# F4A-PDMDM-1M-X

FSJ4-50B SureFlex® Jumper with interface types 7-16 DIN Male and 7-16 DIN Male, 1 m

#### Product Classification

Product Type	SureFlex® standard	
Product Brand	HELIAX®   SureFlex®	
Product Series	FSJ4-50B	
General Specifications		
Attachment, Connector B	Field attachment	
Body Style, Connector A	Straight	
Body Style, Connector B	Straight	
Interface, Connector A	7-16 DIN Male	
Interface, Connector B	7-16 DIN Male	
Specification Sheet Revision Level	А	
Dimensions		
Length	1 m   3.281 ft	
Nominal Size	1/2 in	
Electrical Specifications		
DTF, Connector A	-32 dB	
VSWR/Return Loss		
Frequency Band	VSWR, typical	Retu

Frequency Band	VSWR, typical	Return Loss, typical (dB)
0–3000 MHz	1.106	25.96
2.2–2.7 GHz	1.083	27.99

#### Jumper Assembly Sample Label

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# F4A-PDMDM-1M-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

- F4HM-D
   4.3-10 Male for 1/2 in FSJ4-50B cable

   F4HMP-D
   4.3-10 Male Push Pull for 1/2 in FSJ4-50B
  - cable
- F4PDMV2-C 7-16 DIN Male for 1/2 in FSJ4-50B cable

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# F4HM-D



#### Product Classification

Product Type Product Brand

Product Series

Ordering Note

#### General Specifications

Body Style	Straight
Cable Family	FSJ4-50B
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	4.3-10 Male
Mounting Angle	Straight
Outer Contact Attachment Method	Crush-flare
Outer Contact Plating	Trimetal
Dimensions	
Length	62.48 mm   2.46 in

Lengui	02.4011111   2.40111
Diameter	24.89 mm   0.98 in
Nominal Size	1/2 in

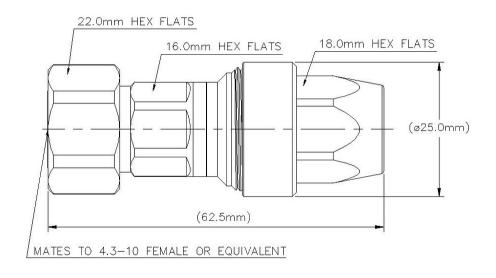
#### 4.3-10 Male for 1/2 in FSJ4-50B cable

Wireless and radiating connector
HELIAX®
FSJ4-50B   FSJ4RK-50B
CommScope® standard product (Global)

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## Outline Drawing



## Electrical Specifications

-116 dBm @ 910 MHz
Two +43 dBm carriers
-116 dB
0.05
600.0 W @ 900 MHz
50 ohm
50 ohm
2500 V
0.8 m0hm
5000 MOhm
0 – 7500 MHz
1.5 m0hm
22.5 kW
884 V

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# F4HM-D

#### **Shielding Effectiveness**

-110 dB

#### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
45–1000 MHz	1.02	40.09
1000–2700 MHz	1.03	36.61
2700–3800 MHz	1.065	30.04
3800–6000 MHz	1.15	23.13

#### Mechanical Specifications

Attachment Durability	25 cycles
Connector Retention Tensile Force	889.64 N   200 lbf
Connector Retention Torque	5.42 N-m   47.998 in lb
Coupling Nut Proof Torque	10 N-m   88.507 in lb
Coupling Nut Retention Force	449.27 N   101 lbf
Interface Durability	100 cycles
Interface Durability Method	IEC 61169-4:9.5
Mechanical Shock Test Method	IEC 60068-2-27

#### **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)
Attenuation, Ambient Temperature	20 °C   68 °F
Average Power, Ambient Temperature	40 °C   104 °F
Corrosion Test Method	IEC 60068-2-11
Immersion Depth	1 m
Immersion Test Mating	Mated
Immersion Test Method	IEC 60529:2001, IP68
Moisture Resistance Test Method	IEC 60068-2-3
Thermal Shock Test Method	IEC 60068-2-14
Vibration Test Method	IEC 60068-2-6
Water Jetting Test Mating	Mated
Water Jetting Test Method	IEC 60529:2001, IP66

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# F4HM-D

#### Packaging and Weights

#### Weight, net

100 g | 0.22 lb

#### Regulatory Compliance/Certifications

# AgencyClassificationCHINA-ROHSBelow maximum concentration valueISO 9001:2015Designed, manufactured and/or distributed under this quality management systemREACH-SVHCCompliant as per SVHC revision on www.commscope.com/ProductComplianceROHSCompliantUK-ROHSCompliantCompliantCompliant

#### \* Footnotes

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

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# F4HMP-D



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

Product Classification
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Product Type

Product Brand

Product Series

Ordering Note

#### General Specifications

Body Style	Straight
Cable Family	FSJ4-50B
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	4.3-10 Male
Mounting Angle	Straight
Outer Contact Attachment Method	Crush-flare
Outer Contact Plating	Trimetal
Dimensions	

 Length
 62.48 mm |
 2.46 in

 Diameter
 27.94 mm |
 1.1 in

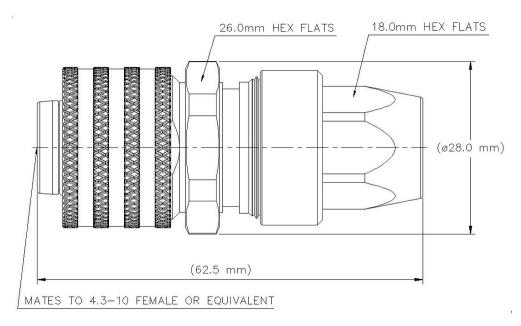
 Nominal Size
 1/2 in

Wireless and radiating connector HELIAX® FSJ4-50B | FSJ4RK-50B CommScope® standard product (Global)

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## Outline Drawing



#### **Electrical Specifications**

3rd Order IMD at Frequency	-116 dBm @ 910 MHz
3rd Order IMD Dynamic Test Method	Two +43 dBm carriers
3rd Order IMD Dynamic, typical	-116 dB
Insertion Loss Coefficient, typical	0.05
Average Power at Frequency	600.0 W @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	2500 V
Inner Contact Resistance, maximum	0.8 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 7500 MHz
Outer Contact Resistance, maximum	1.5 mOhm
Peak Power, maximum	22.5 kW
RF Operating Voltage, maximum (vrms)	884 V
Shielding Effectiveness	-110 dB

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#### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
45–1000 MHz	1.02	40.09
1000–2700 MHz	1.03	36.61
2700–3800 MHz	1.065	30.04
3800-6000 MHz	1.15	23.13

#### Mechanical Specifications

Attachment Durability	5 cycles
Connector Retention Tensile Force	889.64 N   200 lbf
Connector Retention Torque	5.42 N-m   47.998 in lb
Interface Durability	25 cycles
Interface Durability Method	IEC 61169-4:9.5
Mechanical Shock Test Method	IEC 60068-2-27

#### **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)
Attenuation, Ambient Temperature	20 °C   68 °F
Average Power, Ambient Temperature	40 °C   104 °F
Corrosion Test Method	IEC 60068-2-11
Immersion Depth	1 m
Immersion Test Mating	Mated
Immersion Test Method	IEC 60529:2001, IP68
Moisture Resistance Test Method	IEC 60068-2-3
Thermal Shock Test Method	IEC 60068-2-14
Vibration Test Method	IEC 60068-2-6
Water Jetting Test Mating	Mated
Water Jetting Test Method	IEC 60529:2001, IP66

#### Packaging and Weights

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# F4HMP-D

#### Weight, net

Agency

123.37 g | 0.272 lb

#### Regulatory Compliance/Certifications

#### Classification

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

#### \* Footnotes

Immersion Depth Immersion at specified depth for 24 hours

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# F4PDMV2-C



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

Wireless and radiating connector

CommScope® standard product (Global)

FSJ4-50B | FSJ4RK-50B

**HELIAX®** 

Product Type

Product Brand

Product Series

**Ordering Note** 

#### General Specifications

Body Style	Straight
Cable Family	FSJ4-50B
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	7-16 DIN Male
Mounting Angle	Straight
Outer Contact Attachment Method	Crush-flare
Outer Contact Plating	Trimetal
Pressurizable	No
Dimensions	
Length	50.04 mm   1.97 in
Diameter	34.54 mm   1.36 in
Nominal Size	1/2 in

### **Electrical Specifications**

3rd Order IMD at Frequency	-120 dBm @ 910 MHz
3rd Order IMD Test Method	Two +43 dBm carriers

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# F4PDMV2-C

Insertion Loss Coefficient, typical	0.05
Average Power at Frequency	1.0 kW @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	2500 V
Inner Contact Resistance, maximum	0.8 m0hm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 7500 MHz
Outer Contact Resistance, maximum	1.5 m0hm
Peak Power, maximum	15.6 kW
RF Operating Voltage, maximum (vrms)	884 V
Shielding Effectiveness	-110 dB

#### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–2200 MHz	1.032	36.06
2200–2700 MHz	1.046	32.96
2700–3000 MHz	1.052	31.92

#### Mechanical Specifications

Attachment Durability	25 cycles
Connector Retention Tensile Force	889.64 N   200 lbf
Connector Retention Torque	5.42 N-m   47.998 in lb
Coupling Nut Proof Torque	24.86 N-m   220.003 in lb
Coupling Nut Retention Force	1,000.85 N   225 lbf
Coupling Nut Retention Force Method	MIL-C-39012C-3.25, 4.6.22
Insertion Force	200.17 N   45 lbf
Insertion Force Method	IEC 61169-1:15.2.4
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

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# F4PDMV2-C

Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Attenuation, Ambient Temperature	20 °C   68 °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	Mated
Immersion Test Method	IEC 60529:2001, IP68
Moisture Resistance Test Method	MIL-STD-202F, Method 106F
Thermal Shock Test Method	MIL-STD-202, Method 107, Test Condition A-1, Low Temperature -55 $^\circ\mathrm{C}$
Vibration Test Method	MIL-STD-202F, Method 204D, Test Condition B
Water Jetting Test Mating	Mated
Water Jetting Test Method	IEC 60529:2001, IP66

#### Packaging and Weights

Weight, net

136.08 g | 0.3 lb

#### Regulatory Compliance/Certifications

Agency	Classification
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 www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant



#### \* Footnotes

Insertion Loss Coefficient, typical0.05√-freq (GHz) (not applicable for elliptical waveguide)Immersion DepthImmersion at specified depth for 24 hours

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