



**716MR-LCF12-C03**

7-16 DIN Male Right Angle Connector for 1/2" 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

**Technical Features**

**STRUCTURE**

Cable Type	LCF	
Cable Size	1/2"	
Qualified Cable Types	LCF12-50J / JFN	LCF12-50J / JFN-ECO
Model Series	C03 Standard Series	
Connector Interface Size	7/16	
Connector Interface Gender	Male	

**MECHANICAL SPECIFICATIONS**

Connector Length	57.9mm (2.28in)
Connector Outer Diameter	38.7mm (1.5in)
Inner Conductor Material / Coating	Brass Alloy / Silver Plated
Outer Conductor Material / Coating	Brass Alloy / Trimetal Plated
Insulation Material	TPX / PTFE
Sealing Method	O-Ring



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**ELECTRICAL SPECIFICATIONS**

Nominal Impedance	50 Ω	
Connector Frequency Range	DC - 6.0 GHz GHz	
PIM Ratio (2 x 20 W Carrier)	-157 dBc	
PIM ratio Typical (2 x 20 W Carrier)	-160 dBc	
Frequency Range	VSWR	Return Loss
0 < f ≤ 1.0 GHz	1.04	34.1
1.0 < f ≤ 2.2 GHz	1.07	29.4
2.2 < f ≤ 2.7 GHz	1.09	27.3
2.7 < f ≤ 3.7 GHz	1.13	24.3
3.7 < f ≤ 5.0 GHz	1.25	19.1
5.0 < f ≤ 6.0 GHz	1.3	17.7

**TESTING AND ENVIRONMENTAL**

Ingress Protection (IP) Rating	IP68
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**ACCESSORIES**

Wrench Size Connector Interface	32mm (1.26in)
Wrench Size Connector Front Part	20mm (13/16in)
Wrench Size Connector Rear Part	20mm (13/16in)
Trimming Tool	TRIM-SET-L12-C02

**Related Documents**

 **Application Note**  
External Datasheet

 **Installation instruction \*\*-LCF12-C03**  
Installation Instructions