# 7-16 DIN Female Connector for 7/8" Coaxial Cable, OMNI FIT™ standard, O-ring sealing



OMNI FIT $^{\mathrm{m}}$  high performance connectors are designed for use with both CELLFLEX $^{\mathrm{m}}$  (copper) and CELLFLEX $^{\mathrm{m}}$  Lite (aluminum) cables. They are designed specifically to provide the highest quality connector-cable interface while simplifying and speeding up connector attachment. The 7-16 connector is the most rugged RF connection meeting all requirements even under the most severe environmental conditions.

# Feature / 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

## **Technical features**

#### **GENERAL SPECIFICATIONS**

Cable Size	7/8		
Cable Type	Foam Dielectric, Ultraflexible, Radiating		
Model Series	LCF78-50 Series	RCF78-50 Series	
Connector Interface	7-16 DIN		
Connector Type	OMNI FIT™ Standard		
Sealing Method	O-ring		

## **TESTING AND ENVIRONMENTAL**

Waterproof Level	IP68
------------------	------

## **MECHANICAL SPECIFICATIONS**

Plating Outer/Inner	Trimetal/Silver
Length	52.5mm (2.07in)
Outer Diameter	35.5mm (1.4in)
Inner Contact Attachment	Spring Finger
Outer Contact Attachment	Spring O-Ring

## **ELECTRICAL SPECIFICATIONS**

Nominal Impedance	50 ohms		
3rd Order IM Product @ 2x20 Watts	-157 ; typical -160		
Maximum Frequency	6 GHz		
Frequency Range	VSWR value	Return Loss value	
0 < f ≤ 1.0 GHz	1.03	36.6	
1.0 < f ≤ 2.7 GHz	1.04	34.1	
2.7 < f ≤ 3.7 GHz	1.08	28.3	
3.7 < f ≤ 5.0 GHz	1.15	23.1	
5.0 < f ≤ 6.0 GHz	1.25	19.1	

**716F-LCF78-C03** REV : B REV DATE : 15 Nov 2025 **www.rfsworld.com** 

External Document Links Notes	

**716F-LCF78-C03** REV : B REV DATE : 15 Nov 2025 **www.rfsworld.com**