



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             |  | 1-1/4              |               |            |                    |
| Cable Type             |  | Foam Dielectric    | Ultraflexible | Radiating  |                    |
| Model Series           |  | UCF114-50A         | LCFS114-50A   | UCF114-50L | LCFS114-50L 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       | 3.6  |
| VSWR, Return Loss                 | VSWR (dB) | 0 < f ≤ 1.0 GHz: 1.03 (36.6)<br>1.0 < f ≤ 2.7 GHz: 1.04 (34.1)<br>2.7 < f ≤ 3.7 GHz: 1.08 (28.3) |

#### MECHANICAL SPECIFICATIONS

|                          |         |                 |
|--------------------------|---------|-----------------|
| Plating Outer/Inner      |         | Trimetal/Silver |
| Length                   | mm (in) | 70.1 (2.76)     |
| Outer Diameter           | mm (in) | 48.8 (1.92)     |
| Inner Contact Attachment |         | Spring Finger   |
| Outer Contact Attachment |         | Spring C-Ring   |



NF-LCF114-C02

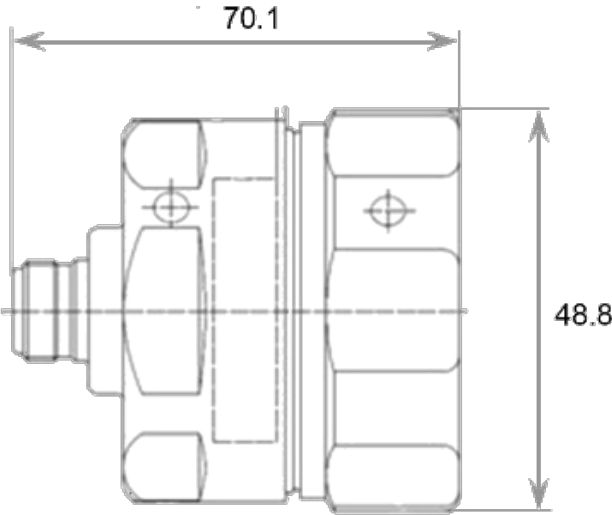
N Female Connector for 1-1/4" Coaxial Cable, OMNI FIT standard, O-ring sealing

ACCESSORIES

|                   |         |   |
|-------------------|---------|---|
| Wrench size front | mm (in) | Open end wrench 45 (1-3/4)                |
| Wrench size rear  | mm (in) | Open end wrench 45 (1-3/4)                |
| Poly Hook Spanner | mm (in) | PHS 60-90-5 Ø 60-90 (2.3-3.5) Pin 5 (0.2) |
| Trimming Tool     |         | TRIM-SET-L114-C02                         |

TESTING AND ENVIRONMENTAL

|                  |  |      |
|------------------|--|------|
| Waterproof Level |  | IP68 |
|------------------|--|------|



External Document Links

[Application Note](#)

[Installation Instruction](#)

Notes