Nut Retention Force</b>	1,000.85 N   225 lbf
<b>Coupling Nut Retention Force Method</b>	MIL-C-39012C-3.25, 4.6.22
<b>Insertion Force</b>	200.17 N   45 lbf
<b>Insertion Force Method</b>	IEC 61169-1:15.2.4
<b>Interface Durability</b>	500 cycles
<b>Interface Durability Method</b>	IEC 61169-4:9.5
<b>Mechanical Shock Test Method</b>	MIL-STD-202F, Method 213B, Test Condition C

## Environmental Specifications

<b>Operating Temperature</b>	-40 °C to +85 °C (-40 °F to +185 °F)
<b>Storage Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Attenuation, Ambient Temperature</b>	20 °C   68 °F
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F
<b>Corrosion Test Method</b>	MIL-STD-1344A, Method 1001.1, Test Condition A
<b>Immersion Depth</b>	1 m
<b>Immersion Test Mating</b>	Mated
<b>Immersion Test Method</b>	IEC 60529:2001, IP68
<b>Moisture Resistance Test Method</b>	MIL-STD-202F, Method 106F

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<b>Vibration Test Method</b>	IEC 60068-2-6
<b>Water Jetting Test Mating</b>	Mated
<b>Water Jetting Test Method</b>	IEC 60529:2001, IP66

## Packaging and Weights

<b>Weight, net</b>	169.74 g   0.374 lb
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## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant



## \* Footnotes

<b>Immersion Depth</b>	Immersion at specified depth for 24 hours
<b>Insertion Loss, typical</b>	$0.05\sqrt{\text{freq}}$ (GHz) (not applicable for elliptical waveguide)