# N Female Connector for 1-5/8" Coaxial Cable, OMNI FIT standard, O-ring sealing

OMNI FIT<sup>™</sup> 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 N connector is one of the most common RF connector types and meets 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
- Standard 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) compliant i.e. can be used on a global basis



OMNI FIT™ Standard Connectors

# **Technical features**

#### **GENERAL SPECIFICATIONS**

Transmission Line Type	Co	Coaxial Cable	
Cable Size		1-5/8	
Cable Type	Foam Dielectric	Radiating	
Model Series	LCF158-50 Series	RCF158-50 Series	
Connector Interface		N	
Connector Type	OMN	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	2.75
VSWR, Return Loss	VSWR (dB)	$0 < f \le 1.0 \text{ GHz: } 1.03 \text{ (36.3)}$ $1.0 < f \le 2.2 \text{ GHz: } 1.04 \text{ (34.1)}$ $2.2 < f \le 2.75 \text{ GHz: } 1.07 \text{ (30)}$

### **MECHANICAL SPECIFICATIONS**

Plating Outer/Inner		Trimetal/Silver
Length	mm (in)	70.1 (2.76)
Outer Diameter	mm (in)	63 (2.48)
Inner Contact Attachment		Spring Finger
Outer Contact Attachment		Spring C-Ring

NF-LCF158-C02 REV : D REV DATE : 06 May 2024 www.rfsworld.com



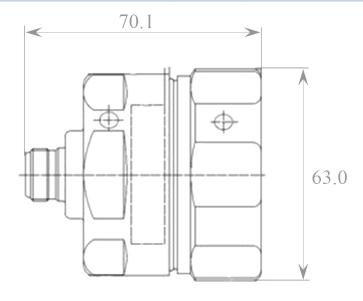
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# **ACCESSORIES**

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)
Trimming Tool		TRIM-SET-L158-C02

### **TESTING AND ENVIRONMENTAL**

Waterproof Level	IP68



### **External Document Links**

Application Note Installation Instruction

Notes

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