



## 4.3-10 Female Connector for 1/2" Coaxial 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.



43F-LCF12-C03

### 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

### Technical Features

#### GENERAL SPECIFICATIONS

Transmission Line Type		Coaxial Cable
Cable Size		1/2"
Cable Type		Foam Dielectric
Model Series		LCF12-50 Series ICA12-50 Series RCF12-50 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 ≤ 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: 1.10 (26.4) 5.0 < f ≤ 6.0 GHz: 1.25 (19.1)

#### MECHANICAL SPECIFICATIONS

Plating Outer/Inner		Trimetal/Silver
Length	mm (in)	54.2 (2.13)
Outer Diameter	mm (in)	22 (0.87)
Weight	kg (lb)	0.075 (0.17)
Inner Contact Attachment		Spring Finger
Outer Contact Attachment		Spring C-Ring

#### ACCESSORIES

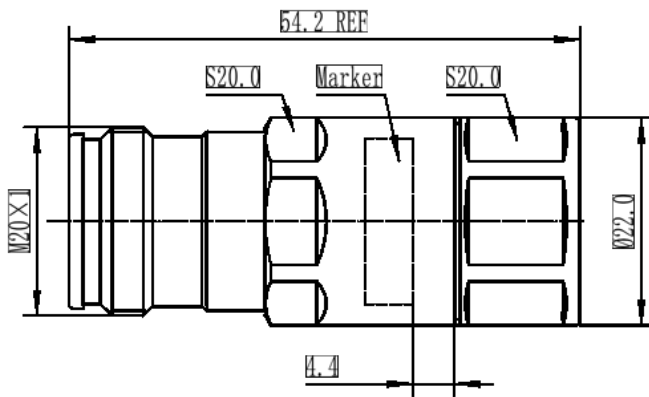
Wrench size front	mm (in)	20 (13/16)
Wrench size rear	mm (in)	20 (13/16)
Trimming Tool		TRIM-SET-L12-C02

#### TESTING AND ENVIRONMENTAL

Waterproof Level		IP68
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## 4.3-10 Female Connector for 1/2" Coaxial Cable, OMNI FIT™ standard, O-ring sealing



43F-LCF12-C03 Outline Drawing

### External Document Links

Installation instruction

### Notes



## 4.3-10 Male Hand-Screw Connector for 1/2" Coaxial 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. Hand-Screw attachment mechanism that is ideal for indoor and outdoor spaces where installation must be completed using only one hand.



43MH-LCF12-C03

### 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
- 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

Transmission Line Type		Coaxial Cable
Cable Size		1/2"
Cable Type		Foam Dielectric Radiating
Model Series		LCF12-50 Series ICA12-50 Series RCF12-50 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 ≤ 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: 1.10 (26.4) 5.0 < f ≤ 6.0 GHz: 1.25 (19.1)

#### MECHANICAL SPECIFICATIONS

Plating Outer/Inner		Trimetal/Silver
Length	mm (in)	51 (2)
Outer Diameter	mm (in)	25 (1)
Weight	kg (lb)	0.081 (0.18)
Inner Contact Attachment		Spring Finger
Outer Contact Attachment		Spring C-Ring

#### ACCESSORIES

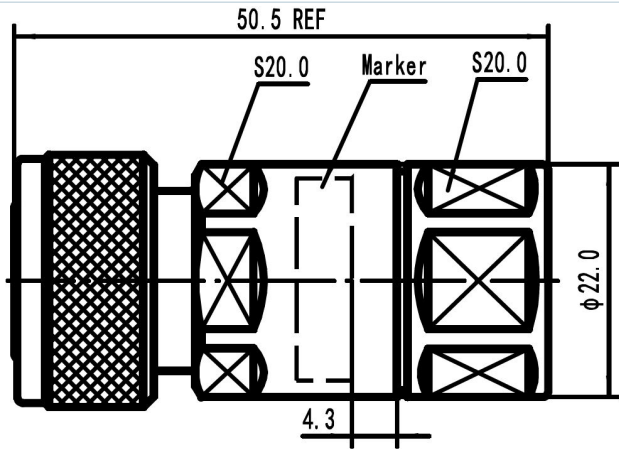
Wrench size front	mm (in)	20 (13/16)
Wrench size rear	mm (in)	20 (13/16)
Trimming Tool		TRIM-SET-L12-C02

#### TESTING AND ENVIRONMENTAL

Waterproof Level		IP68
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## 4.3-10 Male Hand-Screw Connector for 1/2" Coaxial Cable, OMNI FIT™ standard, O-ring sealing



43MH-LCF12-C03 Outline drawing

### External Document Links

Installation Instruction

### Notes

## 1-5/8" EIA Connector for 7/8" Coaxial Cable, RAPID FIT™ Sealing compound

Radio Frequency Systems' line of high performance coaxial cable connectors are designed specifically to provide the highest quality connector-cable interface while simplifying and speeding up the attachment of connectors to CELLFLEX® coaxial cables. RFS connectors are fully tested for mechanical and electrical compliance specifications. They are available in all popular cable sizes in a variety of mating interfaces. To join two cables with EIA connectors, two identical socket connectors are installed on either end of the cables to be joined, and a coupling element is used to make the connection of the center conductor. The coupling element must be ordered separately with the exception of the S-Line male versions that have a captivated coupling element. Connectors are available in sizes matching the nominal cable size. EIA connectors provide optimal power handling for the complete transmission line system.



RAPID FIT™ Connectors

### FEATURES / BENEFITS

- ➔ Single-piece design for Fast and Easy Installation  
Reliable and simple attachment avoids unnecessary connector adjustments and provides outstanding performance every time. Saves time and provides cost savings.
- ➔ Robust Mechanical Design  
Low and consistent intermodulation performance guarantees outstanding system sensitivity.
- ➔ Excellent Electrical Performance  
Consistent and repeatable low VSWR improves overall system performance and margin and reduces mismatch losses
- ➔ Totally Waterproof according to IP68  
Assures safe, long term operation in the harshest of environments.

### Technical Features

#### GENERAL SPECIFICATIONS

Transmission Line Type		Coaxial Cable
Cable Size		7/8"
Cable Type		Foam Dielectric
Model Series		LCF78-50A-Series, RCF78-50A-Series
Connector Interface		1-5/8" EIA
Connector Type		RAPID FIT™
Sealing Method		Sealing compound <sup>1)</sup>
Gender		None

#### ELECTRICAL SPECIFICATIONS

3rd Order IM Product @ 2x20 Watts	dBc	<-156
Maximum Frequency	GHz	3.3
VSWR, Return Loss	VSWR (dB)	0 < f ≤ 1.0 GHz: 1.02 (40.0) 1.0 < f ≤ 2.7 GHz: 1.03 (36.6) 2.7 < f ≤ 3.7 GHz: 1.06 (30.7)

#### MECHANICAL SPECIFICATIONS

Plating Outer/Inner		Silver/Silver
Length	mm (in)	110 (4.3)
Outer Diameter	mm (in)	90 (3.5)
Weight	kg (lb)	0.95 (2.1)
Inner Contact Attachment		Spring Finger
Outer Contact Attachment		Spring Finger

#### ACCESSORIES

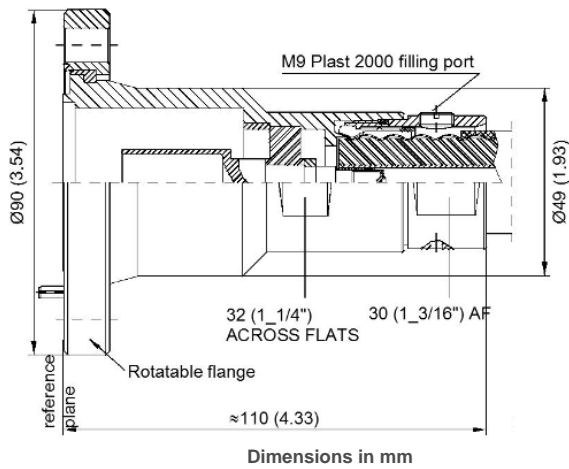
Wrench size front	mm (in)	30 (1-3/16)
Wrench size rear	mm (in)	30 (1-3/16)
Trimming Tool		TRIM-Series-A

#### TESTING AND ENVIRONMENTAL

Waterproof Level		IP68
Sealing Volume	cm <sup>3</sup> (ounces)	7 (0.26)



## 1-5/8" EIA Connector for 7/8" Coaxial Cable, RAPID FIT™ Sealing compound



### External Document Links

Installation Instruction

### Notes

1) The sealing compound must be ordered separately.



## 7-16 DIN Male Connector for RG214 Coaxial Cable, Soldered Inner Contact



### Technical Features

#### GENERAL SPECIFICATIONS

Transmission Line Type		Coaxial Cable
Cable Size		RG214
Cable Type		PE Dielectric
Model Series		RG-Series
Connector Interface		7-16 DIN
Connector Type		Straight
Sealing Method		O-ring
Gender		Male

#### MECHANICAL SPECIFICATIONS

Plating Outer/Inner		Silver/Silver
Inner Contact Attachment		Soldered
Outer Contact Attachment		Basket

#### External Document Links

#### Notes