

# **Premium Factory-Fit Jumpers**

**Low VSWR, low PIM** Premium CELLFLEX® coaxial cable jumper assemblies for high-performance telecommunications systems



## Premium VSWR - Lowest PIM - Optional Pre-Installed Weatherproofing

RFS' CELLFLEX® Factory-Fit Jumpers are available in a variety of interfaces and feature specially designed connectors which are soldered-on in a strictly controlled industrial process to ensure industry-leading performance for today's complex wireless systems. The connector design and manufacturing process has been optimized to produce premium VSWR and IM levels.

The CELLFLEX® Factory-Fit Jumper Assembly with optional pre-installed Weatherproofing System is waterproof up to IP 68. The pre-installed slide-up style weatherproofing system saves time and installation difficulty in modern multiport antennas and remote radio units where port spacing is at a minimum.

The RFS factory-fit cable/ connector design and manufacturing process combination is optimized to produce premium VSWR and PIM levels for outstanding performance

## **Exclusive Features**

- Guaranteed Electrical Performance
  - Very Low PIM
  - -160 dBc static
  - -155 dBc typical dynamic
  - Premium VSWR Versions
     1.065:1 (30.0 dB) @ 698-2200 MHz
     Preferred for VSWR- or DTF-sensitive systems
- 100% VSWR, PIM and interface tested
- Connectors are soldered (inner and outer conductor) to cable

Provides superior mechanical and electrical, long life performance

- Pre-installed, compact weatherproofing available
  - Prevents moisture migration into the connector interface – waterproof up to IP 68
  - Saves time and eases the installation process
- Price Effective Solution

Costs significantly less than buying cable and loose connectors

Field Proven Design
 Consistent track record

#### **Typical VSWR**

	410-470 MHz	698-794 MHz	806-960 MHz	1850-1990 MHz	1700-2200 MHz
LCF-Premium	-40 dB	-40 dB	-35 dB	-35 dB	-32 dB
SCF-Premium	-35 dB	-35 dB	-32 dB	-32 dB	-30 dB

Use our custom <u>Jumper Performance Test Tool</u> to quickly and easily access valuable test data specifications such as PIM and Return Loss for RFS Factory-Fit Jumpers.

## Ordering Information for Popular Models\*\*

## Standard Flexible 1/2" Cable, LCF12-50J

Model Number	Connectors	Length, ft
7M7ML12-030FFP	Straight 7-16 DIN Males	3
7M7ML12-060FFP	Straight 7-16 DIN Males	6
7M7ML12-080FFP	Straight 7-16 DIN Males	8
7M7ML12-100FFP	Straight 7-16 DIN Males	10
7M7ML12-120FFP	Straight 7-16 DIN Males	12
7M7ML12-150FFP	Straight 7-16 DIN Males	15
7M7ML12-200FFP	Straight 7-16 DIN Males	20
7M7MRL12-060FFP	Straight 7-16 DIN Male / Right Angle 7-16 DIN Male	6
7M7MRL12-080FFP	Straight 7-16 DIN Male / Right Angle 7-16 DIN Male	8
7M7MRL12-100FFP	Straight 7-16 DIN Male / Right Angle 7-16 DIN Male	10
7M7MRL12-120FFP	Straight 7-16 DIN Male / Right Angle 7-16 DIN Male	12
7M(7M)L12-120	Straight 7-16 DIN Male / Straight 7-16 DIN Male (Loose)	12
7M(7M)L12-150	Straight 7-16 DIN Male / Straight 7-16 DIN Male (Loose)	15
7M(7M)L12-200	Straight 7-16 DIN Male / Straight 7-16 DIN Male (Loose)	20
7M(7M)L12-250*	Straight 7-16 DIN Male / Straight 7-16 DIN Male (Loose)	25
7M(7M)L12-300*	Straight 7-16 DIN Male / Straight 7-16 DIN Male (Loose)	30
7MR(7M)L12-300*	Right Angle 7-16 DIN Male / Straight 7-16 DIN Male (Loose)	30

## Super Flexible 1/2" Cable, SCF12-50J

Model Number	Connectors	Length, ft
7M7MS12-030FFP	Straight 7-16 DIN Males	3
7M7MS12-060FFP	Straight 7-16 DIN Males	6
7M7MS12-080FFP	Straight 7-16 DIN Males	8
7M7MS12-100FFP	Straight 7-16 DIN Males	10
7M7MS12-120FFP	Straight 7-16 DIN Males	12
7M7MS12-150FFP	Straight 7-16 DIN Males	15
7M7MRS12-080FFP	Straight 7-16 DIN Male / Right Angle 7-16 DIN Male	8
7M7MRS12-100FFP	Straight 7-16 DIN Male / Right Angle 7-16 DIN Male	10
7M7MRS12-120FFP	Straight 7-16 DIN Male / Right Angle 7-16 DIN Male	12
7M(7M)S12-080	Straight 7-16 DIN Male / Straight 7-16 DIN Male (Loose)	8
7M(7M)S12-250*	Straight 7-16 DIN Male / Straight 7-16 DIN Male (Loose)	25
7M(7M)S12-300*	Straight 7-16 DIN Male / Straight 7-16 DIN Male (Loose)	30
7MR(7M)S12-250*	Right Angle 7-16 DIN Male / Straight 7-16 DIN Male (Loose)	25

## Standard Flexible 1/2" Cable With Pre-Installed Weatherproofing System, LCF12-50J

Model Number	Connectors	Length, ft
7MW7MWL12-030FFP	Straight 7-16 DIN Males	3
7MW7MWL12-040FFP	Straight 7-16 DIN Males	4
7MW7MWL12-060FFP	Straight 7-16 DIN Males	6
7MW7MWL12-080FFP	Straight 7-16 DIN Males	8
7MW7MWL12-100FFP	Straight 7-16 DIN Males	10
7MW7MWL12-120FFP	Straight 7-16 DIN Males	12

- \* Guaranteed electrical performance for the identified assemblies: Return Loss -26dB; PIM -150dBc static @ 698-2200 MHz \*\* Please contact an RFS Sales Office for additional jumper configurations and/or lengths

Qualification Test Summary					
Test Name	Qualifying Specification	Reference Test Procedure	Criteria Values	Verification	
Connector/Cable Pull-off	IEC60169-4 CECC22190	IEC60169-1 Section 15.4.3	112 lb-f @ 1 minute	IM, VSWR and Visual	
Cable Bending	IEC60169-4	IEC60169-1 15.4.4	From 12in away; 10x, 90°	IM, VSWR and Visual	
Cable Torsion	IEC60169-4 CECC22190	IEC60169-1 15.4.5	22 in-lb (2.5 Nm), 60sec	IM and Visual	
Coupling Nut Torque	CECC22190	CECC22000 4.5.4	308 in-lb (35Nm), 3 times	Visual	
Water Submerge Cont	EN60529 IP68	RFS P-B605-A	18°C, 15PSI in water 1hr	Ins Res (500VDC>20Gohm)	
Temperature Range	IEC60169-4		-40°/85°C, 5 times	Insulation Resistance	
Environmental Seal	IEC60169-4	5 PSI in water	1/85/20°C for 1hr, 1-time	Ins Res (500VDC>20Gohm)	
Corrosion Salt Spray	IEC60169-4, MIL-STD-202	ASTM B117, Meth101/Cond A	95%RH, 5%NaCl, 35°C, 96hrs	Visual	
Vibration	MIL-STD-202	Method 204, Test Condition B	10-2000Hz,15g,12cycles@20min	IM, VSWR and Visual	
Shock	MIL-STD-202	Method 213, Test Condition I	100g, sawtooth, 6 ms, 18 times	IM, VSWR and Visual	
Intermodulation	IEC60237		2x20W (43 dBm)	IM	

