# 7-16 Male Connector for 1/2" Coaxial SuperFlexibleCable, OMNI FIT™ standard

OMNI FIT™ high performance connectors are designed for use with both CELLFLEX® (copper) and CELLFLEX® Lite (aluminum) 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.

#### FEATURES / BENEFITS

- Cost effective two-piece design for safe and easy installation
- Robust mechanical design for low and consistent intermodulation performance i.e. keeps the mobile network performance up, reduces the number of dropped calls and avoids revenue losses
- Standard electrical performance for consistent and repeatable VSWR i.e. ensure network system performance
- Waterproof to IP 68 i.e. no downtime risk, secures revenue
- RoHS (EU) compliant i.e. can be used on a global basis



716M-SCF12-C03

# **Technical features**

#### **GENERAL SPECIFICATIONS**

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Transmission Line Type	Coaxial Cable	
Cable Size	1/2	
Cable Type	Foam Dielectric Superflexible	
Model Series	SCF12-50 Series	
Connector Interface	7-16	
Connector Type	OMNI FIT™ Standard	
Sealing Method	O-ring	
Gender	Male	

### **ELECTRICAL SPECIFICATIONS**

Nominal Impedance, ohms	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-157 ; typical -160
Maximum Frequency	GHz	6
VSWR, Return Loss	VSWR (dB)	0 < f ≤ 1.0 GHz: 1.03 (36.6) 1.0 < f ≤ 2.7 GHz: 1.04 (34.1)
		$2.7 < f \le 3.7 \text{ GHz: } 1.08 (28.3)$ $3.7 < f \le 5.0 \text{ GHz: } 1.15 (23.1)$ $5.0 < f \le 6.0 \text{ GHz: } 1.25 (19.1)$

#### **MECHANICAL SPECIFICATIONS**

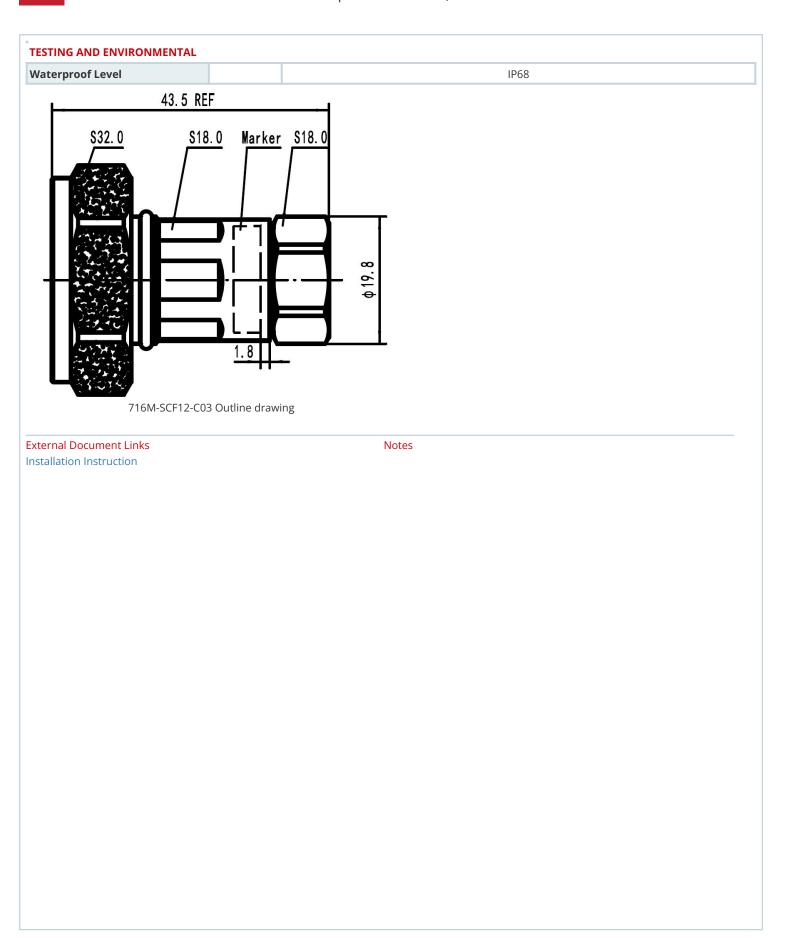
Plating Outer/Inner		Trimetal/Silver
Length	mm (in)	43.5 (1.72)
Outer Diameter	mm (in)	36 (1.42)
Inner Contact Attachment		Basket
Outer Contact Attachment		Rigidity impaction

### **ACCESSORIES**

Wrench size front	mm (in)	18 (3/4)
Wrench size rear	mm (in)	18 (3/4)
Trimming Tool		TRIM-SET-S12-C02

**716M-SCF12-C03** REV : B REV DATE : 06 May 2024 **www.rfsworld.com** 

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