



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

|                        |  |                    |                  |
|------------------------|--|--------------------|------------------|
| 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    |  | 7-16 DIN           |                  |
| 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 <math>\leq f=1.0\text{ GHz}</math>: 1.03 (36.6)<br>1.0 <math>\leq f=2.2\text{ GHz}</math>: 1.04 (34.1) |

### MECHANICAL SPECIFICATIONS

|                          |         |                 |
|--------------------------|---------|-----------------|
| Plating Outer/Inner      |         | Trimetal/Silver |
| Length                   | mm (in) | 64.6 (2.54)     |
| Outer Diameter           | mm (in) | 62.9 (2.5)      |
| Weight                   | kg (lb) | 0.46 (1.01)     |
| Inner Contact Attachment |         | Spring Finger   |
| Outer Contact Attachment |         | Spring C-Ring   |



716F-LCF158-C02

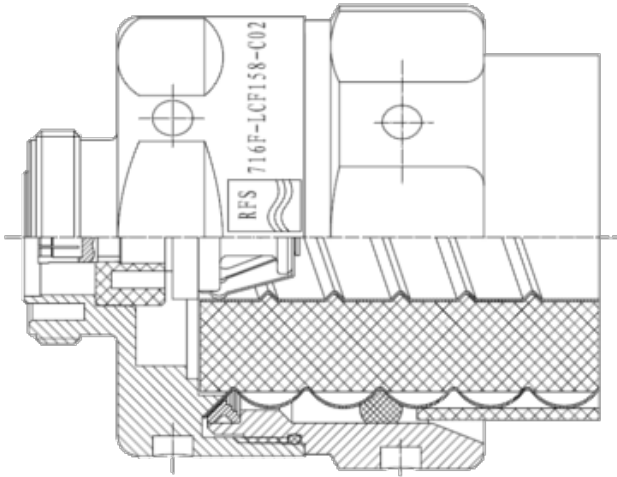
7-16 DIN Female Connector for 1-5/8" Coaxial Cable, OMNI FIT™ standard, O-ring sealing

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) |

TESTING AND ENVIRONMENTAL

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



External Document Links

- [Application Note](#)
- [Installation Instruction](#)

Notes