



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 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		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		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 ≤ 1.0 GHz: 1.03 (36.3) 1.0 < f ≤ 2.2 GHz: 1.04 (34.1) 2.2 < f ≤ 2.75 GHz: 1.07 (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

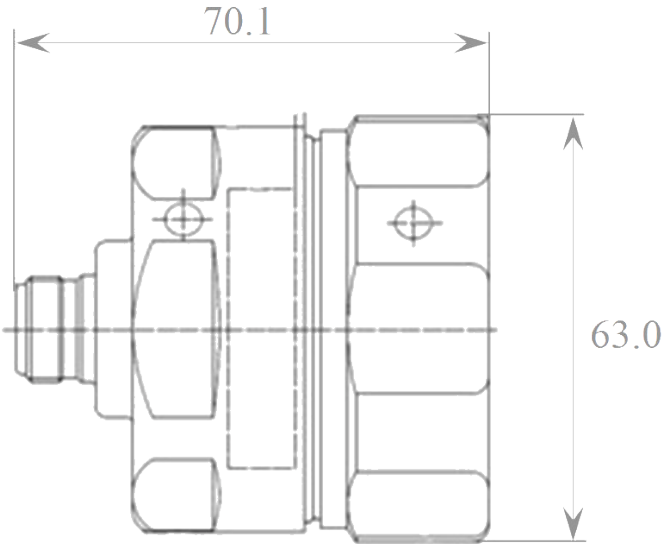
N Female Connector for 1-5/8" Coaxial Cable, OMNI FIT standard, O-ring sealing

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