

N Male Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium,

# Straight, O-Ring and 360° compression sealing

OMNI FIT<sup>™</sup> 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 Technologies connectors are fully tested for mechanical and electrical compliance to

industry specifications. The N connector meets all technical requirements and covers high frequencies as well as legacy

applications. 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<sup>™</sup> 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		Ν	
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	-158 ; typical -162	
Maximum Frequency	GHz	6.0	
VSWR, Return Loss	VSWR (dB)	0 < f ≤ 1.0 GHz: 1.02 (40)	
		1.0 < f ≤ 2.2 GHz: 1.03 (37)	
		2.2 < f ≤ 2.7 GHz: 1.03 (36)	
		2.7 < f ≤ 3.8 GHz: 1.07 (30)	
		3.8 < f ≤ 5.0 GHz: 1.11 (26)	
		5.0 < f ≤ 6.0 GHz: 1.15 (23)	

NM-SCF12-E01

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# PRODUCT DATASHEET NM-SCF12-E01 N Male Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, Straight, O-Ring and 360° compression sealing

Length     mm (in)     57.2 (2.25)       Outer Diameter     mm (in)     22.5 (0.89)       Inner Contact Attachment     Spring Finger       Outer Contact Attachment     360° clamping       ACCESSORIES     Mrench size front     mm (in)       Wrench size front     mm (in)     20 / 22       Wrench size rear     mm (in)     20       Trimming Tool     TRIM-12-S06       TSTING AND ENVIRONMENTAL       Waterproof Level     IP68	Plating Outer/Inner		Tri metal alloy / Silver
Outer Diameter     mm (in)     22.5 (0.89)       Inner Contact Attachment     Spring Finger       Outer Contact Attachment     360° clamping       ACCESSORIES     Mrench size front     mm (in)       Wrench size front     mm (in)     20 / 22       Wrench size rear     mm (in)     20       Trimming Tool     TRIM-12-506 TRIM-SCF12-D01-A	Length	mm (in)	
Outer Contact Attachment     360° clamping       ACCESSORIES       Wrench size front     mm (in)       20 / 22       Wrench size rear     mm (in)       20       Trimming Tool     TRIM-12-S06 TRIM-SCF12-D01-A   TESTING AND ENVIRONMENTAL       Waterproof Level     IP68		mm (in)	22.5 (0.89)
ACCESSORIES Wrench size front mm (in) 20/22 Wrench size rear mm (in) 20 Trimming Tool TRIM-12-506 TRIM-5CF12-D01-A TESTING AND ENVIRONMENTAL Waterproof Level IP68 Upfor Upfor Upfo	Inner Contact Attachment		Spring Finger
Wrench size front     mm (in)     20 / 22       Wrench size rear     mm (in)     20       Trimming Tool     TRIM-12-506 TRIM-5CF12-DD1-A	Outer Contact Attachment		360° clamping
Wrench size rear     mm (in)     20       Trimming Tool     TRIM-12-S06 TRIM-SCF12-D01-A   TESTING AND ENVIRONMENTAL       Waterproof Level     IP68         Image: Comparison of the state of th	ACCESSORIES		
Trimming Tool TRIM-12-S06 TRIM-SCF12-D01-A TESTING AND ENVIRONMENTAL Waterproof Level IP68 IFAN I	Wrench size front	mm (in)	20 / 22
TRIM-SCF12-D01-A TESTING AND ENVIRONMENTAL Waterproof Level IP68 (15,2) (1	Wrench size rear	mm (in)	20
Waterproof Level IP68	Trimming Tool		
External Document Links	TESTING AND ENVIRONMENTAL		
External Document Links	Waterproof Level		IP68
	external Document Links		Notes
	Installation Instruction		