

## 78VDM

7-16 DIN Male Positive Stop™ for 7/8 in VXL5-50 cable



## CHARACTERISTICS

### General Specifications

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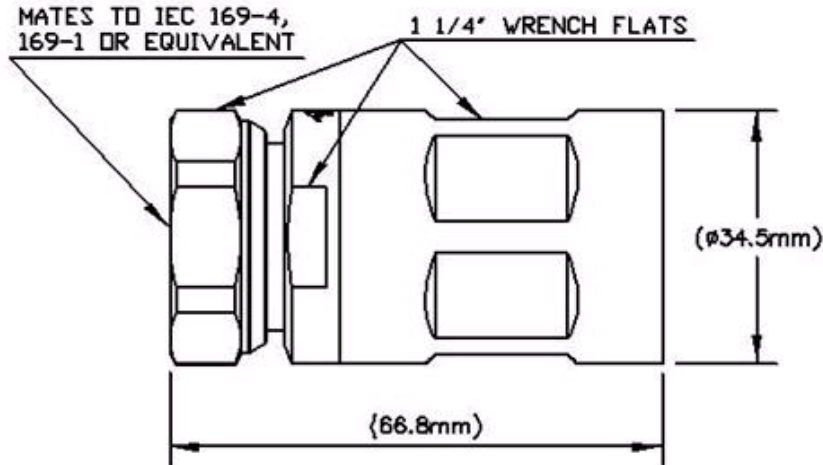
Interface	7-16 DIN Male
Body Style	Straight
Brand	HELIAX®   Positive Stop™
Mounting Angle	Straight

### Electrical Specifications

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Connector Impedance	50 ohm
Operating Frequency Band	0 – 5000 MHz
Cable Impedance	50 ohm
3rd Order IMD	-116 dBm @ 910 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	1.50 mOhm
Inner Contact Resistance	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

## Outline Drawing



## Mechanical Specifications

Outer Contact Attachment Method	Ring-flare
Inner Contact Attachment Method	Thread-in stub
Outer Contact Plating	Tin
Inner Contact Plating	Silver
Attachment Durability	25 cycles
Interface Durability	500 cycles
Interface Durability Method	IEC 169-16:9.5
Connector Retention Tensile Force	667 N   150 lbf
Connector Retention Torque	8.13 N-m   72.00 in lb
Insertion Force	200.17 N   45.00 lbf
Insertion Force Method	IEC 169-1:15.2.4
Pressurizable	No
Coupling Nut Proof Torque	24.86 N-m   220.00 in lb
Coupling Nut Retention Force	1000.85 N   225.00 lbf
Coupling Nut Retention Force Method	MIL-C-39012C-3.25, 4.6.22

## Dimensions

Nominal Size	7/8 in
Diameter, maximum	34.50 mm   1.36 in
Length	66.80 mm   2.63 in

# Product Specifications



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Weight 72.00 g | 0.16 lb

## 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)
Immersion Depth	1 m
Immersion Test Mating	Mated
Immersion Test Method	IEC 60529:2001, IP68
Water Jetting Test Mating	Mated
Water Jetting Test Method	IEC 60529:2001, IP66
Moisture Resistance Test Method	IEC 529, IP68
Mechanical Shock Test Method	IEC 60068-2-27
Thermal Shock Test Method	IEC 60068-2-14
Vibration Test Method	IEC 60068-2-6
Corrosion Test Method	IEC 60068-2-11, Test Condition Ka

## Standard Conditions

Attenuation, Ambient Temperature	20 °C   68 °F
Average Power, Ambient Temperature	40 °C   104 °F

## Return Loss

Frequency Band	VSWR	Return Loss (dB)
50–1000 MHz	1.02	39.00
1010–2200 MHz	1.04	35.00
2210–3000 MHz	1.11	26.00
3010–4000 MHz	1.17	22.00
4010–5200 MHz	1.29	18.00

## Regulatory Compliance/Certifications

Agency	Classification
RoHS 2002/95/EC	Compliant by Exemption
China RoHS SJ/T 11364-2006	Above Maximum Concentration Value (MCV)



## \* Footnotes

Immersion Depth Immersion at specified depth for 24 hours

# Product Specifications



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Insertion Loss, typical  $0.05\sqrt{\text{freq (GHz)}}$  (not applicable for elliptical waveguide)