## F4A-PDMDR-X

#### **Base Product**



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

#### Product Classification

Product Type		Wireless transmission cable	e assembly
Product Brand		HELIAX®   SureFlex®	
Product Series		FSJ4-50B	
General Specifications			
Attachment, Connector B		Field attachment	
Body Style, Connector A		Straight	
Body Style, Connector B		Right angle	
Interface, Connector A		7-16 DIN Male	
Interface, Connector B		7-16 DIN Male	
Specification Sheet Revision Level		А	
Variable Length		For custom lengths contact CommScope representative	t 828-324-2200 or 1-800-982-1708 (toll free), or your local e
Dimensions			
Length		0 m   0 ft	
Nominal Size		1/2 in	
Electrical Specifications			
DTF, Connector A		-32 dB	
VSWR/Return Loss			
Frequency Band	VSWR, t	ypical	Return Loss, typical (dB)
0–3000 MHz	1.11		26
2.2–2.7 GHz	1.09		28

### Jumper Assembly Sample Label

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**COMMSCOPE**°

## F4A-PDMDR-X



#### **Environmental Specifications**

Immersion Test Method

Meets IEC 60529:2001, IP68 in mated condition

#### Regulatory Compliance/Certifications

#### Agency

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

#### Included Products

F4PDR-C – 7-16 DIN Male Right Angle for 1/2 in FSJ4-50B cable

Classification

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

Wireless and radiating connector

**HELIAX®** 

Product Classification
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Product Type

**Product Brand** 

## General Specifications

Body Style	Right angle
Cable Family	FSJ4-50B
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Gold
Interface	7-16 DIN Male
Mounting Angle	Right angle
Outer Contact Attachment Method	Crush-flare
Outer Contact Plating	Trimetal
Pressurizable	No
Dimensions	
1475-141-	0175

Width	31.75 mm	1.25 in
Length	60.96 mm	2.4 in
Right Angle Length	45.72 mm	1.8 in
Diameter	40.39 mm	1.59 in
Nominal Size	1/2 in	

## Outline Drawing

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### **Electrical Specifications**

3rd Order IMD at Frequency	-120 dBm @ 910 MHz
3rd Order IMD Test Method	Two +43 dBm carriers
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 – 5200 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)
50–1000 MHz	1.04	34.16

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1000–1900 MHz	1.04	34.16
1900–2200 MHz	1.07	29.42
2000–2700 MHz	1.1	26.45
2700–3600 MHz	1.13	24.29
3600–5000 MHz	1.25	19.09

## 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

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	IEC 60068-2-6
Water Jetting Test Mating	Mated
Water Jetting Test Method	IEC 60529:2001, IP66

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#### Packaging and Weights

Weight, net

207.36 g | 0.457 lb

### \* Footnotes

 $\label{eq:linear} \textbf{Insertion Loss Coefficient, typical} \quad 0.05 \sqrt{\phantom{a}} freq (GHz) \ (not applicable for elliptical waveguide)$ 

**Immersion Depth** 

Immersion at specified depth for 24 hours

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