### Разъемы для коаксиального кабеля 1/2"

#### Технический паспорт изделия

- Серия OMNI FIT™
- Кабельная группа SCF12-50 (особо гибкий, со спирально гофрированным внешним проводником)
- Производство RFS (Radio Frequency Systems)

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Примечание. Для перехода на нужную вам страницу кликните по ссылке

43F-SCF12-C03



### 4.3-10 Female Connector for 1/2" Coaxial Superflexible Cable, OMNI FIT™ standard, O-ring sealing

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. The 4.3-10 connector is an innovative, space-saving RF connection meeting all requirements even under the most severe environmental conditions and not relying on coupling nut torque to meet PIM performance.

#### **FEATURES / BENEFITS**

- Cost effective two-piece design for safe and easy installation
- Compatible with copper and aluminium cable types i.e. one connector for both outer conductor materials eliminates the risk of faulty connector installation and helps to keep inventory down
- 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
- Superior 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) and CRoHS (China) compliant i.e. can be used on a global basis

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43F-SCF12-C03

#### **Technical Features**

GENERAL	SPECIFIC	CATIONS
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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	4.3-10	
Connector Type	OMNI FIT™ Standard	
Sealing Method	O-ring	
Gender	Female	

#### **ELECTRICAL SPECIFICATIONS**

Nominal Impedance	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-162 ; typical -166
Maximum Frequency	GHz	6.0
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.03 (36.6) 1.0 < f Š 2.7 GHz: 1.04 (34.1) 2.7 < f Š 3.7 GHz: 1.08 (28.3) 3.7 < f Š 5.0 GHz: 1.10 (26.4) 5.0 < f Š 6.0 GHz: 1.25 (19.1)

#### **MECHANICAL SPECIFICATIONS**

Plating Outer/Inner		Trimetal/Silver
Length	mm (in)	48.78 (1.92)
Outer Diameter	mm (in)	19.8 (0.78)
Weight	kg (lb)	0.078 (0.17)
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

#### **TESTING AND ENVIRONMENTAL**

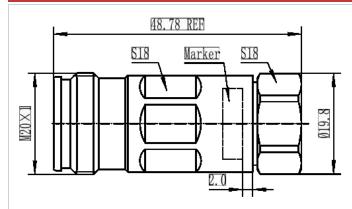
Waterproof Level		IP68
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43F-SCF12-C03 REV: B REV DATE: 07.Oct.2018 www.rfsworld.com

В начало документа



# 4.3-10 Female Connector for 1/2" Coaxial Superflexible Cable, OMNI FIT™ standard, O-ring sealing



43F-SCF12-C03 Outline Drawing

**External Document Links** 

Notes

Installation Instruction

В начало документа

43F-SCF12-C03 REV: B REV DATE: 07.Oct.2018 www.rfsworld.com

43F-SCF12-D01



### 4.3-10 Female Straight Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, Polymer claw and 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 4.3-10 connector is an innovative, space-saving RF connection meeting all requirements even under the most severe environmental conditions and not relying on coupling nut torque. Sealing against outer conductor and jacket by means of the polymer claw and 360° compression fit. Multifunctional, self-lubricating HighTech polymer assembly locks on cable corrugation, avoids electrochemical potential differences and compression-fits to the jacket.



#### OMNI FIT™ Premium Connectors

#### **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
- Unique NiTin 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 SPECIF	FICATIONS
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Coaxial Cable		
1/2"		
Foam Dielectric, Superflexible		
SCF12-50 Series		
4.3-10		
OMNI FIT™ PREMIUM Straight		
Polymer claw + 360° Compression		
Female		

50

#### **ELECTRICAL SPECIFICATIONS**

Nominal Impedance

	0	00
3rd Order IM Product @ 2x20 Watts	dBc	-163 ; typical -167
Maximum Frequency	GHz	6.0
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.03 (36.6) 1.0 < f Š 2.7 GHz: 1.04 (34.2) 2.7 < f Š 3.7 GHz: 1.06 (30.7) 3.7 < f Š 5.0 GHz: 1.08 (28.3) 5.0 < f Š 6.0 GHz: 1.25 (19.1)

#### **MECHANICAL SPECIFICATIONS**

Plating Outer/Inner	NiTin/Silver	
Inner Contact Attachment	Basket	
Outer Contact Attachment	360° clamping	

#### **ACCESSORIES**

Wrench size front	mm (in)	22 (7/8)
Wrench size rear	mm (in)	22 (7/8)
Trimming Tool		TRIM-SET-S12-D01, TRIM-SCF12-D01-A
TESTING AND ENVIRONMENTAL		

Waterproof Level	IP68
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External	Document	Lin	ks
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Notes

Installation Instruction

43F-SCF12-D01 REV: A REV DATE: 29.Sep.2016 www.rfsworld.com

43F-SCF12-E01



### 4.3-10 Female Straight Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, O-Ring and 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 4.3-10 connector is an innovative, space-saving RF connection meeting all requirements even under the most severe environmental conditions and not relying on coupling nut torque. Sealing against outer conductor and jacket by means of the o-ring and 360° compression fit. Multifunctional, self-lubricating HighTech polymer assembly locks on cable corrugation, avoids electrochemical potential differences and compression-fits to the jacket.



#### **FEATURES / BENEFITS**

- Oultra 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**

Transmission Line Type	Coaxial Cable
Cable Size	1/2"
Cable Type	Foam Dielectric, Superflexible
Model Series	SCF12-50 Series
Connector Interface	4.3-10
Connector Type	OMNI FIT™ PREMIUM Straight
Sealing Method	sealing rubber
Gender	Male

#### **ELECTRICAL SPECIFICATIONS**

**Nominal Impedance** 

3rd Order IM Product @ 2x20 Watts	dBc	-163 ; typical -167
Maximum Frequency	GHz	6.0
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.02 (40.0) 1.0 < f Š 2.2 GHz: 1.03 (37.0) 2.2 < f Š 2.7 GHz: 1.03 (36.0) 2.7 < f Š 3.8 GHz: 1.05 (30.0) 3.8 < f Š 5.0 GHz: 1.11 (26.0) 5.0 < f Š 6.0 GHz: 1.15 (23.0)

#### MECHANICAL SPECIFICATIONS

Plating Outer/Inner		Tri metal alloy / Silver	
Length	mm (in)	54.1 (2.13)	
Outer Diameter	mm (in)	23.5 (0.9)	
Weight	kg (lb)	0.08 (0.17)	
Inner Contact Attachment		spring finger	
Outer Contact Attachment		clamping	
ACCESSORIES			
Wrench size front	mm (in)	22 (7/8)	
Wrench size rear	mm (in)	20 (7/8)	

#### Trimming Tool

TESTING AND ENVIRONMENTAL		
	IP68	

TRIM-SET-S12-D01, TRIM-SCF12-D01-A

#### **External Document Links**

**Notes** 

Installation Instruction

43F-SCF12-E01 REV: A REV DATE: 31.Aug.2020 www.rfsworld.com

43MH-SCF12-C03



### 4.3-10 Male Hand-Screw 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 4.3-10 connector is an innovative, space-saving RF connection meeting all requirements even under the most severe environmental conditions and not relying on coupling nut torque to meet PIM performance.

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Hand-Screw attachment mechanism that is ideal for indoor and outdoor spaces where installation must be completed using only one hand.

#### 43MH-SCF12-C03

#### **FEATURES / BENEFITS**

- Ocst 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
- Materproof to IP 68 i.e. no downtime risk, secures revenue
- RoHS (EU) compliant i.e. can be used on a global basis
- Hand-Screw Type connector could be torqued by hand, possesses special feature to prevent unwanted loosening of the coupling nut which could fit for both indoor and outdoor application where small installation space is required to accommodate one of the hands

#### **Technical Features**

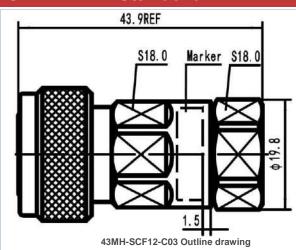
GENERAL SPECIFICATIONS			
		0 1011	
Transmission Line Type		Coaxial Cable	
Cable Size		1/2"	
Cable Type		Foam Dielectric Superflexible	
Model Series		SCF12-50 Series	
Connector Interface		4.3-10 Hand-Screw	
Connector Type		OMNI FIT™ Standard	
Sealing Method		O-ring	
Gender		Male	
ELECTRICAL SPECIFICATIONS			
Nominal Impedance	Ohm	50	
3rd Order IM Product @ 2x20 Watts	dBc	-162 ; typical -166	
Maximum Frequency	GHz	6.0	
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.03 (36.6) 1.0 < f Š 2.7 GHz: 1.04 (34.1) 2.7 < f Š 3.7 GHz: 1.08 (28.3) 3.7 < f Š 5.0 GHz: 1.10 (26.4) 5.0 < f Š 6.0 GHz: 1.25 (19.1)	
MECHANICAL SPECIFICATIONS			
Plating Outer/Inner		Trimetal/Silver	
Length	mm (in)	43.9 (1.73)	
Outer Diameter	mm (in)	25 (1)	
Weight	kg (lb)	0.072 (0.16)	
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	
TESTING AND ENVIRONMENTAL			
Waterproof Level		IP68	

43MH-SCF12-C03 REV: B REV DATE: 07.Oct.2018 www.rfsworld.com

В начало документа



### 4.3-10 Male Hand-Screw Connector for 1/2" Coaxial SuperFlexibleCable, OMNI FIT™ standard



**External Document Links** 

**Notes** 

Installation Instruction

В начало документа

43MH-SCF12-C03 REV: B REV DATE: 07.Oct.2018 www.rfsworld.com

43MP-SCF12-C03



43MP-SCF12-C03

### 4.3-10 Male Push-Pull 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 4.3-10 connector is an innovative, space-saving RF connection meeting all requirements even under the most severe environmental conditions and not relying on coupling nut torque to meet PIM performance.

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Push-Pull lock and unlock attachment mechanism that is ideal for the smallest installation spaces.

#### FEATURES / BENEFITS

- Ocst 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
- Push-Pull Type connector possesses special mechanical design to support quickest lock & unlock feature within the most confined smallest installation space where only accommodates one of the hands

#### **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	4.3-10 Push-Pull	
Connector Type	OMNI FIT™ Standard	
Sealing Method	O-ring	
Gender	Male	

#### **ELECTRICAL SPECIFICATIONS**

Nominal Impedance	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-162 ; typical -166
Maximum Frequency	GHz	6.0
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.03 (36.6) 1.0 < f Š 2.7 GHz: 1.04 (34.1) 2.7 < f Š 3.7 GHz: 1.08 (28.3) 3.7 < f Š 5.0 GHz: 1.10 (26.4) 5.0 < f Š 6.0 GHz: 1.25 (19.1)

#### **MECHANICAL SPECIFICATIONS**

Plating Outer/Inner		Trimetal/Silver
Length	mm (in)	43.9 (1.73)
Outer Diameter	mm (in)	25 (1)
Weight	kg (lb)	0.074 (0.16)
Inner Contact Attachment		Basket
Outer Contact Attachment		Rigidity impaction
1000000000		

#### **ACCESSORIES**

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

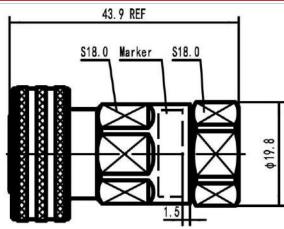
#### **TESTING AND ENVIRONMENTAL**

Waterproof Level	IP68	

43MP-SCF12-C03 REV: B REV DATE: 07.Oct.2018 www.rfsworld.com



### 4.3-10 Male Push-Pull Connector for 1/2" Coaxial SuperFlexibleCable, OMNI FIT™ standard



43MP-SCF12-C03 Outline drawing

**External Document Links** 

**Notes** 

Installation Instruction

В начало документа

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43MR-SCF12-C03



### 4.3-10 Right Angle Male Connector for 1/2" SuperFlexible Cable, 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 4.3-10 connector is an innovative, space-saving RF connection meeting all requirements even under the most severe environmental conditions and not relying on coupling nut torque to meet PIM performance.

#### 43MR-SCF12-C03

#### **FEATURES / BENEFITS**

- Ost 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

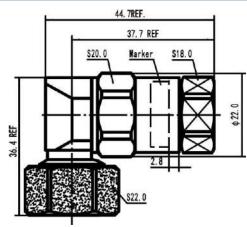
#### **Technical Features**

GENERAL SPECIFICATIONS		
Transmission Line Type		Coaxial Cable
Cable Size		1/2"
Cable Type		Foam Dielectric Coaxial
Model Series		SCF12-50 Series
Connector Interface		4.3-10 Right Angle
Connector Type		OMNI FIT™ Standard
Sealing Method		O-ring
Gender		Male
ELECTRICAL SPECIFICATIONS		
Nominal Impedance	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-162 ; typical -166
Maximum Frequency	GHz	6.0
VSWR, Return Loss	VSWR (dB)	0 < f Š 2.2 GHz: 1.04 (34.1) 2.2 < f Š 2.7 GHz: 1.06 (30.7) 2.7 < f Š 3.7 GHz: 1.13 (24.3) 3.7 < f Š 5.0 GHz: 1.20 (20.8) 5.0 < f Š 6.0 GHz: 1.33 (17.0)
MECHANICAL SPECIFICATIONS		
Plating Outer/Inner		Trimetal/Silver
Length	mm (in)	56.8 (2.23)
Outer Diameter	mm (in)	36.4 (1.4)
Weight	kg (lb)	0.106 (0.24)
Inner Contact Attachment		Spring Finger
Outer Contact Attachment		Spring O-Ring
ACCESSORIES		
Wrench size front	mm (in)	20 (13/16)
Wrench size rear	mm (in)	18 (3/4)
TESTING AND ENVIRONMENTAL		
Waterproof Level		IP68

43MR-SCF12-C03 REV: B REV DATE: 07.Oct.2018 www.rfsworld.com



### 4.3-10 Right Angle Male Connector for 1/2" SuperFlexible Cable, OMNI FIT™ standard



43MR-SCF12-C03 Outline drawing

#### **External Document Links**

**Notes** 

Application Note

Installation instruction

43MR-SCF12-C03 REV: B www.rfsworld.com REV DATE: 07.Oct.2018

43MR-SCF12-D01



### 4.3-10 Male Right Angle Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, Polymer claw and 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 4.3-10 connector is an innovative, space-saving RF connection meeting all requirements even under the most severe environmental conditions and not relying on coupling nut torque. Sealing against outer conductor and jacket by means of the polymer claw and 360° compression fit. Multifunctional, self-lubricating HighTech polymer assembly locks on cable corrugation, avoids electrochemical potential differences and compression-fits to the jacket.



#### OMNI FIT™ Premium Connectors

#### 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
- Unique NiTin 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**

GENER	KAL S	SPEC	IFICA	HONS

Transmission Line Type	Coaxial Cable
Cable Size	1/2"
Cable Type	Foam Dielectric, Superflexible
Model Series	SCF12-50 Series
Connector Interface	4.3-10
Connector Type	OMNI FIT™ PREMIUM Right Angle
Sealing Method	Polymer claw + 360° Compression
Gender	Male

#### **ELECTRICAL SPECIFICATIONS**

Nominal Impedance	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-163 ; typical -167
Maximum Frequency	GHz	6.0
VSWR, Return Loss	VSWR (dB)	0 < f Š 2.2 GHz: 1.04 (34.2) 2.2 < f Š 2.7 GHz: 1.06 (30.7) 2.7 < f Š 3.7 GHz: 1.13 (24.3) 3.7 < f Š 5.0 GHz: 1.20 (20.8) 5.0 < f Š 6.0 GHz: 1.25 (19.1)

#### MECHANICAL SPECIFICATIONS

Plating Outer/Inner	NiTin/Silver
Inner Contact Attachment	Basket
Outer Contact Attachment	360° clamping

#### ACCESSORIES

Wrench size front	mm (in)	22 (7/8)
Wrench size rear	mm (in)	22 (7/8)
Trimming Tool		TRIM-SET-S12-D01, TRIM-SCF12-D01-A

#### **TESTING AND ENVIRONMENTAL**

Waterproof Level		IP68
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Notes

Installation Instruction

43MR-SCF12-D01 REV: A REV DATE: 29.Sep.2016 www.rfsworld.com

43M-SCF12-C03



### 4.3-10 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 4.3-10 connector is an innovative, space-saving RF connection meeting all requirements even under the most severe environmental conditions and not relying on coupling nut torque to meet PIM performance.

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#### 43M-SCF12-C03

#### **FEATURES / BENEFITS**

- Ost 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

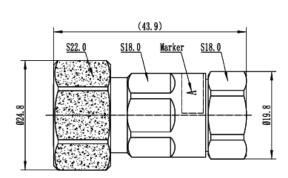
#### **Technical Features**

GENERAL SPECIFICATIONS		
Transmission Line Type		Coaxial Cable
Cable Size		1/2"
Cable Type		Foam Dielectric Superflexible
Model Series		SCF12-50 Series
Connector Interface		4.3-10
Connector Type		OMNI FIT™ Standard
Sealing Method		O-ring
Gender		Male
ELECTRICAL SPECIFICATIONS		
Nominal Impedance	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-162 ; typical -166
Maximum Frequency	GHz	6.0
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.03 (36.6) 1.0 < f Š 2.7 GHz: 1.04 (34.1) 2.7 < f Š 3.7 GHz: 1.08 (28.3) 3.7 < f Š 5.0 GHz: 1.10 (26.4) 5.0 < f Š 6.0 GHz: 1.25 (19.1)
MECHANICAL SPECIFICATIONS		
Plating Outer/Inner		Trimetal/Silver
Length	mm (in)	43.9 (1.73)
Outer Diameter	mm (in)	25 (1)
Weight	kg (lb)	0.063 (0.14)
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
TESTING AND ENVIRONMENTAL		
Waterproof Level		IP68

43M-SCF12-C03 REV: B REV DATE: 07.Oct.2018 www.rfsworld.com



### 4.3-10 Male Connector for 1/2" Coaxial SuperFlexibleCable, OMNI FIT™ standard



43M-SCF12-C03 Outline Drawing

**External Document Links** 

**Notes** 

Installation Instruction

В начало документа

43M-SCF12-C03 REV: B REV DATE: 07.Oct.2018 www.rfsworld.com

43M-SCF12-D01



### 4.3-10 Male Straight Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, Polymer claw and 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 4.3-10 connector is an innovative, space-saving RF connection meeting all requirements even under the most severe environmental conditions and not relying on coupling nut torque. Sealing against outer conductor and jacket by means of the polymer claw and 360° compression fit. Multifunctional, self-lubricating HighTech polymer assembly locks on cable corrugation, avoids electrochemical potential differences and compression-fits to the jacket.



#### OMNI FIT™ Premium Connectors

#### **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.
- Unique NiTin 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**

GEN	ERAL	SPE	CIFICA	ATIO	<b>1</b> S

Transmission Line Type	Coaxial Cable
Cable Size	1/2"
Cable Type	Foam Dielectric, Superflexible
Model Series	SCF12-50 Series
Connector Interface	4.3-10
Connector Type	OMNI FIT™ PREMIUM Straight
Sealing Method	Polymer claw + 360° Compression
Gender	Male

### ELECTRICAL SPECIFICATIONS

Nominal impedance	Onm	50
3rd Order IM Product @ 2x20 Watts	dBc	-163 ; typical -167
Maximum Frequency	GHz	6.0
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.02 (40.1) 1.0 < f Š 2.7 GHz: 1.03 (36.6) 2.7 < f Š 3.7 GHz: 1.06 (30.7) 3.7 < f Š 5.0 GHz: 1.15 (23.1) 5.0 < f Š 6.0 GHz: 1.25 (19.1)

#### MECHANICAL SPECIFICATIONS

Plating Outer/Inner	NiTin/Silver
Inner Contact Attachment	Basket
Outer Contact Attachment	360° clamping

#### **ACCESSORIES**

ACCESSORIES		
Wrench size front	mm (in)	22 (7/8)
Wrench size rear	mm (in)	22 (7/8)
Trimming Tool		TRIM-SET-S12-D01, TRIM-SCF12-D01-A
TESTING AND ENVIRONMENTAL		

#### TESTING AND ENVIRONMENTAL

Waterproof Level		IP68
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<b>External Document Links</b>	Notes

43M-SCF12-D01 REV: A REV DATE: 29.Sep.2016 www.rfsworld.com

Installation Instruction

43M-SCF12-E01



### 4.3-10 Male Straight Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, O-Ring and 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 4.3-10 connector is an innovative, space-saving RF connection meeting all requirements even under the most severe environmental conditions and not relying on coupling nut torque. Sealing against outer conductor and jacket by means of the o-ring and 360° compression fit. Multifunctional, self-lubricating HighTech polymer assembly locks on cable corrugation, avoids electrochemical potential differences and compression-fits to the jacket



Page 1 of 2

#### FEATURES / BENEFITS

- Outra 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**

Transmission Line Type	Coaxial Cable
Cable Size	1/2"
Cable Type	Foam Dielectric, Superflexible
Model Series	SCF12-50 Series
Connector Interface	4.3-10
Connector Type	OMNI FIT™ PREMIUM Straight
Sealing Method	Polymer claw + 360° Compression
Gender	Male

#### **ELECTRICAL SPECIFICATIONS**

Nominal Impedance	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-163 ; typical -167
Maximum Frequency	GHz	6.0
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.02 (40.0) 1.0 < f Š 2.2 GHz: 1.03 (37.0) 2.2 < f Š 2.7 GHz: 1.03 (36.0) 2.7 < f Š 3.8 GHz: 1.05 (30.0) 3.8 < f Š 5.0 GHz: 1.11 (26.0) 5.0 < f Š 6.0 GHz: 1.15 (23.0)

#### MECHANICAL SPECIFICATIONS

Plating Outer/Inner		Tri metal alloy / Silver
Length	mm (in)	54.1 (2.13)
Outer Diameter	mm (in)	22.5 (0.89)
Weight	kg (lb)	0.099 (0.218)
Inner Contact Attachment		Basket
Outer Contact Attachment		360° clamping

#### **ACCESSORIES**

Wrench size front	mm (in)	22 (7/8)
Wrench size rear	mm (in)	20 (7/8)
Trimming Tool		TRIM-SET-S12-D01, TRIM-SCF12-D01-A
TESTING AND ENVIDONMENTAL		

#### TESTING AND ENVIRONMENTAL

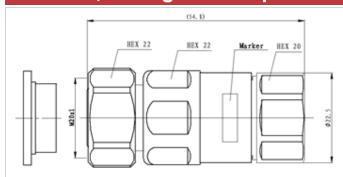
В начало документа

Waterproof Level		IP68
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43M-SCF12-E01 REV: A REV DATE: 18.Feb.2020 www.rfsworld.com



# 4.3-10 Male Straight Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, O-Ring and compression sealing



#### **External Document Links**

**Notes** 

Installation Instruction

В начало документа

43M-SCF12-E01 REV: A REV DATE: 18.Feb.2020 www.rfsworld.com

716F-SCF12-C02



### 7-16 DIN Female Connector for 1/2" Coaxial SuperFlexible Cable, 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**

- Ocst 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



OMNI FIT™ Standard Connectors

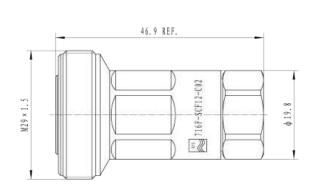
#### **Technical Features**

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 DIN
Connector Type		OMNI FIT™ Standard
Sealing Method		O-ring
Gender		Female
ELECTRICAL SPECIFICATIONS		
Nominal Impedance	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-159 typical
Maximum Frequency	GHz	3.7
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.03 (36.6) 1.0 < f Š 2.7 GHz: 1.04 (34.1) 2.7 < f Š 3.7 GHz: 1.08 (28.3)
MECHANICAL SPECIFICATIONS		
Plating Outer/Inner		Trimetal/Silver
Length	mm (in)	46.9 (1.85)
Outer Diameter	mm (in)	29 (1.14)
Weight	kg (lb)	0.08 (0.18)
Inner Contact Attachment		Basket
Outer Contact Attachment		Rigidity impaction
ACCESSORIES		
Wrench size front	mm (in)	18 (7/10)
Wrench size rear	mm (in)	18 (7/10)
TESTING AND ENVIRONMENTAL		
Waterproof Level		IP68

716F-SCF12-C02 REV: D REV DATE: 11.Dec.2013 www.rfsworld.com



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



#### **External Document Links**

**Notes** 

Installation instruction

В начало документа

716F-SCF12-C02 REV: D REV DATE: 11.Dec.2013 www.rfsworld.com

716F-SCF12-C03



### 7-16 Female 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.

#### 716F-SCF12-C03

#### **FEATURES / BENEFITS**

- Ost 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

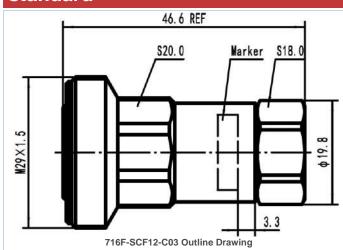
#### **Technical Features**

	Coaxial Cable
	1/2"
	Foam Dielectric Superflexible
	SCF12-50 Series
	7-16
	OMNI FIT™ Standard
	O-ring
	Female
Ohm	50
dBc	-157 ; typical -160
GHz	6.0
VSWR (dB)	0 < f Š 1.0 GHz: 1.03 (36.6) 1.0 < f Š 2.7 GHz: 1.04 (34.1) 2.7 < f Š 3.7 GHz: 1.08 (28.3) 3.7 < f Š 5.0 GHz: 1.15 (23.1) 5.0 < f Š 6.0 GHz: 1.25 (19.1)
	Trimetal/Silver
mm (in)	46.6 (1.83)
mm (in) mm (in)	46.6 (1.83) 29 (1.14)
` '	` '
mm (in)	29 (1.14)
mm (in)	29 (1.14) 0.082 (0.18)
mm (in)	29 (1.14) 0.082 (0.18) Basket
mm (in)	29 (1.14) 0.082 (0.18) Basket
mm (in) kg (lb)	29 (1.14) 0.082 (0.18) Basket Rigidity impaction
mm (in) kg (lb) mm (in)	29 (1.14) 0.082 (0.18) Basket Rigidity impaction
mm (in) kg (lb) mm (in)	29 (1.14) 0.082 (0.18) Basket Rigidity impaction  20 (0.79) 18 (0.71)
	dBc GHz

716F-SCF12-C03 REV: B REV DATE: 07.Oct.2018 www.rfsworld.com



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



**External Document Links** 

**Notes** 

Installation Instruction

В начало документа

**716F-SCF12-C03** REV: B REV DATE: 07.Oct.2018 www.rfsworld.com

716F-SCF12-D01



#### 7-16 DIN Female Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium,

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 threaded gasket and 360 u compression fit. Multifunctional, self-lubricating HighTech polymer assembly locks on cable corrugation, avoids electrochemical potential differences and compression-fits to the jacket.



#### OMNI FIT™ Premium Connectors

#### **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  $^{\text{\tiny{TM}}}$  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
- Unique NiTin 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**

<b>GENERAL</b>	<b>SPECIFICATIONS</b>	
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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 DIN
Connector Type	OMNI FIT™ PREMIUM Straight
Sealing Method	Threaded Gasket + 360° Compression
Gender	Female

#### **ELECTRICAL SPECIFICATIONS**

Nominal Impedance	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-163; typical -167
Maximum Frequency	GHz	3.7
VSWR, Return Loss	,	0 < f Š 1.0 GHz: 1.02 (40.0) 1.0 < f Š 2.7 GHz: 1.03 (36.6) 2.7 < f Š 3.7 GHz: 1.06 (30.7)

#### **MECHANICAL SPECIFICATIONS**

Plating Outer/Inner		NiTin/Silver
Length	mm (in)	486 (1.9)
Outer Diameter	mm (in)	28.8 (1.1)
Weight	kg (lb)	0.11 (0.24)
Inner Contact Attachment		Spring Finger
Outer Contact Attachment		360° clamping
10070007170		

#### **ACCESSORIES**

Wrench size front	mm (in)	22 (7/8)
Wrench size rear	mm (in)	22 (7/8)
Trimming Tool		TRIM-12-S06 TRIM-SCF12-D01-A
TESTING AND ENVIRONMENTAL		

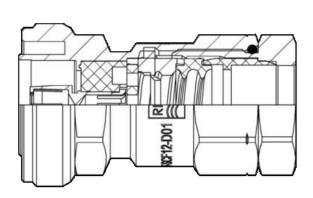
TESTING AND ENVIRONMENTAL		
Waterproof Level	IP68	

716F-SCF12-D01 REV: G **REV DATE: 10.Jan.2014** www.rfsworld.com 716F-SCF12-D01



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### 7-16 DIN Female Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium,



**External Document Links** 

**Notes** 

Installation Instruction

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716MR-SCF12-C02



### 7-16 DIN Male Right Angle 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.

# 9-60

#### OMNI FIT™ Standard Connectors

Page 1 of 2

#### **FEATURES / BENEFITS**

- Ost 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

#### **Technical Features**

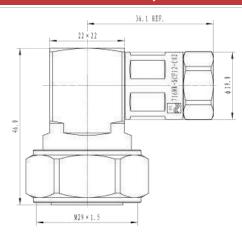
В начало документа

GENERAL SPECIFICATIONS				
		0		
Transmission Line Type		Coaxial Cable		
Cable Size		1/2"		
Cable Type		Foam Dielectric Superflexible		
Model Series		SCF12-50 Series		
Connector Interface		7-16 DIN		
Connector Type		OMNI FIT™ Standard Right Angle		
Sealing Method		O-ring		
Gender		Male		
ELECTRICAL SPECIFICATIONS				
Nominal Impedance	Ohm	50		
3rd Order IM Product @ 2x20 Watts	dBc	-159 typical		
Maximum Frequency	GHz	3.7		
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.04 (34.1) 1.0 < f Š 2.2 GHz: 1.07 (29.4) 2.2 < f Š 2.7 GHz: 1.09 (27.3) 2.7 < f Š 3.7 GHz: 1.13 (24.3)		
MECHANICAL SPECIFICATIONS				
Plating Outer/Inner		Trimetal/Silver		
Length	mm (in)	48 (1.9)		
Outer Diameter	mm (in)	37 (1.45)		
Weight	kg (lb)	0.2 (0.44)		
Inner Contact Attachment		Basket		
Outer Contact Attachment		Rigidity impaction		
ACCESSORIES				
Wrench size front	mm (in)	18 (7/10)		
Wrench size rear	mm (in)	18 (7/10)		
TESTING AND ENVIRONMENTAL				
Waterproof Level		IP68		

716MR-SCF12-C02 REV: C REV DATE: 11.Dec.2013 www.rfsworld.com



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



#### **External Document Links**

**Notes** 

Installation instruction

716MR-SCF12-C02 REV: C REV DATE: 11.Dec.2013 www.rfsworld.com

716MR-SCF12-C03



#### 7-16 Male Right Angle 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 connectorcable 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

#### 716MR-SCF12-C03

#### **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

#### **Technical Features**

	ICATIONS	

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 Right Angle	

#### **ELECTRICAL SPECIFICATIONS**

Nominal Impedance	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-157 ; typical -160
Maximum Frequency	GHz	6.0
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.04 (34.1) 1 < f Š 2.2 GHz: 1.07 (29.4) 2.2 < f Š 2.7 GHz: 1.09 (27.3) 2.7 < f Š 3.7 GHz: 1.13 (24.3) 3.7 < f Š 5.0 GHz: 1.25 (19.1) 5.0 < f Š 6.0 GHz: 1.30 (17.7)

#### **MECHANICAL SPECIFICATIONS**

Plating Outer/Inner		Trimetal/Silver
Length	mm (in)	53.7 (2.11)
Outer Diameter	mm (in)	38.7 (1.52)
Weight	kg (lb)	0.136 (0.3)
Inner Contact Attachment		Basket
Outer Contact Attachment		Rigidity impaction
ACCESSORIES		

ACCECCATE		
Wrench size front	mm (in)	18 (3/4)
Wrench size rear	mm (in)	20 (13/16)
Trimming Tool		TRIM-SET-S12-C02

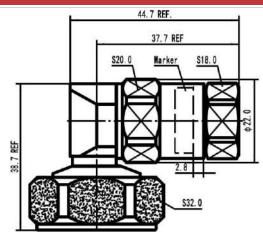
#### TESTING AND ENVIRONMENTAL

TESTING / INTESTINATION		
Waterproof Level	IP68	

716MR-SCF12-C03 REV: B REV DATE: 07.Oct.2018 www.rfsworld.com



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



716MR-SCF12-C03 Outline drawing

**External Document Links** 

**Notes** 

Application Note

Installation Instruction

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716MR-SCF12-D01



### 7-16 DIN Male Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, Right Angle, threaded gasket 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 threaded gasket and 360° compression fit. Multifunctional, self-lubricating HighTech polymer assembly locks on cable corrugation, avoids electrochemical potential differences and compression-fits to the jacket.



#### OMNI FIT™ Premium Connectors

#### **FEATURES / BENEFITS**

- Outra 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
- Unique NiTin 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**

	SPECI	

Transmission Line Type	Coaxial Cable
Cable Size	1/2"
Cable Type	Foam Dielectric Superflexible
Model Series	SCF12-50 Series
Connector Interface	7-16 DIN
Connector Type	OMNI FIT™ PREMIUM Right Angle
Sealing Method	Threaded Gasket + 360° Compression
Gender	Male

NiTin/Silver

#### **ELECTRICAL SPECIFICATIONS**

Nominal Impedance	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-163; typical -167
Maximum Frequency	GHz	3.7
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.03 (36.6) 1.0 < f Š 2.2 GHz: 1.04 (34.2) 2.2 < f Š 2.7 GHz: 1.06 (30.7) 2.7 < f Š 3.7 GHz: 1.13 (24.3)

#### **MECHANICAL SPECIFICATIONS**

mm (in)	67 (2.64)
mm (in)	42.7 (1.68)
kg (lb)	0.2 (0.44)
	Spring Finger
	360° clamping
	mm (in)

#### **ACCESSORIES**

Plating Outer/Inner

Wrench size front	mm (in)	22 (7/8)
Wrench size rear	mm (in)	18 (7/10)

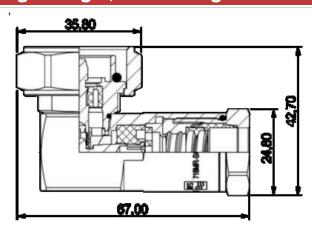
#### TESTING AND ENVIRONMENTAL

Waterproof Level	IP6	8

716MR-SCF12-D01 REV: F REV DATE: 10.Jan.2014 www.rfsworld.com



# 7-16 DIN Male Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, Right Angle, threaded gasket and 360° compression sealing



**External Document Links** 

**Notes** 

Installation Instruction

В начало документа

716MR-SCF12-D01 REV: F REV DATE: 10.Jan.2014 www.rfsworld.com

716M-SCF12-C02



### 7-16 DIN 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**

- Ocst 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



OMNI FIT™ Standard Connectors

Page 1 of 2

#### **Technical Features**

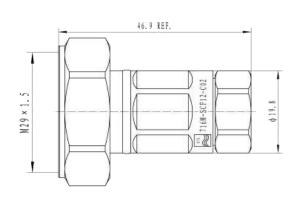
В начало документа

CENERAL ORGANICATIONS				
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 DIN		
Connector Type		OMNI FIT™ Standard		
Sealing Method		O-ring		
Gender		Male		
ELECTRICAL SPECIFICATIONS				
Nominal Impedance	Ohm	50		
3rd Order IM Product @ 2x20 Watts	dBc	-159 typical		
Maximum Frequency	GHz	3.7		
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.03 (36.6) 1.0 < f Š 2.7 GHz: 1.04 (34.1) 2.7 < f Š 3.7 GHz: 1.08 (28.3)		
MECHANICAL SPECIFICATIONS				
Plating Outer/Inner		Trimetal/Silver		
Length	mm (in)	46.9 (1.85)		
Outer Diameter	mm (in)	36 (1.42)		
Weight	kg (lb)	0.1 (0.22)		
Inner Contact Attachment		Basket		
Outer Contact Attachment		Rigidity impaction		
ACCESSORIES				
Wrench size front	mm (in)	18 (7/10)		
Wrench size rear	mm (in)	18 (7/10)		
TESTING AND ENVIRONMENTAL				
Waterproof Level		IP68		
		·		

716M-SCF12-C02 REV: C REV DATE: 11.Dec.2013 www.rfsworld.com



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



#### **External Document Links**

**Notes** 

Installation instruction

В начало документа

716M-SCF12-C02 REV: C REV DATE: 11.Dec.2013 www.rfsworld.com

716M-SCF12-C03



### 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**

- Ocst 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**

<b>GENERAL</b>	<b>SPECIFICATIONS</b>
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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	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-157 ; typical -160
Maximum Frequency	GHz	6.0
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.03 (36.6) 1.0 < f Š 2.7 GHz: 1.04 (34.1) 2.7 < f Š 3.7 GHz: 1.08 (28.3) 3.7 < f Š 5.0 GHz: 1.15 (23.1) 5.0 < f Š 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)
Weight	kg (lb)	0.088 (0.194)
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

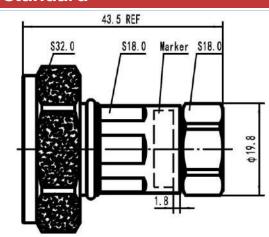
#### TESTING AND ENVIRONMENTAL

Waterproof Level	IP68	

716M-SCF12-C03 REV: B REV DATE: 07.Oct.2018 www.rfsworld.com



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



716M-SCF12-C03 Outline drawing

**External Document Links** 

**Notes** 

Installation Instruction

В начало документа

716M-SCF12-C03 REV: B REV DATE: 07.Oct.2018 www.rfsworld.com

716M-SCF12-D01



## 7-16 DIN Male Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, Straight, threaded gasket 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 threaded gasket and 360° compression fit. Multifunctional, self-lubricating HighTech polymer assembly locks on cable corrugation, avoids electrochemical potential differences and compression-fits to the jacket.



#### OMNI FIT™ Premium Connectors

#### **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
- Unique NiTin 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**

GEN	ERAL	SPEC	IFIC <i>P</i>	ATIONS

CENTER OF ECH TOXITORS	
Transmission Line Type	Coaxial Cable
Cable Size	1/2"
Cable Type	Foam Dielectric  Superflexible
Model Series	SCF12-50 Series
Connector Interface	7-16 DIN
Connector Type	OMNI FIT™ PREMIUM Straight
Sealing Method	Threaded Gasket + 360° Compression
Gender	Male

#### **ELECTRICAL SPECIFICATIONS**

Nominai impedance	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-163; typical -167
Maximum Frequency	GHz	3.7
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.02 (40.0) 1.0 < f Š 2.7 GHz: 1.03 (36.6) 2.7 < f Š 3.7 GHz: 1.06 (30.7)

#### **MECHANICAL SPECIFICATIONS**

Plating Outer/Inner		NiTin/Silver
Length	mm (in)	47.2 (1.9)
Outer Diameter	mm (in)	35.8 (1.4)
Weight	kg (lb)	0.11 (0.24)
Inner Contact Attachment		Spring Finger
Outer Contact Attachment		360° clamping

#### **ACCESSORIES**

Wrench size front	mm (in)	22 (7/8)
Wrench size rear	mm (in)	22 (7/8)
Trimming Tool		TRIM-12-S06 TRIM-SCF12-D01-A
TECTING AND ENVIRONMENTAL		

#### TESTING AND ENVIRONMENTAL

TEOTING AND ENVIRONMENTAL		
Waterproof Level	IP68	

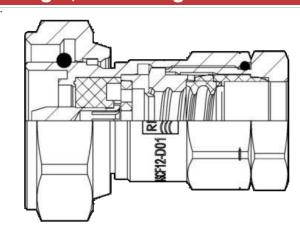
716M-SCF12-D01 REV: E REV DATE: 08-Feb-2012 www.rfsworld.com

716M-SCF12-D01



Page 2 of 2

# 7-16 DIN Male Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, Straight, threaded gasket and 360° compression sealing



**External Document Links** 

**Notes** 

Installation Instruction

В начало документа

716M-SCF12-D01 REV: E REV DATE: 08-Feb-2012 www.rfsworld.com

716M-SCF12-E01



## 7-16 DIN Male Connector for 1/2" 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 o-ring and 360° compression fit.



#### **FEATURES / BENEFITS**

- (a) 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**

<b>GENERAL</b>	SPECIF	ICATIONS
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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 DIN
Connector Type		OMNI FIT™ PREMIUM Straight
Sealing Method		O-ring + 360° Compression
Gender		Male
ELECTRICAL SPECIFICATIONS		
Nominal Impedance	Ohm	50

3rd Order IM Product @ 2x20 Watts	dBc	-163 ; typical -167
Maximum Frequency	GHz	6
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.02 (40.0) 1.0 < f Š 2.2 GHz: 1.03 (37.0) 2.2 < f Š 2.7 GHz: 1.03 (36.0) 2.7 < f Š 3.8 GHz: 1.06 (31.0) 3.8 < f Š 5.0 GHz: 1.11 (26.0) 5.0 < f Š 6.0 GHz: 1.15 (23.0)

#### **MECHANICAL SPECIFICATIONS**

WECHANICAL SPECIFICATIONS		
Plating Outer/Inner		Tri metal alloy / Silver
Length	mm (in)	53.9 (2.12)
Outer Diameter	mm (in)	22.5 (0.89)
Weight	kg (lb)	0.134 (0.3)
Inner Contact Attachment		Spring Finger
Outer Contact Attachment		360° clamping
ACCESSORIES		

#### **ACCESSORIES**

Wrench size front	mm (in)	32 / 24
Wrench size rear	mm (in)	20
Trimming Tool		TRIM-12-S06 TRIM-SCF12-D01-A

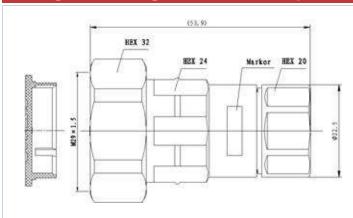
#### **TESTING AND ENVIRONMENTAL**

Waterproof Level	IP68
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716M-SCF12-E01 REV: A REV DATE: 18-Feb-2020 www.rfsworld.com



# 7-16 DIN Male Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, Straight, O-Ring and 360° compression sealing



**External Document Links** 

**Notes** 

Installation Instruction

В начало документа

716M-SCF12-E01 REV: A REV DATE: 18-Feb-2020 www.rfsworld.com

NF-SCF12-C02



### N Female Connector for 1/2" Coaxial SuperFlexible Cable, 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 N connector is one of the most common RF connector types and meets all requirements even under the most severe environmental conditions.

### OMNI FIT™ Standard Connectors

Page 1 of 2

#### **FEATURES / BENEFITS**

- Ocst 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

#### **Technical Features**

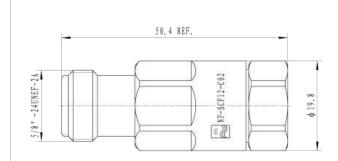
В начало документа

GENERAL SPECIFICATIONS			
Transmission Line Type		Coaxial Cable	
Cable Size		1/2"	
Cable Type		Foam Dielectric Superflexible	
Model Series		SCF12-50 Series	
Connector Interface		N	
Connector Type		OMNI FIT™ Standard	
Sealing Method		O-ring	
Gender		Female	
ELECTRICAL SPECIFICATIONS			
Nominal Impedance	Ohm	50	
3rd Order IM Product @ 2x20 Watts	dBc	-159 typical	
Maximum Frequency	GHz	3.7	
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.03 (36.6) 1.0 < f Š 2.7 GHz: 1.04 (34.1) 2.7 < f Š 3.7 GHz: 1.08 (28.3)	
MECHANICAL SPECIFICATIONS			
Plating Outer/Inner		Trimetal/Silver	
Length	mm (in)	50.4 (1.99)	
Outer Diameter	mm (in)	19.8 (0.78)	
Weight	kg (lb)	0.06 (0.13)	
Inner Contact Attachment		Basket	
Outer Contact Attachment		Rigidity impaction	
ACCESSORIES			
Wrench size front	mm (in)	18 (7/10)	
Wrench size rear	mm (in)	18 (7/10)	
TESTING AND ENVIRONMENTAL			
Waterproof Level		IP68	

NF-SCF12-C02 REV: B REV DATE: 11.Dec.2013 www.rfsworld.com



## N Female Connector for 1/2" Coaxial SuperFlexible Cable, OMNI FIT™ standard



### **External Document Links**

**Notes** 

Installation instruction

В начало документа

NF-SCF12-C02 REV: B REV DATE: 11.Dec.2013 www.rfsworld.com

NF-SCF12-C03



### N Female 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.

#### **FEATURES / BENEFITS**

- Ost 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



NF-SCF12-C03

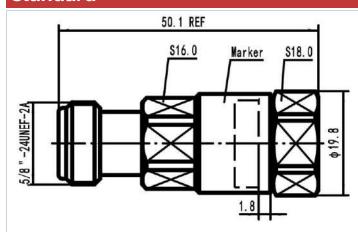
#### **Technical Features**

GENERAL SPECIFICATIONS			
Transmission Line Type		Coaxial Cable	
Cable Size		1/2"	
Cable Type		Foam Dielectric Superflexible	
Model Series		SCF12-50 Series	
Connector Interface		N	
Connector Type		OMNI FIT™ Standard	
Sealing Method		O-ring	
Gender		Female	
ELECTRICAL SPECIFICATIONS			
Nominal Impedance	Ohm	50	
3rd Order IM Product @ 2x20 Watts	dBc	-157 ; typical -160	
Maximum Frequency	GHz	6.0	
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.03 (36.6) 1.0 < f Š 2.7 GHz: 1.04 (34.1) 2.7 < f Š 3.7 GHz: 1.08 (28.3) 3.7 < f Š 5.0 GHz: 1.15 (23.1) 5.0 < f Š 6.0 GHz: 1.25 (19.1)	
MECHANICAL SPECIFICATIONS			
Plating Outer/Inner		Trimetal/Silver	
Length	mm (in)	50.1 (2)	
Outer Diameter	mm (in)	19.8 (0.78)	
Weight	kg (lb)	0.055 (0.12)	
Inner Contact Attachment		Basket	
Outer Contact Attachment		Rigidity impaction	
ACCESSORIES			
Wrench size front	mm (in)	16 (0.63)	
Wrench size rear	mm (in)	18 (0.71)	
Trimming Tool		TRIM-SET-S12-C02	
TESTING AND ENVIRONMENTAL			
Waterproof Level		IP68	

NF-SCF12-C03 REV: B REV DATE: 07.Oct.2018 www.rfsworld.com



## N Female Connector for 1/2" Coaxial SuperFlexibleCable, OMNI FIT™ standard



NF-SCF12-C03 Outline drawing

**External Document Links** 

**Notes** 

Installation Instruction

В начало документа

NF-SCF12-C03 REV: B REV DATE: 07.Oct.2018 www.rfsworld.com

NF-SCF12-D01



### N Female Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, Straight, threaded gasket 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 connectorcable interface while simplifying and speeding up connector attachment.

All RFS 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 threaded gasket and 360° compression fit. Multifunctional, self-lubricating HighTech polymer assembly locks on cable corrugation, avoids electrochemical potential differences and compression-fits to the jacket.;



OMNI FIT™ Premium Connectors

#### **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
- Unique NiTin plating i.e. extreme resistance against corrosion even under hardest climatic and environmental
- 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**

		ATIONS

SEREIGE OF ESTITIONS			
Transmission Line Type	Coaxial Cable		
Cable Size	1/2"		
Cable Type	Foam Dielectric  Superflexible		
Model Series	SCF12-50 Series		
Connector Interface	N		
Connector Type	OMNI FIT™ PREMIUM Straight		
Sealing Method	Threaded Gasket + 360° Compression		
Gender	Female		

### **ELECTRICAL SPECIFICATIONS**

Nominal impedance	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-156 ; typical -162
Maximum Frequency	GHz	3.7
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.02 (40.0) 1.0 < f Š 2.7 GHz: 1.03 (36.6) 2.7 < f Š 3.7 GHz: 1.08 (28.3)

#### **MECHANICAL SPECIFICATIONS**

Plating Outer/Inner		NiTin/Silver
Length	mm (in)	52.2 (2.1)
Outer Diameter	mm (in)	24.8 (1)
Weight	kg (lb)	0.09 (0.2)
Inner Contact Attachment		Spring Finger
Outer Contact Attachment		360° clamping
ACCESSORIES		

#### **ACCESSORIES**

Wrench size front	mm (in)	22 (7/8)
Wrench size rear	mm (in)	22 (7/8)
Trimming Tool		TRIM-12-S06 TRIM-SCF12-D01-A
TESTING AND ENVIRONMENTAL		

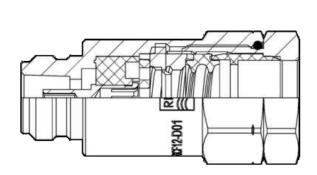
TEOTING AND ENVIRONMENTAL		
Waterproof Level	IP68	

NF-SCF12-D01 REV: F **REV DATE: 10.Jan.2014** www.rfsworld.com NF-SCF12-D01



Page 2 of 2

# N Female Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, Straight, threaded gasket and 360° compression sealing



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**Notes** 

Installation Instruction

В начало документа

NF-SCF12-D01 REV: F REV DATE: 10.Jan.2014 www.rfsworld.com

NMR-SCF12-D01



### N Male Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, Right Angle, threaded gasket 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 N connector meets all technical requirements and covers high frequencies as well as legacy applications. Sealing against outer conductor and jacket by means of threaded gasket and 360° compression fit. Multifunctional, self-lubricating HighTech polymer assembly locks on cable corrugation, avoids electrochemical potential differences and compression-fits to the jacket.



### OMNI FIT™ Premium Connectors

#### **FEATURES / BENEFITS**

- Outra 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
- Unique NiTin 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**

GEN	ERAL	SPEC	IFIC <i>P</i>	ATIONS

CENERAL OF ECH FOATIONS			
Transmission Line Type	Coaxial Cable		
Cable Size	1/2"		
Cable Type	Foam Dielectric Superflexible		
Model Series	SCF12-50 Series		
Connector Interface	N		
Connector Type	OMNI FIT™ PREMIUM Straight		
Sealing Method	Threaded Gasket + 360° Compression		
Gender	Male		

NiTin/Silver

#### **ELECTRICAL SPECIFICATIONS**

Nominal Impedance	Ohm	50
3rd Order IM Product @ 2x20 Watts	dBc	-156; typical -162
Maximum Frequency	GHz	3.7
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.04 (34.2) 1.0 < f Š 2.0 GHz: 1.04 (34.2) 2.0 < f Š 2.7 GHz: 1.06 (30.7) 2.7 < f Š 3.7 GHz: 1.13 (24.3)

#### MECHANICAL SPECIFICATIONS

mm (in)	60.2 (2.37)
mm (in)	496 (1.95)
kg (lb)	0.17 (0.37)
	Spring Finger
	360° clamping
_	mm (in)

#### **ACCESSORIES**

Plating Outer/Inner

Wrench size front	mm (in)	22 (7/8)
Wrench size rear	mm (in)	18 (7/10)

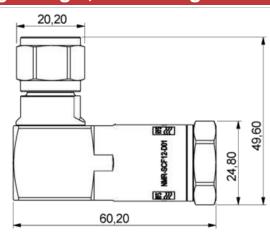
#### **TESTING AND ENVIRONMENTAL**

Waterproof Level IP68
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NMR-SCF12-D01 REV: F REV DATE: 09.Dec.2013 www.rfsworld.com



# N Male Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, Right Angle, threaded gasket and 360° compression sealing



**External Document Links** 

**Notes** 

Installation Instruction

В начало документа

NMR-SCF12-D01 REV: F REV DATE: 09.Dec.2013 www.rfsworld.com

NM-SCF12-C02



### N Male Connector for 1/2" Coaxial SuperFlexible Cable, 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 N connector is one of the most common RF connector types and meets all requirements even under the most severe environmental conditions.

OMNI FIT™ Standard Connectors

#### **FEATURES / BENEFITS**

- Ost 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

#### **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		N		
Connector Type		OMNI FIT™ Standard		
Sealing Method		O-ring		
Gender		Male		
ELECTRICAL SPECIFICATIONS				
Nominal Impedance	Ohm	50		
3rd Order IM Product @ 2x20 Watts	dBc	-159 typical		
Maximum Frequency	GHz	3.7		
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.03 (36.6) 1.0 < f Š 2.7 GHz: 1.04 (34.1) 2.7 < f Š 3.7 GHz: 1.08 (28.3)		
MECHANICAL SPECIFICATIONS				
Plating Outer/Inner		Trimetal/Silver		
Length	mm (in)	51.3 (2.02)		
Outer Diameter	mm (in)	19.8 (0.78)		
Weight	kg (lb)	0.07 (0.15)		
Inner Contact Attachment		Basket		
Outer Contact Attachment		Rigidity impaction		
ACCESSORIES				
Wrench size front	mm (in)	18 (7/10)		
Wrench size rear	mm (in)	18 (7/10)		
TESTING AND ENVIRONMENTAL				
Waterproof Level		IP68		

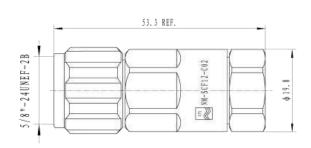
NM-SCF12-C02 REV: B REV DATE: 11.Dec.2013 www.rfsworld.com

NM-SCF12-C02



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## N Male Connector for 1/2" Coaxial SuperFlexible Cable, OMNI FIT™ standard



#### **External Document Links**

**Notes** 

Installation instruction

В начало документа

NM-SCF12-C02 REV: B REV DATE: 11.Dec.2013 www.rfsworld.com

NM-SCF12-C03



### N 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.

#### **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
- $\Theta$ 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



#### NM-SCF12-C03

#### **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		N		
Connector Type		OMNI FIT™ Standard		
Sealing Method		O-ring		
Gender		Male		
ELECTRICAL SPECIFICATIONS				
Nominal Impedance	Ohm	50		

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

#### **MECHANICAL SPECIFICATIONS**

Plating Outer/Inner		Trimetal/Silver
Length	mm (in)	51.3 (2.02)
Outer Diameter	mm (in)	19.8 (0.78)
Weight	kg (lb)	0.064 (0.14)
Inner Contact Attachment		Basket
Outer Contact Attachment		Rigidity impaction
ACCESSORIES		

#### ACCESSORIES

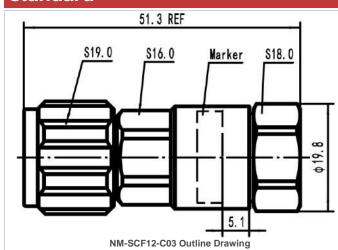
Wrench size front	mm (in)	16 (0.63)
Wrench size rear	mm (in)	18 (0.71)
Trimming Tool		TRIM-SET-S12-C02
TESTING AND ENVIRONMENTAL		

Waterproof Level	IP68

NM-SCF12-C03 REV: B REV DATE: 07.Oct.2018 www.rfsworld.com



## N Male Connector for 1/2" Coaxial SuperFlexibleCable, OMNI FIT™ standard



**External Document Links** 

**Notes** 

Installation Instruction

В начало документа

NM-SCF12-C03 REV: B REV DATE: 07.Oct.2018 www.rfsworld.com

NM-SCF12-D01



### N Male Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, Straight, threaded gasket 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 connectorcable interface while simplifying and speeding up connector attachment.

All RFS 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 threaded gasket and 360° compression fit. Multifunctional, self-lubricating HighTech polymer assembly locks on cable corrugation, avoids electrochemical potential differences and compression-fits to the jacket.;



#### OMNI FIT™ Premium Connectors

#### **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
- Unique NiTin 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**

GEN	ERAL	SPEC	IFIC <i>i</i>	ATIONS

SERENCE OF ESTITION				
Transmission Line Type	Coaxial Cable			
Cable Size	1/2"			
Cable Type	Foam Dielectric  Superflexible			
Model Series	SCF12-50 Series			
Connector Interface	N			
Connector Type	OMNI FIT™ PREMIUM Straight			
Sealing Method	Threaded Gasket + 360° Compression			
Gender	Male			

### **ELECTRICAL SPECIFICATIONS**

Nominal Impedance 3rd Order IM Product @ 2x20 Watts	Ohm dBc	50 -156 ; typical -162
Maximum Frequency	GHz	6.0
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.02 (40.0) 1.0 < f Š 2.7 GHz: 1.03 (36.6) 2.7 < f Š 3.7 GHz: 1.08 (28.3) 3.7 < f Š 5.0 GHz: 1.10 (26.4) 5.0 < f Š 6.0 GHz: 1.11 (25.7)

#### MECHANICAL SPECIFICATIONS

Plating Outer/Inner		NiTin/Silver
Length	mm (in)	52.5 (2.1)
Outer Diameter	mm (in)	24.8 (1)
Weight	kg (lb)	0.09 (0.2)
Inner Contact Attachment		Spring Finger
Outer Contact Attachment		360° clamping
ACCESSORIES		

#### **ACCESSORIES**

Wrench size front	mm (in)	22 (7/8)
Wrench size rear	mm (in)	22 (7/8)
Trimming Tool		TRIM-12-S06 TRIM-SCF12-D01-A

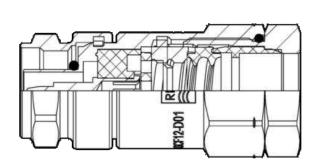
#### TESTING AND ENVIRONMENTAL

Waterproof Level		IP68
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NM-SCF12-D01 REV: C **REV DATE: 22.Jan.2019** www.rfsworld.com NM-SCF12-D01



# N Male Connector for 1/2" Coaxial Cable, OMNI FIT™ Premium, Straight, threaded gasket and 360° compression sealing



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**Notes** 

Installation Instruction

NM-SCF12-D01 REV: C REV DATE: 22.Jan.2019 www.rfsworld.com

NM-SCF12-E01



## N Male Connector for 1/2" 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 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**

- Oultra 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
- 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**

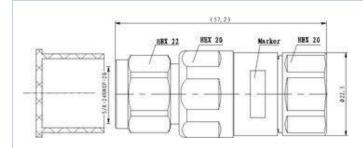
GENERAL SPECIFICATIONS				
Transmission Line Type		Coaxial Cable		
Cable Size		1/2"		
Cable Type		Foam Dielectric  Superflexible		
Model Series		SCF12-50 Series		
Connector Interface		N		
Connector Type		OMNI FIT™ PREMIUM Straight		
Sealing Method		O-ring + 360° Compression		
Gender		Male		
ELECTRICAL SPECIFICATIONS				
Nominal Impedance	Ohm	50		
3rd Order IM Product @ 2x20 Watts	dBc	-158 ; typical -162		
Maximum Frequency	GHz	6.0		
VSWR, Return Loss	VSWR (dB)	0 < f Š 1.0 GHz: 1.02 (40.0) 1.0 < f Š 2.2 GHz: 1.03 (37.0) 2.2 < f Š 2.7 GHz: 1.03 (36.0) 2.7 < f Š 3.8 GHz: 1.07 (30.0) 3.8 < f Š 5.0 GHz: 1.11 (26.0) 5.0 < f Š 6.0 GHz: 1.15 (23.0)		
MECHANICAL SPECIFICATIONS				
Plating Outer/Inner		Tri metal alloy / Silver		
Length	mm (in)	57.2 (2.25)		
Outer Diameter	mm (in)	22.5 (0.89)		
Weight	kg (lb)	0.133 (0.29)		
Inner Contact Attachment		Spring Finger		
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		

NM-SCF12-E01 REV: A REV DATE: 18.Feb.2020 www.rfsworld.com

NM-SCF12-E01



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



### **External Document Links**

**Notes** 

Installation Instruction

NM-SCF12-E01 REV: A REV DATE: 18.Feb.2020 www.rfsworld.com



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

ПЕРЕЧЕНЬ

Разъем 43F-SCF12-C03 4.3-10 розетка

Разъем 43F-SCF12-D01 4.3-10 розетка

Разъем 43F-SCF12-E01 4.3-10 розетка

Разъем 43MH-SCF12-C03 4.3-10 вилка

Разъем 43MP-SCF12-C03 4.3-10 вилка

Разъем 43MR-SCF12-C03 4.3-10 вилка угловая

Разъем 43MR-SCF12-D01 4.3-10 вилка угловая

Разъем 43M-SCF12-C03 4.3-10 вилка

Разъем 43M-SCF12-D01 4.3-10 вилка

Разъем 43M-SCF12-E01 4.3-10 вилка

Разъем 716F-SCF12-C02 7-16 DIN розетка

Разъем 716F-SCF12-C03 7-16 розетка

Разъем 716F-SCF12-D01 7-16 DIN розетка

Разъем 716MR-SCF12-C02 7-16 DIN вилка угловая

Разъем 716MR-SCF12-C03 7-16 вилка угловая

Разъем 716MR-SCF12-D01 7-16 DIN вилка

Разъем 716M-SCF12-C02 7-16 DIN вилка

Разъем 716M-SCF12-C03 7-16 вилка

Разъем 716M-SCF12-D01 7-16 DIN вилка

Разъем 716M-SCF12-E01 7-16 DIN вилка

Разъем NF-SCF12-C02 N розетка

Разъем NF-SCF12-C03 N розетка

Разъем NF-SCF12-D01 N розетка

Разъем NNR-SCF12-D01 N вилка

Разъем NN-SCF12-C02 N вилка

Разъем NN-SCF12-C03 N вилка

Разъем NN-SCF12-D01 N вилка

Разъем NN-SCF12-E01 N вилка

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