

F4NR-HC



Type N Male Right Angle for 1/2 in FSJ4-50B cable

Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX®
Ordering Note	CommScope® standard product in Asia Pacific CommScope® standard product in Europe, the Middle East, and Africa

General Specifications

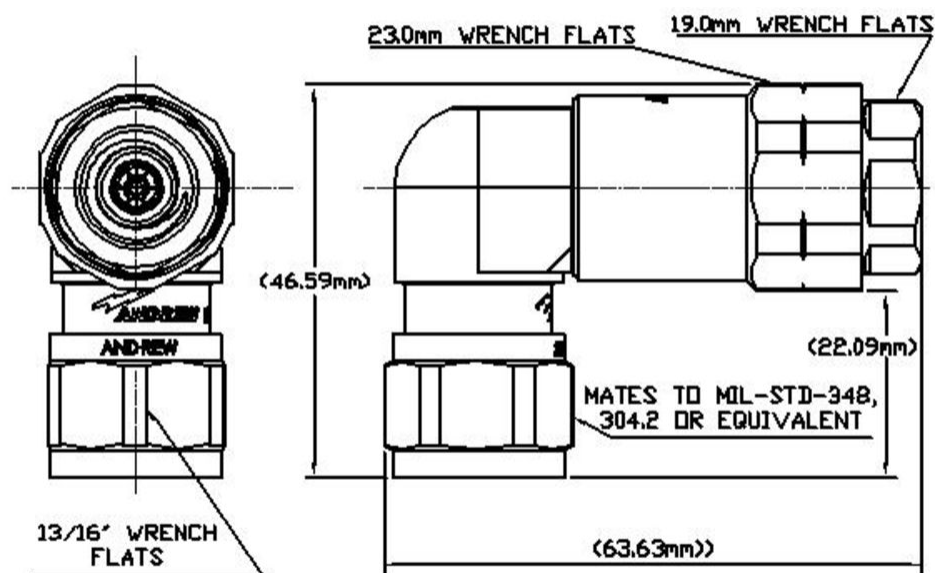
Body Style	Right angle
Cable Family	FSJ4-50B
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Gold Silver
Interface	N Male
Mounting Angle	Right angle
Outer Contact Attachment Method	Self-flare
Outer Contact Plating	Trimetal
Pressurizable	No

Dimensions

Height	1.83 in 46.482 mm
Width	0.96 in 24.384 mm
Length	2.51 in 63.754 mm
Right Angle Length	0.87 in 22.098 mm
Nominal Size	1/2 in

Outline Drawing

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Electrical Specifications

3rd Order IMD at Frequency	-116 dBm @ 910 MHz
3rd Order IMD Test Method	Two +43 dBm carriers
Insertion Loss, typical	0.05 dB
Attenuation, Ambient Temperature	20 °C 68 °F
Average Power at Frequency	0.6 kW @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	2000 V
Inner Contact Resistance, maximum	2 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 10200 MHz

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Outer Contact Resistance, maximum	0.3 mOhm
Peak Power, maximum	10 kW
RF Operating Voltage, maximum (vrms)	707 V
Shielding Effectiveness	-110 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
50–1000 MHz	1.05	32.26
1000–1900 MHz	1.06	30.72
1900–2200 MHz	1.06	30.72
2200–2700 MHz	1.08	28.3
2700–3600 MHz	1.19	21.24
3600–6000 MHz	1.19	21.24
6000–8800 MHz	1.25	19.09
8800–10200 MHz	1.29	-18

Mechanical Specifications

Connector Retention Tensile Force	100 lbf 444.822 N
Connector Retention Torque	48 in lb 5.423 N-m
Coupling Nut Proof Torque	40 in lb 4.519 N-m
Coupling Nut Retention Force	100 lbf 444.822 N
Coupling Nut Retention Force Method	MIL-C-39012C-3.23, 4.6.22
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-4:9.5
Mechanical Shock Test Method	MIL-STD-202F, Method 213B, Test Condition C

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)
Average Power, Ambient Temperature	40 °C 104 °F
Corrosion Test Method	MIL-STD-1344A, Method 1001.1, Test Condition A
Immersion Depth	1 m
Immersion Test Mating	Unmated
Immersion Test Method	IEC 60529:2001, IP68

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Moisture Resistance Test Method	MIL-STD-202F, Method 106F
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
Water Jetting Test Mating	Unmated
Water Jetting Test Method	IEC 60529:2001, IP66

Packaging and Weights

Weight, net	160.9 g 0.355 lb
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Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted



* Footnotes

Immersion Depth	Immersion at specified depth for 24 hours
Insertion Loss, typical	0.05√freq (GHz) (not applicable for elliptical waveguide)