



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

[External Document Links](#)[Notes](#)[Installation Instruction](#)

## 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
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	6.0
VSWR, Return Loss	VSWR (dB)	0 &lt; f ≤ 1.0 GHz: 1.03 (36.6) 1.0 &lt; f ≤ 2.7 GHz: 1.04 (34.1) 2.7 &lt; f ≤ 3.7 GHz: 1.08 (28.3) 3.7 &lt; f ≤ 5.0 GHz: 1.15 (23.1) 5.0 &lt; f ≤ 6.0 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



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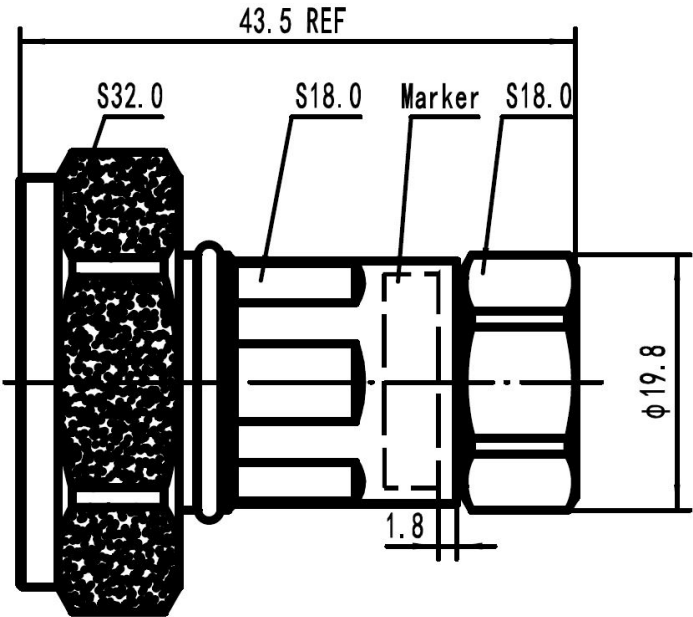
7-16 Male Connector for 1/2" Coaxial SuperFlexibleCable, OMNI FIT™ standard

ACCESSORIES

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

TESTING AND ENVIRONMENTAL

Waterproof Level		IP68
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716M-SCF12-C03 Outline drawing