

F4DR-C

7-16 DIN Male Right Angle for 1/2 in FSJ4-50B cable

Product Classification

Brand	HELIAX®
Product Type	Wireless and radiating connector

General Specifications

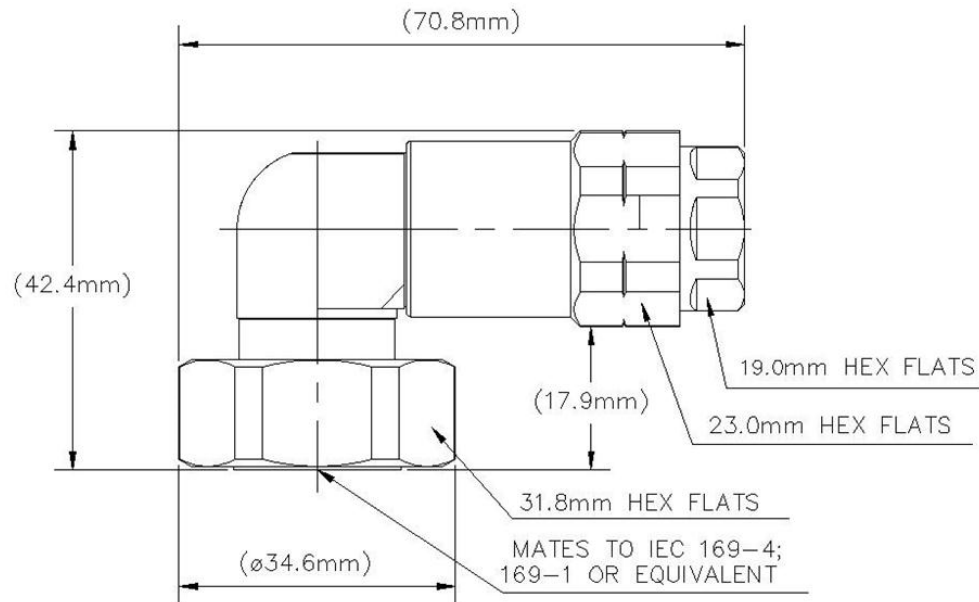
Interface	7-16 DIN Male
Body Style	Right angle
Mounting Angle	Right angle
Ordering Note	CommScope® standard product (Global)

Electrical Specifications

Connector Impedance	50 ohm
Operating Frequency Band	0 – 7500 MHz
Average Power at Frequency	1.0 kW @ 900 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
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	Gold Silver
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-4:9.5
Connector Retention Tensile Force	445 N 100 lbf
Connector Retention Torque	5.42 N-m 48.00 in lb
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 1/2 in

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Height	42.41 mm 1.67 in
Length	70.82 mm 2.79 in
Right Angle Length	17.91 mm 0.71 in
Weight	197.20 g 0.43 lb
Width	34.60 mm 1.36 in

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	Unmated
Immersion Test Method	IEC 60529:2001, IP68
Water Jetting Test Mating	Unmated
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-202F, Method 107G, 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)
50–1000 MHz	1.04	33.00
1000–1900 MHz	1.04	33.00
1900–2200 MHz	1.07	29.00
2200–2700 MHz	1.10	26.00
2700–3600 MHz	1.13	24.00
3600–6000 MHz	1.25	19.00
6000–8800 MHz	1.67	12.00
8000–10200 MHz	1.67	12.00

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	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)