

# Product Specifications

**COMMScope®**


## PLU010428

**7-16 DIN Female for 1/2 in FSJ4-50B cable**

### General Specifications

Interface	7-16 DIN Female
Body Style	Straight
Brand	HELIAX®
Mounting Angle	Straight

### Electrical Specifications

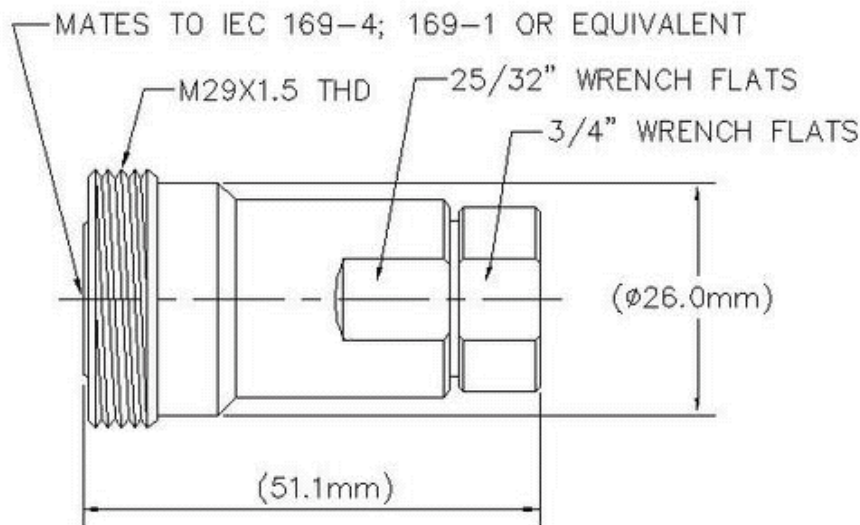
Connector Impedance	50 ohm
Operating Frequency Band	0 – 7500 MHz
Cable Impedance	50 ohm
3rd Order IMD, typical	-120 dBm @ 910 MHz
3rd Order IMD Test Method	Two +43 dBm carriers
RF Operating Voltage, maximum (vrms)	884.00 V
dc Test Voltage	2500 V
Outer Contact Resistance, maximum	1.50 mOhm
Inner Contact Resistance, maximum	0.80 mOhm
Insulation Resistance, minimum	5000 MOhm
Average Power	1.0 kW @ 900 MHz
Peak Power, maximum	15.60 kW
Insertion Loss, typical	0.05 dB
Shielding Effectiveness	-110 dB

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## Outline Drawing



## Mechanical Specifications

Outer Contact Attachment Method	Self-flare
Inner Contact Attachment Method	Captivated
Outer Contact Plating	Trimetal
Inner Contact Plating	Silver
Attachment Durability	25 cycles
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-4:9.5
Connector Retention Tensile Force	890 N   200 lbf
Connector Retention Torque	5.42 N-m   48.00 in lb
Insertion Force	200.17 N   45.00 lbf
Insertion Force Method	IEC 61169-1:15.2.4
Pressurizable	No

## Dimensions

Nominal Size	1/2 in
Diameter	27.99 mm   1.10 in
Length	50.01 mm   1.97 in
Weight	150.00 g   0.33 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

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Immersion Test Method	IEC 60529:2001, IP68
Water Jetting Test Mating	Mated
Water Jetting Test Method	IEC 60529:2001, IP66
Moisture Resistance Test Method	MIL-STD-202F, Method 106F
Mechanical Shock Test Method	MIL-STD-202F, Method 213B, Test Condition C
Thermal Shock Test Method	MIL-STD-202, Method 107, Test Condition A-1, Low Temperature -55 °C
Vibration Test Method	MIL-STD-202F, Method 204D, Test Condition B
Corrosion Test Method	MIL-STD-1344A, Method 1001.1, Test Condition A

## Standard Conditions

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

## Return Loss/VSWR

Frequency Band	VSWR	Return Loss (dB)
0–1000 MHz	1.02	39.00
1000–2000 MHz	1.03	38.00
2000–2300 MHz	1.03	37.00
2300–4000 MHz	1.12	25.00

## Regulatory Compliance/Certifications

Agency	Classification
RoHS 2002/95/EC	Compliant by Exemption
China RoHS SJ/T 11364-2006	Above Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system



## \* Footnotes

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