# 7-16 DIN Female Connector for 1-1/4" Coaxial Cable, OMNI FIT™ standard, O-ring sealing

OMNI FIT™ high performance connectors are designed for use with both CELLFLEX® (copper) and CELLFLEX® Lite (aluminum) cables. They are designed specifically to provide the highest quality connector-cable interface while simplifying and speeding up connector attachment. All RFS connectors are fully tested for mechanical and electrical compliance to industry specifications.

The 7-16 connector is the most rugged RF connection meeting all requirements even under the most severe environmental conditions.

#### FEATURES / BENEFITS

- Cost effective two-piece design for safe and easy installation
- Compatible with copper and aluminium cable types i.e. one connector for both outer conductor materials eliminates the risk of faulty connector installation and helps to keep inventory down
- Robust mechanical design for low and consistent intermodulation performance i.e. keeps the mobile network performance up reduces the number of dropped calls and avoids revenue losses
- Superior electrical performance for consistent and repeatable VSWR i.e. ensure network system performance
- Waterproof to IP 68 i.e. no downtime risk, secures revenue
- RoHS (EU) and CRoHS (China) compliant i.e. can be used on a global basis



OMNI FIT™ Standard Connectors

### **Technical features**

#### **GENERAL SPECIFICATIONS**

Transmission Line Type	Coaxial Cable		
Cable Size	1 1/4		
Cable Type	Foam Dielectric	Ultraflexible	Radiating
Model Series	UCF114-50 Series	LCFS114-50 Series	RCF114-50 Series
Connector Interface	7-16		
Connector Type	OMNI FIT™ Standard		
Sealing Method	O-ring		
Gender	Female		

### **ELECTRICAL SPECIFICATIONS**

Nominal Impedance, ohms	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-159 typical
Maximum Frequency	GHz	3.6
VSWR, Return Loss	VSWR (dB)	$0 < f \le 1.0 \text{ GHz: } 1.03 \text{ (36.6)}$ $1.0 < f \le 2.7 \text{ GHz: } 1.05 \text{ (32.3)}$ $2.7 < f \le 3.6 \text{ GHz: } 1.08 \text{ (28.3)}$

# **MECHANICAL SPECIFICATIONS**

Plating Outer/Inner		Trimetal/Silver
Length	mm (in)	61 (2)
Outer Diameter	mm (in)	49 (2)
Inner Contact Attachment		Spring Finger
Outer Contact Attachment		Spring C-Ring

**716F-LCF114-C02** REV : E REV DATE : 06 May 2024 **www.rfsworld.com** 



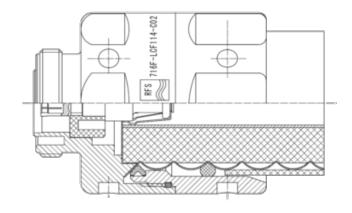
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## **ACCESSORIES**

Wrench size front	mm (in)	Open end wrench 45 (1-3/4)
Wrench size rear	mm (in)	Open end wrench 45 (1-3/4)
Poly Hook Spanner	mm (in)	PHS 60-90-5 Ø 60-90 (2.3-3.5) Pin 5 (0.2)

### **TESTING AND ENVIRONMENTAL**

Waterproof Level	IDE8
water proof Level	1700



**External Document Links** 

Application Note Installation Instruction

Notes

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