



**716M-LCF158-C02**

7-16 DIN Male 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 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

**Technical Features**

**STRUCTURE**

|                            |                     |
|----------------------------|---------------------|
| Cable Type                 | LCF                 |
| Cable Size                 | 1-5/8"              |
| Qualified Cable Types      | LCF158-50JA / JFNA  |
| Model Series               | C02 Standard Series |
| Connector Interface Size   | 7/16                |
| Connector Interface Gender | Male                |

**MECHANICAL SPECIFICATIONS**

|                                    |                               |
|------------------------------------|-------------------------------|
| Connector Length                   | 69.9mm (2.8in)                |
| Connector Outer Diameter           | 62.9mm (2.5in)                |
| Inner Conductor Material / Coating | Brass Alloy / Silver Plated   |
| Outer Conductor Material / Coating | Brass Alloy / Trimetal Plated |
| Insulation Material                | TPX                           |
| Sealing Method                     | O-Ring                        |

**ELECTRICAL SPECIFICATIONS**

|                                      |                   |             |
|--------------------------------------|-------------------|-------------|
| Nominal Impedance                    | 50 Ω              |             |
| Connector Frequency Range            | DC - 2.75 GHz GHz |             |
| PIM ratio Typical (2 x 20 W Carrier) | -159 dBc          |             |
| Frequency Range                      | VSWR              | Return Loss |
| 0 < f ≤ 1.0 GHz                      | 1.03              | 36.6        |
| 1.0 < f ≤ 2.2 GHz                    | 1.04              | 34.1        |
| 2.2 < f ≤ 2.75 GHz                   | 1.07              | 30          |

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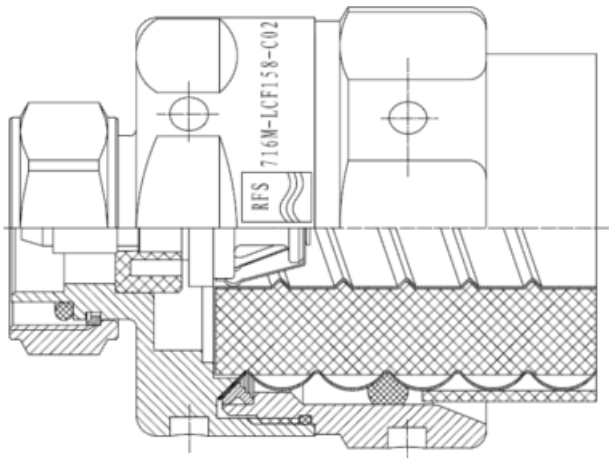
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**TESTING AND ENVIRONMENTAL**

|                                |      |
|--------------------------------|------|
| Ingress Protection (IP) Rating | IP68 |
|--------------------------------|------|

**ACCESSORIES**

|                                  |                   |
|----------------------------------|-------------------|
| Wrench Size Connector Interface  | 32mm (1.26in)     |
| Wrench Size Connector Front Part | 55mm (2.165in)    |
| Wrench Size Connector Rear Part  | 55mm (2.165in)    |
| Poly Hook Spanner                | PHS 60-90-7       |
| Trimming Tool                    | TRIM-SET-L158-C02 |

**Related Documents****Application Note**  
External Datasheet**Installation Instruction \*\*-LCF158-C02**  
Installation Instructions