

# 7-16 DIN Male Connector for 1-5/8" 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

**External Document Links** 

Application Note

Installation Instruction



OMNI FIT™ Standard Connectors

## **Technical features**

GENERAL SPECIFICATIONS					
Transmission Line Type		Coaxial Cable			
Cable Size		1 5/8			
Cable Type		Foam Dielectric	Radiating		
Model Series		LCF158-50 Series	RCF158-50 Series		
Connector Interface		7-16 DIN			
Connector Type		OMNI FIT™ Standard			
Sealing Method		O-ring			
Gender		Male			
ELECTRICAL SPECIFICATIONS					
Nominal Impedance, ohms	Ohm	50	50		
3rd Order IM Product @ 2x20 Watts	dBc	-159 ty	-159 typical		
Maximum Frequency	GHz	2.75	2.75		
VSWR, Return Loss	VSWR (dB)		0 < f ≤ 1.0 GHz: 1.03 (36.6) 1.0 < f ≤ 2.2 GHz: 1.04 (34.1)		

Notes

### **MECHANICAL SPECIFICATIONS**

Plating Outer/Inner		Trimetal/Silver	
Length	mm (in)	69.9 (2.8)	
Outer Diameter	mm (in)	62.9 (2.5)	
Inner Contact Attachment		Spring Finger	
Outer Contact Attachment		Spring C-Ring	

2.2 <  $f \le 2.75$  GHz: 1.07 (30)

**716M-LCF158-C02** REV : D REV DATE : 05 Apr 2017 **www.rfstechnologies.com** 

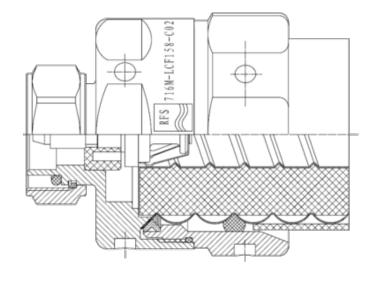


7-16 DIN Male Connector for 1-5/8" Coaxial Cable, OMNI FIT™ standard, O-ring sealing

# Wrench size front mm (in) Open end wrench 55 (2-1/6) Wrench size rear mm (in) Open end wrench 60 (2-1/3) 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	IP68	
	00	



**716M-LCF158-C02** REV : D REV DATE : 05 Apr 2017 **www.rfstechnologies.com**