

# F4HM-F

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4.3-10 Male for 1/2 in FSJ4-50B cable

## Product Classification

<b>Product Type</b>	Wireless and radiating connector
<b>Product Brand</b>	HELIAX®
<b>Product Series</b>	FSJ4-50B   FSJ4RK-50B
<b>Ordering Note</b>	CommScope® standard product (Global)
<b>Warranty</b>	Five years

## General Specifications

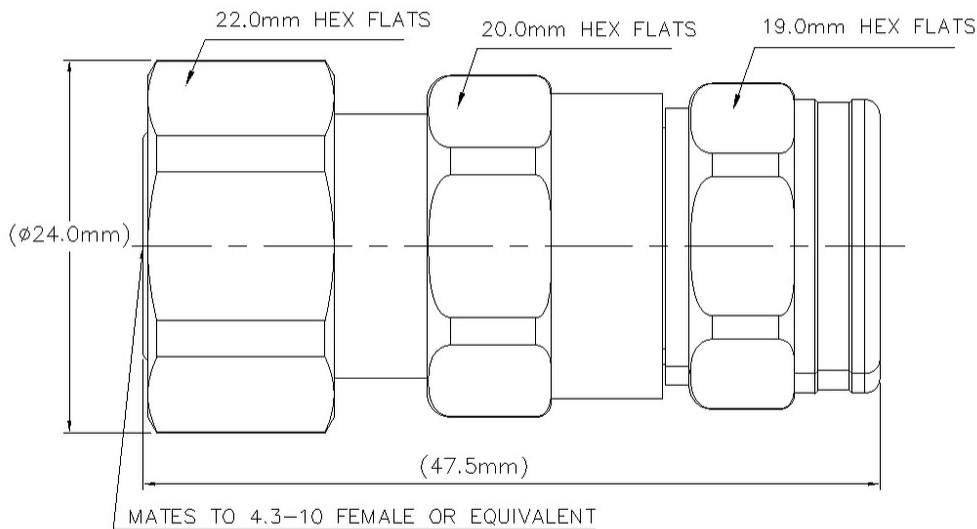
<b>Body Style</b>	Straight
<b>Cable Family</b>	FSJ4-50B
<b>Inner Contact Attachment Method</b>	Captivated
<b>Inner Contact Plating</b>	Silver
<b>Interface</b>	4.3-10 Male
<b>Mounting Angle</b>	Straight
<b>Outer Contact Attachment Method</b>	Clamp
<b>Outer Contact Plating</b>	Trimetal

## Dimensions

<b>Length</b>	47.5 mm   1.87 in
<b>Diameter</b>	24 mm   0.945 in
<b>Nominal Size</b>	1/2 in

## Outline Drawing

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## Electrical Specifications

<b>3rd Order IMD at Frequency</b>	-116 dBm @ 900 MHz
<b>3rd Order IMD Test Method</b>	Two +43 dBm carriers
<b>Insertion Loss Coefficient, typical</b>	0.05
<b>Average Power at Frequency</b>	600.0 W @ 900 MHz
<b>Cable Impedance</b>	50 ohm
<b>Connector Impedance</b>	50 ohm
<b>dc Test Voltage</b>	2000 V
<b>Impedance</b>	50 ohm
<b>Inner Contact Resistance, maximum</b>	1 mOhm
<b>Insulation Resistance, minimum</b>	5000 MOhm
<b>Operating Frequency Band</b>	0 – 8800 MHz
<b>Outer Contact Resistance, maximum</b>	1 mOhm
<b>Peak Power, maximum</b>	22.5 kW
<b>RF Operating Voltage, maximum (vrms)</b>	884 V
<b>Shielding Effectiveness</b>	-110 dB

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## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)	Gated VSWR	Gated Return Loss (dB)	VSWR, typical	Return Loss, typical (dB)
0–3000 MHz	1.101	26.4	1.032	36		
3000–4000 MHz	1.253	19	1.041	34		
4000–5000 MHz	1.253	19	1.065	30		
5000–6000 MHz	1.253	19	1.106	26		
6000–8800 MHz			1.253	19	1.577	13

## Mechanical Specifications

<b>Attachment Durability</b>	25 cycles
<b>Connector Retention Tensile Force</b>	445 N   100.04 lbf
<b>Connector Retention Torque</b>	2.5 N-m   22.127 in lb
<b>Coupling Nut Proof Torque</b>	10 N-m   88.507 in lb
<b>Coupling Nut Retention Force</b>	449.27 N   101 lbf
<b>Insertion Force</b>	66.72 N   14.999 lbf
<b>Interface Durability</b>	100 cycles
<b>Interface Durability Method</b>	IEC 61169-4:9.5
<b>Mechanical Shock Test Method</b>	IEC 60068-2-27

## Environmental Specifications

<b>Operating Temperature</b>	-45 °C to +85 °C (-49 °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>	IEC 60068-2-11
<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>	IEC 60068-2-3
<b>Thermal Shock Test Method</b>	IEC 60068-2-14
<b>Vibration Test Method</b>	IEC 60068-2-6

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## Packaging and Weights

<b>Height, packed</b>	248.92 mm   9.8 in
<b>Width, packed</b>	266.7 mm   10.5 in
<b>Length, packed</b>	266.7 mm   10.5 in
<b>Packaging quantity</b>	50
<b>Weight, net</b>	72.69 g   0.16 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Below maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



## \* Footnotes

<b>Warranty</b>	For more information, please consult our Product Warranty guidelines
<b>Insertion Loss Coefficient, typical</b>	0.05√freq (GHz) (not applicable for elliptical waveguide)
<b>Immersion Depth</b>	Immersion at specified depth for 24 hours