

# F4A-PNMDF-X

## Base Product



HELIAX® 1/2" Superflexible SureFlex® Jumper with interface types N Male and 7-16 DIN Female, variable length

## Product Classification

<b>Product Type</b>	Wireless transmission cable assembly
<b>Product Series</b>	FSJ4-50B

## General Specifications

<b>Attachment, Connector B</b>	Field attachment
<b>Body Style, Connector A</b>	Straight
<b>Body Style, Connector B</b>	Straight
<b>Interface, Connector A</b>	N Male
<b>Interface, Connector B</b>	7-16 DIN Female
<b>Specification Sheet Revision Level</b>	A
<b>Variable Length</b>	For custom lengths contact 828-324-2200 or 1-800-982-1708 (toll free), or your local CommScope representative

## Dimensions

<b>Length</b>	0 m   0 ft
<b>Nominal Size</b>	1/2 in

## Electrical Specifications

<b>DTF, Connector A</b>	-32 dB
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## VSWR/Return Loss

Frequency Band	VSWR, typical	Return Loss, typical (dB)
0-3000 MHz	1.11	26
2.2-2.7 GHz	1.09	28

## Jumper Assembly Sample Label

# F4A-PNMDF-X



## Environmental Specifications

**Immersion Test Method** Meets IEC 60529:2001, IP68 in mated condition

## Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

## Included Products

- F4PDF-C – 7-16 DIN Female connector for 1/2 in FSJ4-50B cable

7-16 DIN Female connector 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)

## General Specifications

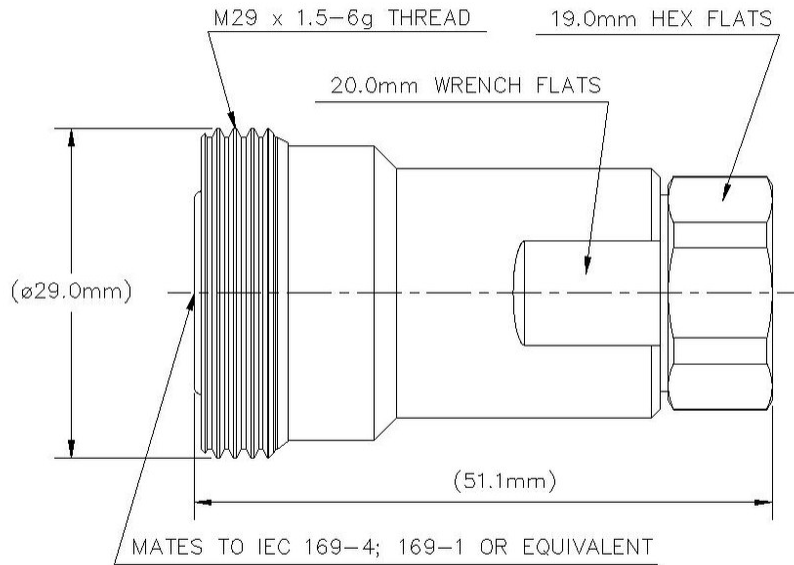
<b>Body Style</b>	Straight
<b>Cable Family</b>	FSJ4-50B
<b>Inner Contact Attachment Method</b>	Captivated
<b>Inner Contact Plating</b>	Silver
<b>Interface</b>	7-16 DIN Female
<b>Mounting Angle</b>	Straight
<b>Outer Contact Attachment Method</b>	Self-flare
<b>Outer Contact Plating</b>	Trimetal
<b>Pressurizable</b>	No

## Dimensions

<b>Length</b>	50.04 mm   1.97 in
<b>Diameter</b>	28.96 mm   1.14 in
<b>Nominal Size</b>	1/2 in

## Outline Drawing

# F4PDF-C



## Electrical Specifications

<b>3rd Order IMD at Frequency</b>	-120 dBm @ 910 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>	1.0 kW @ 900 MHz
<b>Cable Impedance</b>	50 ohm
<b>Connector Impedance</b>	50 ohm
<b>dc Test Voltage</b>	2500 V
<b>Inner Contact Resistance, maximum</b>	0.8 mOhm
<b>Insulation Resistance, minimum</b>	5000 MOhm
<b>Operating Frequency Band</b>	0 – 7500 MHz
<b>Outer Contact Resistance, maximum</b>	1.5 mOhm
<b>Peak Power, maximum</b>	15.6 kW
<b>RF Operating Voltage, maximum (vrms)</b>	884 V
<b>Shielding Effectiveness</b>	-110 dB

## VSWR/Return Loss

# F4PDF-C

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Frequency Band	VSWR	Return Loss (dB)
0–1000 MHz	1.023	38.89
1000–2000 MHz	1.025	38.17
2000–2300 MHz	1.029	36.9
2300–4000 MHz	1.119	25.01

## Mechanical Specifications

<b>Attachment Durability</b>	25 cycles
<b>Connector Retention Tensile Force</b>	889.64 N   200 lbf
<b>Connector Retention Torque</b>	5.42 N-m   47.998 in lb
<b>Insertion Force</b>	200.17 N   45 lbf
<b>Insertion Force Method</b>	IEC 61169-1:15.2.4
<b>Interface Durability</b>	500 cycles
<b>Interface Durability Method</b>	IEC 61169-4:9.5
<b>Mechanical Shock Test Method</b>	MIL-STD-202F, Method 213B, Test Condition C

## Environmental Specifications

<b>Operating Temperature</b>	-55 °C to +85 °C (-67 °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>	MIL-STD-1344A, Method 1001.1, Test Condition A
<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>	MIL-STD-202F, Method 106F
<b>Thermal Shock Test Method</b>	MIL-STD-202, Method 107, Test Condition A-1, Low Temperature -55 °C
<b>Vibration Test Method</b>	MIL-STD-202F, Method 204D, Test Condition B
<b>Water Jetting Test Mating</b>	Mated
<b>Water Jetting Test Method</b>	IEC 60529:2001, IP66

## Packaging and Weights

<b>Weight, net</b>	150 g   0.331 lb
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## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
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>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