

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

OMNI FIT<sup>M</sup> 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



716F-SCF12-C03

## **Technical features**

#### **GENERAL SPECIFICATIONS**

CENTERIA DI LONGO		
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	Female	

#### **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 ≤ 3.7 GHz: 1.08 (28.3)
		3.7 < f ≤ 5.0 GHz: 1.15 (23.1)
		5.0 < f ≤ 6.0 GHz: 1.25 (19.1)

### **MECHANICAL SPECIFICATIONS**

Plating Outer/Inner		Trimetal/Silver
Length	mm (in)	46.6 (1.83)
Outer Diameter	mm (in)	29 (1.14)
Inner Contact Attachment		Basket
Outer Contact Attachment		Rigidity impaction

**716F-SCF12-C03** REV : C REV DATE : 06 May 2024 **www.rfsworld.com** 



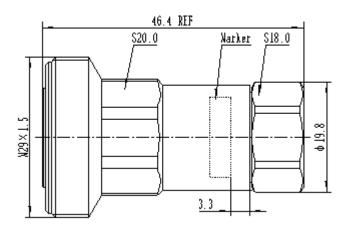
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## **ACCESSORIES**

Wrench size front	mm (in)	20 (0.79)
Wrench size rear	mm (in)	18 (0.71)
Trimming Tool		TRIM-SET-S12-C02

### **TESTING AND ENVIRONMENTAL**

147 . 61 1	IDCO
Waterproof Level	IP68



716F-SCF12-C03 Outline Drawing

External Document Links Installation Instruction

Notes

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