PRODUCT DATASHEET

# 716F-LCF158-C02

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

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 Technologies 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.

OMNI FIT™ Standard Connectors

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

## 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 < f=1.0 GHz: 1.03 (36.6)<br>1.0 < f=2.2 GHz: 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) |
| **Inner Contact Attachment** | | Spring Finger |
| **Outer Contact Attachment** | | Spring C-Ring |



All values nominal unless tolerances provided; information contained in the present datasheet is subject to confirmation at time of ordering

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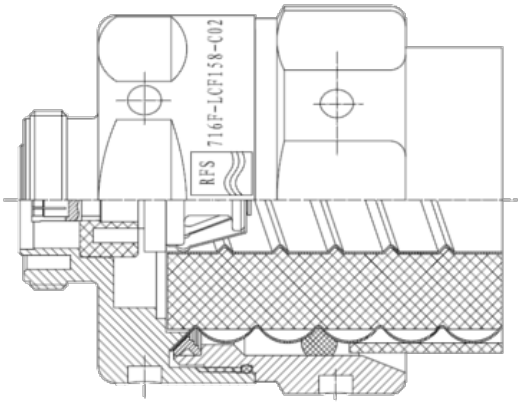
## ACCESSORIES

| | | |
|---|---|---|
| **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



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