



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
- 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

[External Document Links](#)[Notes](#)[Installation instruction](#)

Technical features

GENERAL SPECIFICATIONS

Transmission Line Type		Coaxial Cable
Cable Size		1/2
Cable Type		Foam Dielectric Superflexible
Model Series		SCF12-50 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	3.7
VSWR, Return Loss	VSWR (dB)	0 $\leq f \leq 1.0 \text{ GHz}$: 1.03 (36.6) 1.0 $\leq f \leq 2.7 \text{ GHz}$: 1.04 (34.1) 2.7 $\leq f \leq 3.7 \text{ GHz}$: 1.08 (28.3)

MECHANICAL SPECIFICATIONS

Plating Outer/Inner		Trimetal/Silver
Length	mm (in)	50.4 (1.99)
Outer Diameter	mm (in)	19.8 (0.78)
Inner Contact Attachment		Basket
Outer Contact Attachment		Rigidity impaction

NF-SCF12-C02

N Female Connector for 1/2" Coaxial SuperFlexible Cable, OMNI FIT™ standard

ACCESSORIES

Wrench size front	mm (in)	18 (7/10)
Wrench size rear	mm (in)	18 (7/10)

TESTING AND ENVIRONMENTAL

Waterproof Level		IP68
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