



Radio Frequency Systems' line of high performance coaxial cable connectors are designed specifically to provide the highest quality connector-cable interface while simplifying and speeding up the attachment of connectors to CELLFLEX® coaxial cables. RFS connectors are fully tested for mechanical and electrical compliance specifications. They are available in all popular cable sizes in a variety of mating interfaces. To join two cables with EIA connectors, two identical socket connectors are installed on either end of the cables to be joined, and a coupling element is used to make the connection of the center conductor. The coupling element must be ordered separately with the exception of the S-Line male versions that have a captivated coupling element. Connectors are available in sizes matching the nominal cable size. EIA connectors provide optimal power handling for the complete transmission line system.



FEATURES / BENEFITS

- Single-piece design for Fast and Easy Installation
Reliable and simple attachment avoids unnecessary connector adjustments and provides outstanding performance every time. Saves time and provides cost savings.
- Robust Mechanical Design
Low and consistent intermodulation performance guarantees outstanding system sensitivity.
- Excellent Electrical Performance
Consistent and repeatable low VSWR improves overall system performance and margin and reduces mismatch losses
- Totally Waterproof according to IP 68
Assures safe, long term operation in the harshest of Environments.
- 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 |
| Model Series | | LCF158-50 RCF158-50 |
| Connector Interface | | 7/8" EIA |
| Connector Type | | RAPID FIT™ |
| Sealing Method | | Sealing compound ¹⁾ |
| Gender | | None |

ELECTRICAL SPECIFICATIONS

| | | |
|-----------------------------------|-----------|--|
| 3rd Order IM Product @ 2x20 Watts | dBc | <-156 |
| Maximum Frequency | GHz | 2.75 |
| VSWR, Return Loss | VSWR (dB) | 0 < f ≤ 1.0 GHz: 1.02 (40) 1.0 < f ≤ 2.7 GHz: 1.04 (34.1) 2.7 < f ≤ 3.7 GHz: 1.06 (30.7) |

MECHANICAL SPECIFICATIONS

| | | |
|--------------------------|---------|---------------|
| Plating Outer/Inner | | Silver/Silver |
| Length | mm (in) | 105 (4.1) |
| Outer Diameter | mm (in) | 57.2 (2.3) |
| Inner Contact Attachment | | Spring Finger |
| Outer Contact Attachment | | Spring Finger |

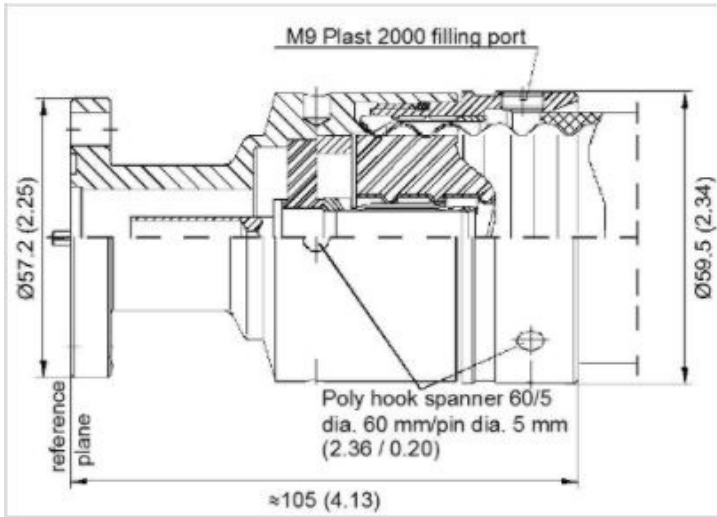


ACCESSORIES

| | | |
|-------------------|---------|--------------------------|
| Wrench size front | mm (in) | Poly Hook Spanner Wrench |
| Wrench size rear | mm (in) | Poly Hook Spanner Wrench |
| Trimming Tool | | TRIM-Series-A |

TESTING AND ENVIRONMENTAL

| | | |
|--|--------------------------|-----------|
| Waterproof Level | | IP68 |
| Sealing Volume, cm ³ (ounces) | cm ³ (ounces) | 20 (0.68) |



Dimensions in mm

[External Document Links](#)
[Installation Instruction](#)

Notes

1) The sealing compound must be ordered separately.