# 7/8" EIA Connector for 7/8" Coaxial Cable, RAPID FIT™ Sealing compound

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.

# RAPID FIT

RAPID FIT™ Connectors

#### 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	7/8
Cable Type	Foam Dielectric
Model Series	LCF78-50A-Series, RCF78-50A-Series
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	3.7
VSWR, Return Loss	VSWR (dB)	$0 < f \le 1.0 \text{ GHz: } 1.02 \text{ (40)}$ $1.0 < f \le 2.7 \text{ GHz: } 1.04 \text{ (34.1)}$ $2.7 < f \le 3.7 \text{ GHz: } 1.06 \text{ (30.7)}$

# **MECHANICAL SPECIFICATIONS**

Plating Outer/Inner		Silver/Silver
Length	mm (in)	83 (3.3)
Outer Diameter	mm (in)	57.2 (2.3)
Inner Contact Attachment		Self Tapping
Outer Contact Attachment		Spring Finger

**78EIA-LCF78-062** REV : F REV DATE : 27 May 2024 **www.rfsworld.com** 



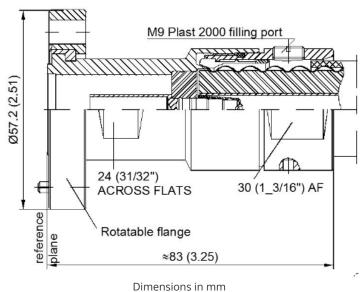
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# **ACCESSORIES**

Wrench size front	mm (in)	30 (1-3/16)
Wrench size rear	mm (in)	30 (1-3/16)
Trimming Tool		TRIM-Series-A

# **TESTING AND ENVIRONMENTAL**

Waterproof Level		IP68
Sealing Volume, cm3 (ounces)	cm³ (ounces)	7 (0.26)



# **External Document Links**

Installation Instruction

#### Notes

<sup>1</sup>) The sealing compound must be ordered separately.

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