

7-16 DIN Male Connector for 1/4" 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 oring 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

CENTENTE SI ECITICATIONS				
Transmission Line Type	Coaxial Cable			
Cable Size	1/4			
Cable Type	Foam Dielectric Superflexible			
Model Series	SCF14-50 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)	$0 < f \le 1.0 \text{ GHz: } 1.03 (37)$ $1.0 < f \le 2.2 \text{ GHz: } 1.06 (31)$ $2.2 < f \le 2.7 \text{ GHz: } 1.08 (28)$ $2.7 < f \le 3.8 \text{ GHz: } 1.12 (25)$ $3.8 < f \le 5.0 \text{ GHz: } 1.17 (22)$ $5.0 < f \le 6.0 \text{ GHz: } 1.22 (20)$

MECHANICAL SPECIFICATIONS

Plating Outer/Inner		Tri metal alloy / Silver
Length	mm (in)	55 (2.165)
Outer Diameter	mm (in)	20 (0.787)
Inner Contact Attachment		Spring Finger
Outer Contact Attachment		360° clamping

716M-SCF14-E01 REV : A REV DATE : 06 May 2024 **www.rfsworld.com**



7-16 DIN Male Connector for 1/4" Coaxial Cable, OMNI FIT™ Premium, Straight, O-Ring and 360° compression sealing

ACCESSORIES Wrench size front mm (in) 32 / 18 Wrench size rear mm (in) 18 **Trimming Tool** TRIM-SCF14-D01-A **TESTING AND ENVIRONMENTAL Waterproof Level** IP68 HEX 32 HEX 18 HEX 18

External Document Links

Installation Instruction

Notes

716M-SCF14-E01 REV : A REV DATE : 06 May 2024 **www.rfsworld.com**