



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. 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



716F-LCF78-C03

**Technical features****GENERAL SPECIFICATIONS**

|                        |  |                    |               |                 |
|------------------------|--|--------------------|---------------|-----------------|
| Transmission Line Type |  | Coaxial Cable      |               |                 |
| Cable Size             |  | 7/8                |               |                 |
| Cable Type             |  | Foam Dielectric    | Ultraflexible | Radiating       |
| Model Series           |  | LCF78-50 Series    |               | RCF78-50 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       | -157 ; typical -160                                                                                                                                                  |  |  |
| Maximum Frequency                 | GHz       | 6.0                                                                                                                                                                  |  |  |
| 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)<br>3.7 < f ≤ 5.0 GHz: 1.15 (23.1)<br>5.0 < f ≤ 6.0 GHz: 1.25 (19.1) |  |  |

**MECHANICAL SPECIFICATIONS**

|                          |         |                 |  |  |
|--------------------------|---------|-----------------|--|--|
| Plating Outer/Inner      |         | Trimetal/Silver |  |  |
| Length                   | mm (in) | 52.5 (2.07)     |  |  |
| Outer Diameter           | mm (in) | 35.5 (1.4)      |  |  |
| Weight                   | kg (lb) | 0.139 (0.306)   |  |  |
| Inner Contact Attachment |         | Spring Finger   |  |  |
| Outer Contact Attachment |         | Spring O-Ring   |  |  |



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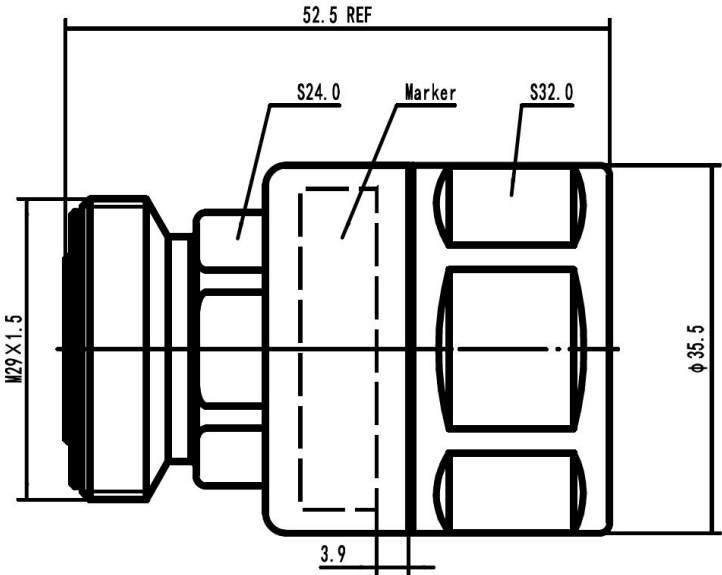
7-16 DIN Female Connector for 7/8" Coaxial Cable, OMNI FIT™ standard, O-ring sealing

ACCESSORIES

|                   |         |            |
|-------------------|---------|------------|
| Wrench size front | mm (in) | 24 (15/16) |
| Wrench size rear  | mm (in) | 32 (1-1/4) |

TESTING AND ENVIRONMENTAL

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



716F-LCF78-C03 Outline drawing

External Document Links

- Application Note
- Installation Instruction

Notes