PRODUCT DATASHEET

MULTIFLEX-L78

CELLFLEX®MULTIFLEX Jumper Assembly with low loss coax, LCF78 feeder

MULTIFLEX Jumper-Cable assemblies are the simple solution for those who like to have a very low loss transmission jumper with highest flexibility at both connection ends. RFS Technologies site kitting services offers a full assembled Jumper containing feeder-cable from LCF78-50 to LCF158-50, and Jumper cable such as super flexible SCF12-50 for both endings.

7MRS12-7MRS12-L78J0200

FEATURES / BENEFITS

- **Stable premium VSWR, outstanding and consistent intermodulation performance - 4.3-10 side not relying on coupling torque**
  Improves network performance, reduces the number of dropped calls and avoids revenue loss.
- **Waterproof to IP 68**
  No downtime risk, secures revenue.
- **Smaller connector footprint for 4.3-10**
  Enables tighter spacing of connections for antennas and RRHs.
- **Available with standard ""J"" or flame retardant ""JFN"" jacket types**
  Usable on global basis in all applications.

Technical features

JUMPER FEATURES

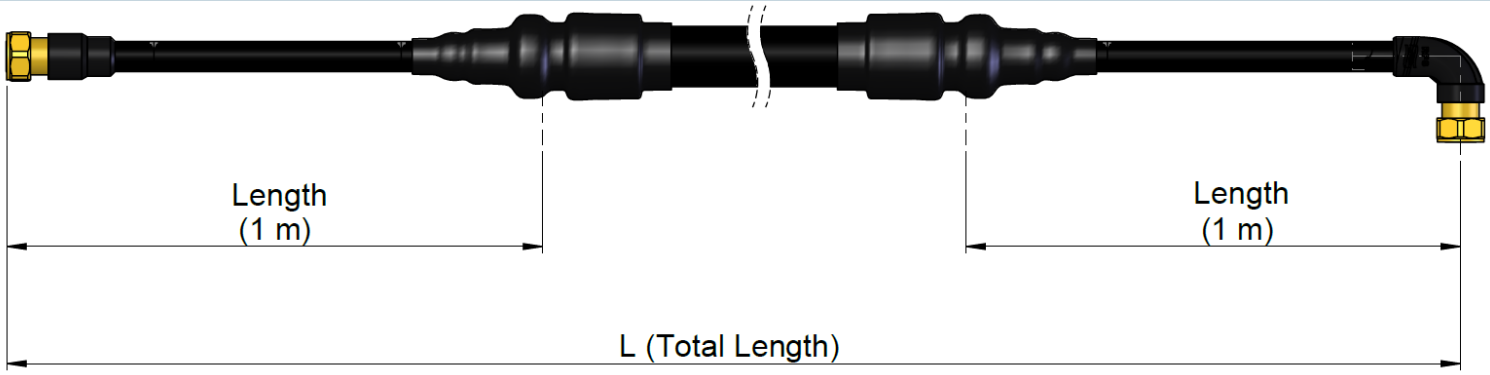
Application		Main feed transitions to equipment, GPS lines, intended for outdoor usage (J) or indoor usage (JFN)
Installation Temperature	°C (°F)	-40 to 60 (-40 to 140)
Storage Temperature	°C (°F)	-70 to 85 (-94 to 185)
Operation Temperature	°C (°F)	-50 to 85 (-58 to 185)
Fire Performance Class		Halogeen free (B2ca option available)
Sealing Class		IP68
RoHS		Compliant to RoHS (EU) and CRoHS (China)
Third Order Intermodulation	dBc	-161 static & dynamic (-165 typical)
Maximum Operating Frequency	GHz	6

CABLE DETAILS

Cable Type	LCF78-50	SCF12-50
Cable weight	0.35 Kg/m (0.23 lb/ft)	0.135 Kg/m (0.09 lb/ft)
Min bending radius, single bending	120 mm (5 in)	32 mm (1.3 in)
Min bending radius, multiple bending	250 mm (10 in)	32 mm (1.3 in)
bending moment	13 Nm (10 lb*ft)	2.5 Nm (1.84 lb*ft)
Tensile strength	1440 Nm (324 lb)	650 Nm (146 lb)
Recommended maximum clamp spacing	0.8 / 1 m (2.75 / 3.25 ft)	0.3 / 0.5 m (1 / 1.64 ft)
Velocity factor	88 %	77 %
Capacitance	74 pF/m (22.5 pF/ft)	86 pF/m (26 pF/ft)

All values nominal unless tolerances provided; information contained in the present datasheet is subject to confirmation at time of ordering

Jacket Spark tested up to:	8000 V RMS	5000 V RMS
Inner conductor DC resistance	2.04 Ω/Km (0.62 Ω/ 1000 ft)	2.97 Ω/Km (0.9 Ω/ 1000 ft)
Outer conductor DC resistance	2 Ω/Km (0.61 Ω/ 1000 ft)	6.5 Ω/Km (1.98 Ω/ 1000 ft)



Schematic sktech of a MULTIFLEX Jumper. The total assembly length "L" is defined by the variable length of the feeder cable plus 2 m jumper lengths.

ELECTRICAL PERFORMANCE

Insertion loss @20°C (A = L*A1 + 2*A2)	Adjustable LCF78 feeder (A1)	1m Jumpers (A2)
Attenuation @1 GHz	0.04 dB/m	0.20 dB
Attenuation @2.2 GHz	0.062 dB/m	0.315 dB
Attenuation @2.7 GHz	0.070 dB/m	0.352 dB
Attenuation @3.8 GHz	0.086 dB/m	0.423 dB
Attenuation @6 GHz	0.113 dB/m	0.543 dB
Frequency [MHz]	Straight Con. dB (VSWR)	Angle Con. dB (VSWR)
0 - 1000	> 28.0 (≤1.08)	> 28.0 (≤1.08)
>1000 - 1700	> 28.0 (≤1.08)	> 26.4 (≤1.10)
>1700 - 2200	> 28.0 (≤1.08)	> 26.4 (≤1.10)
>2200 - 2700	> 26.4 (≤1.10)	> 24.9 (≤1.12)
>2700 - 3800	> 23.1 (≤1.15)	> 20.8 (≤1.20)
>3800 - 5000	> 20.8 (≤1.20)	> 19.1 (≤1.25)
>5000 - 6000	> 17.7 (≤1.30)	> 17.7 (≤1.30)

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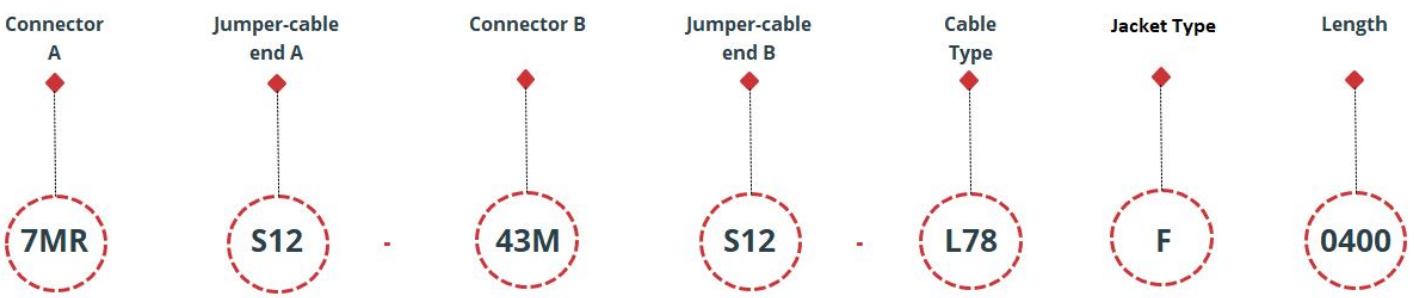

7MR — CONNECTOR A

7M	7-16 Male
7F	7-16 Female
7MR	7-16 Male Right Angle
43M	4.3-10 Male
43F	4.3-10 Female
43MH	4.3-10 Male Handscrew
43MP	4.3-10 Male Push Pull
43MR	4.3-10 Male Right Angle

S12 — CABLE for jumper end A

L38	3/8" Low Loss Coax
L12	1/2" Low Loss Coax
S14	1/4" Super exible Coax
S38	3/8" Super exible Coax
S12	1/2" Super exible Coax

43M — CONNECTOR B

7M	7-16 Male
7F	7-16 Female
7MR	7-16 Male Right Angle
43M	4.3-10 Male
43F	4.3-10 Female
43MH	4.3-10 Male Handscrew
43MP	4.3-10 Male Push Pull
43MR	4.3-10 Male Right Angle

S12 — CABLE for jumper end B

L38	3/8" Low Loss Coax
L12	1/2" Low Loss Coax
S14	1/4" Super exible Coax
S38	3/8" Super exible Coax
S12	1/2" Super exible Coax

78 — Cable Size (LCF)

78	LCF78-50
114	LCFS114-50
158	LCF158-50

F — JACKET TYPE

F	JFN Flame Retardant
J	PE (J)

0400 — CABLE LENGTH*

0100	1 meter
0200	2 meter
0250	2.5 meter
1000	10 meter
1500	15 meter
030	3 feet
060	6 feet
100	10 feet

Modelname nomenclature

External Document Links

Notes

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