



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



OMNI FIT™ Standard Connectors

**Technical features**

**GENERAL SPECIFICATIONS**

|                               |  |                    |                   |                    |
|-------------------------------|--|--------------------|-------------------|--------------------|
| <b>Transmission Line Type</b> |  | Coaxial Cable      |                   |                    |
| <b>Cable Size</b>             |  | 1 1/4              |                   |                    |
| <b>Cable Type</b>             |  | Foam Dielectric    | Ultraflexible     | Radiating          |
| <b>Model Series</b>           |  | UCF114-50A-Series  | LCF114-50A-Series | LCFS114-50A-Series |
| <b>Connector Interface</b>    |  | 7-16 DIN           |                   |                    |
| <b>Connector Type</b>         |  | OMNI FIT™ Standard |                   |                    |
| <b>Sealing Method</b>         |  | O-ring             |                   |                    |
| <b>Gender</b>                 |  | Male               |                   |                    |

**ELECTRICAL SPECIFICATIONS**

|  |           |   |  |  |
|--|-----------|---|--|--|
| <b>Nominal Impedance, ohms</b>           | Ohm       | 50  |  |  |
| <b>3rd Order IM Product @ 2x20 Watts</b> | dBc       | -159 typical  |  |  |
| <b>Maximum Frequency</b>                 | GHz       | 3.6   |  |  |
| <b>VSWR, Return Loss</b>                 | VSWR (dB) | 0 &lt; f ≤ 1.0 GHz: 1.03 (36.6)<br>1.0 &lt; f ≤ 2.7 GHz: 1.05 (32.3)<br>2.7 &lt; f ≤ 3.6 GHz: 1.08 (28.3) |  |  |

**MECHANICAL SPECIFICATIONS**

|                                 |         |                 |  |  |
|---------------------------------|---------|-----------------|--|--|
| <b>Plating Outer/Inner</b>      |         | Trimetal/Silver |  |  |
| <b>Length</b>                   | mm (in) | 69.3 (2.7)      |  |  |
| <b>Outer Diameter</b>           | mm (in) | 48.8 (1.9)      |  |  |
| <b>Weight</b>                   | kg (lb) | 0.38 (0.84)     |  |  |
| <b>Inner Contact Attachment</b> |         | Spring Finger   |  |  |
| <b>Outer Contact Attachment</b> |         | Spring C-Ring   |  |  |

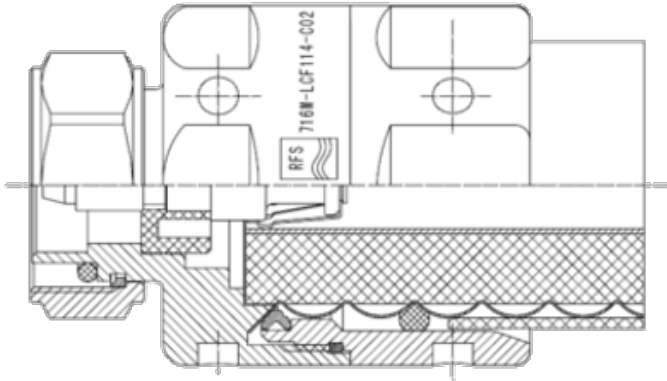


**ACCESSORIES**

|                          |         |   |
|--------------------------|---------|---|
| <b>Wrench size front</b> | mm (in) | Open end wrench 45 (1-3/4)                |
| <b>Wrench size rear</b>  | mm (in) | Open end wrench 45 (1-3/4)                |
| <b>Poly Hook Spanner</b> | mm (in) | PHS 60-90-5 Ø 60-90 (2.3-3.5) Pin 5 (0.2) |

**TESTING AND ENVIRONMENTAL**

|                         |  |      |
|-------------------------|--|------|
| <b>Waterproof Level</b> |  | IP68 |
|-------------------------|--|------|



**External Document Links**

[Application Note](#)

[Installation Instruction](#)

**Notes**