

7-16 DIN Male Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, Straight, O-Ring 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 o-ring and 360° compression fit.

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
- Tri metal alloy 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



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	O-ring + 360° Compression	
Gender	Male	

ELECTRICAL SPECIFICATIONS

Nominal Impedance, ohms	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-163 ; typical -167
Maximum Frequency	GHz	6
VSWR, Return Loss	VSWR (dB)	$0 < f \le 1.0 \text{ GHz: } 1.02 \text{ (40)}$ $1.0 < f \le 2.2 \text{ GHz: } 1.03 \text{ (37)}$ $2.2 < f \le 2.7 \text{ GHz: } 1.03 \text{ (36)}$ $2.7 < f \le 3.8 \text{ GHz: } 1.06 \text{ (31)}$ $3.8 < f \le 5.0 \text{ GHz: } 1.11 \text{ (26)}$ $5.0 < f \le 6.0 \text{ GHz: } 1.15 \text{ (23)}$

MECHANICAL SPECIFICATIONS

Plating Outer/Inner		Tri metal alloy / Silver
Length	mm (in)	53.9 (2.12)
Outer Diameter	mm (in)	22.5 (0.89)
Inner Contact Attachment		Spring Finger
Outer Contact Attachment		360° clamping

716M-SCF12-E01 REV : B REV DATE : 06 May 2024 **www.rfsworld.com**



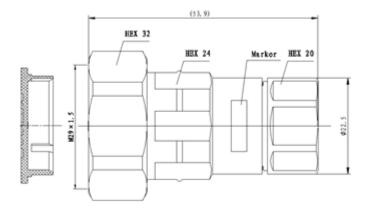
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ACCESSORIES

Wrench size front	mm (in)	32 / 24
Wrench size rear	mm (in)	20
Trimming Tool		TRIM-12-S06 TRIM-SCF12-D01-A

TESTING AND ENVIRONMENTAL

Waterproof Level	IP68
Water proof Level	11 00



External Document Links

Installation Instruction

Notes

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