



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.

**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 <sup>1)</sup>
Gender		None

**ELECTRICAL SPECIFICATIONS**

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

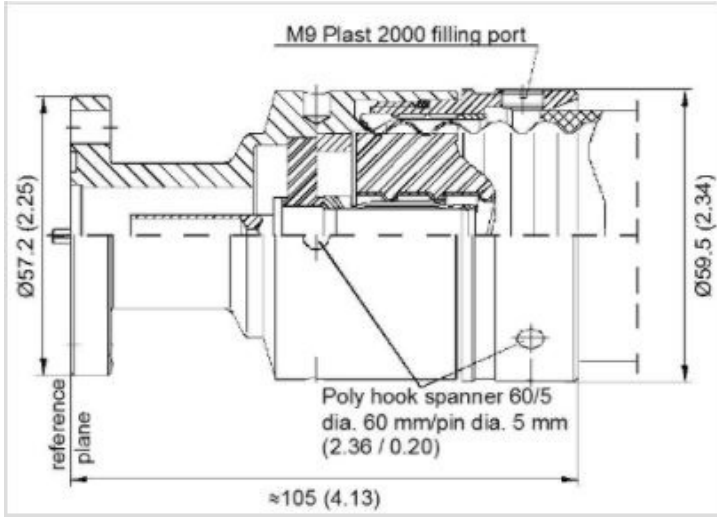


**ACCESSORIES**

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 <sup>3</sup> (ounces)	cm <sup>3</sup> (ounces)	20 (0.68)



Dimensions in mm

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

**Notes**

1) The sealing compound must be ordered separately.