

7-16 DIN Male Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, Straight, threaded gasket and 360° compression sealing

OMNI FIT™ high performance connectors are designed for use with both CELLFLEX® (copper) and CELLFLEX® Lite (aluminium) 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. Sealing against outer conductor and jacket by means of threaded gasket and 360° compression fit. Multifunctional, self-lubricating HighTech polymer assembly locks on cable corrugation, avoids electrochemical potential differences and compression-fits to the jacket.

# FEATURES / BENEFITS

- Ultra high PIM performance i.e. reduced interference leading to high customer satisfaction
- Two-piece design i.e. visual inspection of interlocking leads to improved installation security
- OMNI FIT™ concept i.e. streamlined order management and reduced stock level
- Watertight sealing in mated and unmated condition, i.e. reduced efforts during installation and improved security during operation
- Unique NiTin plating i.e. extreme resistance against corrosion even under hardest climatic and environmental circumstances
- Multi-thread (Tristart) design i.e. simplified and accelerated tightening process
- RoHS (EU) and CRoHS (China) compliant i.e. can be used on a global basis



OMNI FIT™ Premium Connectors

# **Technical features**

#### **GENERAL SPECIFICATIONS**

Transmission Line Type	Coaxial Cable
Cable Size	1/2
Cable Type	Foam Dielectric Superflexible
Model Series	SCF12-50 Series
Connector Interface	7-16 DIN
Connector Type	OMNI FIT™ PREMIUM Straight
Sealing Method	Threaded Gasket + 360° Compression
Gender	Male

## **ELECTRICAL SPECIFICATIONS**

Nominal Impedance, ohms	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-163 ; typical -167
Maximum Frequency	GHz	3.7
VSWR, Return Loss	VSWR (dB)	$0 < f \le 1.0 \text{ GHz: } 1.02 \text{ (40)}$ $1.0 < f \le 2.7 \text{ GHz: } 1.03 \text{ (36.6)}$ $2.7 < f \le 3.7 \text{ GHz: } 1.06 \text{ (30.7)}$

### **MECHANICAL SPECIFICATIONS**

Plating Outer/Inner		NiTin/Silver
Length	mm (in)	47.2 (1.9)
Outer Diameter	mm (in)	35.8 (1.4)
Inner Contact Attachment		Spring Finger
Outer Contact Attachment		360° clamping

716M-SCF12-D01 REV : E REV DATE : 06 May 2024 **www.rfsworld.com** 



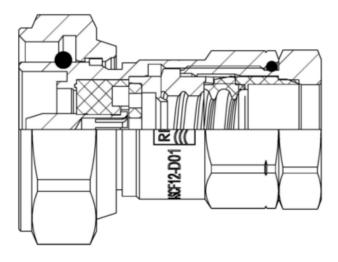
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# ACCESSORIES

Wrench size front	mm (in)	22 (7/8)
Wrench size rear	mm (in)	22 (7/8)
Trimming Tool		TRIM-12-S06 TRIM-SCF12-D01-A

#### **TESTING AND ENVIRONMENTAL**

	ID CO
Waterproof Level	IP68



**External Document Links** 

Installation Instruction

Notes

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