RFS Technologies
an Amphenol Company

RF CABLE SOLUTIONS SELECTION GUIDE

October 30, 2024

RFS TECHNOLOGIES, AN AMPHENOL COMPANY

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CELLFLEX® SETS THE STANDARD FOR COMMUNICATION CABLES

It was 1961 when we pioneered CELLFLEX, the foam dielectric corrugated coaxial cables that quickly became the industry's preferred choice for base station applications. Since then, CELLFLEX cables have been proving their value in indoor and outdoor applications around the world.

Today, our premium attenuation, low-loss CELLFLEX cables continue to set industry standards for performance, flexibility and durability.

INDUSTRY-LEADING ELECTRICAL PERFORMANCE

CELLFLEX foam dielectric corrugated cables feature copper outer and inner conductors that are key to improving performance:

- The two, solid copper conductors virtually eliminate interference due to passive intermodulation (PIM) and intermodulation distortion (IMD).
- The outer conductor creates a continuous electromagnetic and radio frequency interference (EMI/RFI) shield that minimizes system interference.

With extremely low attenuation, excellent heat transfer properties and temperature-stabilized dielectric material, CELLFLEX cables deliver safe, long-term operation, even at high transmit power levels. Special low VSWR cable models help maintain system integrity.

REMARKABLE FLEXIBILITY AND STRENGTH

We've been continually advancing and refining our corrugation technology since we invented the first corrugated, seam-welded cable in 1951. Our ongoing dedication to superior corrugation techniques means CELLFLEX cables bend easily without risk of damage, even against strong bending forces. This rugged flexibility makes installations faster, easier and lower risk than installations using smooth wall cables.

CELLFLEX cables are also easier to reuse and recycle than competing cables because the layers are not bonded.

CELLFLEX® SETS THE STANDARD
FOR COMMUNICATION CABLES

A COMPREHENSIVE, FUTUREPROOF PORTFOLIO

Our entire portfolio of CELLFLEX cables supports frequencies from low MHz ranges to 6 GHz to protect your investment. You can take advantage of emerging spectrum and evolve to 5G anywhere in the world — no matter which stage of evolution you're in today.

With 20 CELLFLEX cable models ranging from 1/4-inch to 1 5/8-inch in diameter, there's a CELLFLEX cable for even the most complicated and demanding applications.

CELLFLEX makes up the largest corrugated transmission-line portfolio in the wireless infrastructure industry.

OMNI FIT™ CONNECTORS
FOR EVERY APPLICATION AND BUDGET

OMNI FIT connectors are known throughout the industry for their precision-engineered performance, ease of installation and long life in the field. They can be used with copper and aluminum cables, and are the perfect complement to our CELLFLEX® communications cables in any scenario:

- Tower and rooftop deployments
- Small cell deployments in dense urban environments
- Indoor and underground deployments

A COMPLETE PORTFOLIO TO CHOOSE FROM

Simply choose the OMNI FIT connectors that match your requirements:

OMNI FIT Premium D01 series connectors are fully optimized to deliver the ultimate combination of electrical performance, simplicity, durability and cost.

OMNI FIT Standard C03 series connectors deliver a first-class feature set at a very cost-effective price point.

Our complete portfolio of OMNI FIT Premium and OMNI FIT Standard connectors is available with spacing-saving 4.3-10 interfaces as well as traditional Type-N and 7-16 DIN interfaces in all interface combinations, versions and variants.

DESIGNED FOR FUTUREPROOF EVOLUTION TO 5G

OMNI FIT connectors support all frequencies up to 6 GHz, making them the perfect choice for smooth evolution to 5G globally.

You can take advantage of newly available spectrum such as Citizens Broadband Radio Service (CBRS), C-Band and License Assisted Access (LAA) today, then seamlessly switch to different frequencies tomorrow.

IDEAL FOR RETROFITS AND UPGRADES

Because OMNI FIT connectors are backwards compatible with so many installed cables, they're a very cost-effective way to instantly gain access to the fully frequency range supported by existing cables.

Simply replace legacy, frequency-limited connectors with OMNI FIT connectors to extend the life of current installations, reduce upgrade costs and gain higher returns on previous investments.

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OMNI FIT™ CONNECTORS
FOR EVERY APPLICATION AND BUDGET

OMNI FIT PREMIUM: MAXIMUM VALUE FOR THE PRICE

OMNI FIT Premium connectors are tested and proven to deliver outstanding PIM and VSWR performance at all frequencies up to 6 GHz. They feature an ultra-compact, lightweight and extremely robust two-piece design that simplifies installations and avoids the need for additional parts that can complicate installations or be lost.

To ensure watertight durability, OMNI FIT Premium D01 series connectors include a built-in seal against the outer conductor and against the cable jacket so there's no need for external sealing.

OMNI FIT STANDARD: COST-EFFECTIVE CONNECTORS WITH NO COMPROMISES

OMNI FIT Standard connectors provide key performance and design features that help you squeeze every last bit of performance out of infrastructure at a very appealing price point.

The high-performance C03 series connectors provide excellent PIM and VSWR ratings that help to maintain signal quality and system performance end-to-end. They also feature a lightweight design that simplifies installation and minimizes weight burdens.

With three attachment options to choose from — push-pull, hand-screw and hex-head — OMNI FIT Standard connectors are easy to install in any environment.

COMPRESSION CONNECTORS
FOR EVERY APPLICATION AND BUDGET

COMPRESSION CONNECTORS: MAXIMUM VALUE FOR THE PRICE

RFS Technologies' Compression Connectors utilize cutting-edge compression technology to ensure maximum throughout in LTE and 5G networks. The automted installation process not only guarantees outstanding performance and proven reliability but also eliminates potential installation errors that could otherwise increase operational expeneses.

To cater to a diverse range of applications, RFS Technologies now offers three distinct connector families. Customers can select the famly that best suits their needs, ensuring optimal performance and ease of use:

- C03 Family: An economic fit without compromising performance, ideal for cost sensitive projects.
- D01 Family: The Premium OMNI Fit, providing some of the best performances availabel in the marketplace, perfect for high demand appliations.
- CP01 Family: The Compression Fit offers premium performance and is compatible with exisitng hydraulic tool sets, ensuring seamless integration.

KEY FEATURES

- **Compression Technology:** ensures Maximum throughout in LTE and 5G networks.
- **Outstanding Performance & Proven Reliablikty:** Automated installation process minimizes errors and operational costs.

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COMPRESSION CONNECTORS
FOR EVERY APPLICATION AND BUDGET

COMPRESSION CONNECTORS: MAXIMUM VALUE FOR THE PRICE

Cable size/Type	Cable Supported	RFS T Model No.	"Interface/ Gender"	Specification	Installation Instruction	Installation Video		Prep tool	Foam Remover	Frameset
1/4" Superflex foam dielectric, corrugated	"SCF14-50J SCF14-50JFN SCF14-50JPL*"	716M-SCF14-CP01	7-16 DIN Male	Datasheet	Installation Doc.	Installation Video		AFBXD05-32	AFBXD07-1	HCG-FRAMESET-1/4
		43M-SCF14-CP01	4.3-10 Male, torque type	Datasheet	Installation Doc.	Installation Video				
1/2" Superflex foam dielectric, corrugated	SCF12-50J SCF12-50JFN	716M-SCF12-CP01	7-16 DIN Male	Datasheet	Installation Doc.	Installation Video		AFBXD05-13	AFBXD07-3	HCG-FRAMESET-1/2
		43M-SCF12-CP01	4.3-10 Male, torque type	Datasheet	Installation Doc.	Installation Video				
		NM-SCF12-CP01	N Male	Datasheet	Installation Doc.	Installation Video For Foam LCF				
1/2" foam dielectric, corrugated	LCF12-50J LCF12-50JFN ICA12-50JPL* ICA12-50JPLL* RCA12-50JPL*	716M-LCF12-CP01	7-16 DIN Male	Datasheet	Installation Doc.	Installation Video For Foam LCF	Installation Video for plenum ICA&RCA12	AFBXD05-2	AFBXD07-4	HCG-FRAMESET-1/2
		716F-LCF12-CP01	7-16 DIN Female	Datasheet	Installation Doc.	Installation Video For Foam LCF	Installation Video for plenum ICA&RCA12			
		43M-LCF12-CP01	4.3-10 Male, torque type	Datasheet	Installation Doc.	Installation Video For Foam LCF	Installation Video for plenum ICA&RCA12			
		43F-LCF12-CP01	4.3-10 Female	Datasheet	Installation Doc.	Installation Video For Foam LCF	Installation Video for plenum ICA&RCA12			
		NM-LCF12-CP01	N Male	Datasheet	Installation Doc.	Installation Video For Foam LCF	Installation Video for plenum ICA&RCA12			
		NF-LCF12-CP01	N Female	Datasheet	Installation Doc.	Installation Video For Foam LCF	Installation Video for plenum ICA&RCA12			
7/8" foam dielectric, corrugated	LCF78-50JA LCF78-50JFNA	716M-LCF78-CP01	7-16 DIN Male	Datasheet	Installation Doc.			AFBXD05-41		HCG-FRAMESET-7/8
		716F-LCF78-CP01	7-16 DIN Female	Datasheet	Installation Doc.					
		43M-LCF78-CP01	4.3-10 Male, torque type	Datasheet	Installation Doc.					
		43F-LCF78-CP01	4.3-10 Female	Datasheet	Installation Doc.					
		NF-LCF78-CP01	N Male	Datasheet	Installation Doc.					
7/8" air dielectric (plenum)	HCA78-50JPL*	43M-HCA78-CP01	4.3/10 Male	Datasheet	Installation Doc.	Installation Video	Installation Video	AFBXD05-42		HCG-FRAMESET-7/8

ACCESSORIES
FOR ALL INSTALLATIONS

THE CRUCIAL ROLE OF ACCESSORIES IN THE TELECOMMUNICATIONS INDUSTRY

In telecommunications, accessories are crucial for optimal system performance, reliability, and longevity. Components like connectors, installation tools, and grounding kits are essential for maintaining seamless connectivity and minimizing downtime. High-quality accessories ensure proper signal transmission, reduce interference, and protect equipment from environmental factors, enhancing network efficiency and supporting advanced technologies.

RFS Technologies provides a wide range of accessories for efficient cable preparation and installation. Their Universal Trimming Tool Series, with various inserts, adapts to different connector families and cable sizes, offering flexibility and cost-efficiency. These tools feature combination chamfer and flare stations, eliminating the need for separate tools. RFS also offers accessories like snap-in hangers, clamps, hoisting grips, and grounding kits, ensuring secure cable installation and reliable connections. These products provide a comprehensive solution for cable management and installation.

Accessory ordering guide

Model Number	Hoisting Grip	Ground Kit	Non Cushion Hanger				Cushion Hanger			Weather Proofing	Boot/Feed through
			Snap Stack	Snap In	Butterfly	Cushion	Snap Stack	Snap In	Butterfly		
SCF14	NA	NA	NA	NA	NA	CUSH-1-14S12-78	SNAP-78	SNAP-ST-78	CLAMP-78	WPFG-1	NA
SCF38	NA	NA	NA	NA	NA	CUSH-1-14S12-78	SNAP-78	SNAP-ST-78	CLAMP-78	WPFG-1	NA
SCF12	HOIST1-12L	GKFORM60-38	SNAP-ST-12	NA	NA	CUSH-1-14S12-78	SNAP-78	SNAP-ST-78	CLAMP-78	WPFG-1	NA
LCF14	NA	NA	NA	NA	NA	CUSH-1-14S12-78	SNAP-78	SNAP-ST-78	CLAMP-78	WPFG-1	NA
LCF38	NA	NA	NA	NA	NA	CUSH-1-14S12-78	SNAP-78	SNAP-ST-78	CLAMP-78	WPFG-1	NA
LCF12	HOIST1-12L	GKFORM60-12	SNAP-ST-12	SNAP-12	CLAMP-12	CUSH-1-1258-114	SNAP-ST-114	SNAP-114	CLAMP-114	WPFG-1	BOOT4-12-1
ICA12	NA	GKFORM60-12	SNAP-ST-12	SNAP-12	CLAMP-12	CUSH-1-1258-114	SNAP-ST-114	SNAP-114	CLAMP-114	WPFG-1	BOOT4-12-1
LCF78	HOIST1-78L	GKFORM60-78	SNAP-ST-78	SNAP-78	CLAMP-105	CUSH-1-78-158	SNAP-ST-158	SNAP-158	CLAMP-158	WPFG-1	BOOT4-78-1
HCA78	HOIST1-78L	GKFORM60-78	SNAP-ST-78	SNAP-78	CLAMP-105	CUSH-1-78-158	SNAP-ST-158	SNAP-158	CLAMP-158	WPFG-1	WF-78-A
LCF158	HOIST1-158L		SNAP-ST-158	SNAP-158	CLAMP-158	N/A	N/A	N/A	N/A	WPFG-1	BOOT4-158-1

Connector ordering guide

Model Number	N Male	N Female	4.3-10 Male	4.3-10 Female	7/16 Male	7/16 Female	7/8 EIA	1-5/8 EIA
SCF14	NM-SCF14-D01	NF-SCF14-D01	43M-SCF14-E01	NA	716M-SCF14-E01	NA	N/A	N/A
	NA	NA	43M-SCF14-CP01	NA	716M-SCF14-CP01	NA	NA	NA
SCF38	NM-SCF38-D01	NF-SCF38-D01	43M-SCF38-E01	NA	NA	NA	N/A	N/A
SCF12	NM-SCF12-D01	NF-SCF12-D01	43M-SCF12-E01	43F-SCF12-E01	716M-SCF12-E01	716F-SCF12-E01	78EIA-SCF12-070	N/A
	NM-SCF12-C03	NF-SCF12-C03	43M-SCF12-C03	43F-SCF12-C03	716M-SCF12-C03	716F-SCF12-C03	N/A	N/A
	NM-SCF12-CP01	N/A	43M-SCF12-CP01	N/A	716M-SCF12-CP01	N/A	N/A	N/A
LCF14	NM-LCF14-D01	NF-LCF14-D01	43M-LCF14-E01	NA	NA	NA	N/A	N/A
LCF38	NM-LCF38-E01	NF-LCF38-E01	43M-LCF38-E01	NA	NA	NA	N/A	N/A
LCF12	NM-LCF12-D01	NF-LCF12-D01	43M-LCF12-D01	43F-LCF12-D01	716M-LCF12-D01	716F-LCF12-D01	78EIA-LCF12-060	N/A
	NM-LCF12-C03	NF-LCF12-C03	43M-LCF12-C03	43F-LCF12-C03	716M-LCF12-C03	716F-LCF12-C03	N/A	N/A
	NM-LCF12-CP01	NF-LCF12-CP01	43M-LCF12-CP01	43F-LCF12-CP01	716M-LCF12-CP01	716F-LCF12-CP01	N/A	N/A
ICA12	NM-LCF12-D01	NF-LCF12-D01	43M-LCF12-D01	43F-LCF12-D01	716M-LCF12-D01	716F-LCF12-D01	N/A	N/A
	NM-LCF12-C03	NF-LCF12-C03	43M-LCF12-C03	43F-LCF12-C03	716M-LCF12-C03	716F-LCF12-C03	N/A	N/A
	NM-LCF12-CP01	NF-LCF12-CP01	43M-LCF12-CP01	43F-LCF12-CP01	716M-LCF12-CP01	716F-LCF12-CP01	N/A	N/A
LCF78	NM-LCF78-D01K	NF-LCF78-D01K	43M-LCF78-D01	43F-LCF78-D01	716M-LCF78-D01K	716F-LCF78-D01K	7/8EIA-LCF78-062	158EIA-LCF78-062
	NM-LCF78-C03	NF-LCF78-C03	43M-LCF78-C03	43F-LCF78-C03	716M-LCF78-C03	716F-LCF78-C03	N/A	N/A
	NA	NF-LCF78-CP01	43M-LCF78-CP01	43F-LCF78-CP01	716M-LCF78-CP01	716F-LCF78-CP01	N/A	N/A
HCA78	NM-HCA78-020	NF-HCA78-020	43M-HCA78-D01	N/A	716M-HCA78-020	716F-HCA78-020	78EIA-HCA78-019KT	158EIA-HCA78-020
	N/A	N/A	43M-HCF78-CP01	N/A	N/A	N/A	N/A	N/A
UCF114	NM-LCF114-D01K	NF-LCF114-D01K	43M-LCF114-E01	43F-LCF114-E01	716M-LCF114-D01K	716F-LCF114-D01K	N/A	N/A
LCF158	NM-LCF158-D01K	NF-LCF158-D01	43M-LCF158-E01	43F-LCF158-E01	716M-LCF158-D01K	716F-LCF158-D01K	78EIA-LCF158-062	158EIA-LCF158-062

CELLFLEX LOW-LOSS
FOAM-DIELECTRIC COAXIAL CABLE

SCF14 Series: up to 20.4 GHz

ORDERING INFORMATION

Jacketing Options	Standard Attenuation Cable Model Numbers
Outdoor standard:	SCF14-50J
Indoor flame retardant:	SCF14-50JFN
Indoor Plenum Rated	SCF14-50JPL*

* different jacket color options

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS		
Dimensions Over Jacket	in (mm)	0.31 (7.8)
Min. Bending Radius, Repeated	in (mm)	1 (25)
Jacket Type		PVC, Plenum Rated / Color Blue, Red, White, Black, water-resistant
Bending Moment	lb-ft (Nm)	0.5 (0.7)
Tensile Strength	lb (N)	135 (600)
Recommended/Maximum Clamp Spacing	ft (m)	0.67/0.67 (0.2/0.2)

ELECTRICAL SPECIFICATIONS		
Maximum Frequency	GHz	6
Max. VSWR / Return Loss	dB (VSWR)	20 (1.22) @ 450-617 MHz 24 (1.13) @ 617-960 MHz 24 (1.13) @ 1695-2200 MHz 20 (1.22) @ 2300-2700 MHz 18 (1.28) @ 3500-4200 MHz 16 (1.37) @ 5150-6000 MHz

TEMPERATURE SPECIFICATIONS		
Installation	°F (°C)	-13 to 140 (-25 to 60)
Storage	°F (°C)	-94 to 185 (-70 to 85)
Operation	°F (°C)	-58 to 185 (-50 to 85)

ATTENUATION			
Frequency, MHz	**dB per 100 ft**	**dB per 100 m**	**Power, kW**
800	5.27	17.3	0.38
1800	8.2	26.90	0.25
2200	9.2	30.1	0.22
3500	11.9	39.1	0.17
4000	12.9	42.2	0.16
5000	14.6	48	0.14
6000	16.3	53.4	0.12

RELATED PRODUCTS

Premium Connector Series E01
Compression Connector Series CP01

Model Number	Type
716M-SCF14-E01	7-16 Male
NM-SCF14-E01	N Type Male
NF-SCF14-E01	N Type Female
43MR-SCF14-E01	4.3-10 Male Right Angle
43M-SCF14-E01	4.3-10 Male
716M-SCF14-CP01	7-16 DIN Male
43M-SCF14-CP01	4.3-10 Male, torque type

Tools for Series E01

Model Number	Type
TRIM-SET-S14-D01	Universal Trimming Tool
TRIM-IS14-D01	Univ. Trimming Tool Insert

Accessories

Model Number	Type
TRIM-T01	Hand Tool Kit

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CELLFLEX LOW-LOSS
FOAM-DIELECTRIC COAXIAL CABLE

SCF38 Series: up to 13.4 GHz

ORDERING INFORMATION

Jacketing Options	Standard Attenuation Cable Model Numbers
Outdoor standard:	SCF38-50J
Indoor flame retardant:	SCF38-50JFN

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS		
Dimensions Over Jacket	in (mm)	0.402 (10.2)
Min. Bending Radius, Repeated	in (mm)	0.984 (25)
Jacket Type		Polyethylene, PE
Bending Moment	lb-ft (Nm)	1 (1.4)
Tensile Strength	lb (N)	135 (600)
Recommended/Maximum Clamp Spacing	ft (m)	0.8/0.8 (0.25/0.25)

ELECTRICAL SPECIFICATIONS		
Maximum Frequency	GHz	13.4
Max. VSWR / Return Loss	dB (VSWR)	20 (1.22) @ 450-617 MHz 24 (1.13) @ 617-960 MHz 24 (1.13) @ 1695-2200 MHz 20 (1.22) @ 2300-2700 MHz 18 (1.28) @ 3500-4200 MHz 16 (1.37) @ 5150-6000 MHz

TEMPERATURE SPECIFICATIONS		
Installation	°F (°C)	-40 to 140 (-40 to 60)
Installation - JFNA	°F (°C)	-13 to 140 (-25 to 60)
Storage	°F (°C)	-94 to 185 (-70 to 85)
Operation	°C (°F)	-58 to 185 (-50 to 85)

ATTENUATION			
Frequency, MHz	**dB per 100 ft**	**dB per 100 m**	**Power, kW**
800	3.88	12.73	0.62
1800	6.11	20.05	0.39
2400	7.21	23.70	0.33
3500	9.01	29.50	0.27
5000	11.16	36.60	0.22
6000	12.48	41.00	0.19
8000	14.94	49.00	0.16
10000	17.21	56.50	0.14
12000	19.37	63.50	0.12
13400	20.82	68.30	0.12

RELATED PRODUCTS

Premium Connector Series D01 / E01

Model Number	Type
NM-SCF38-D01	N Type Male
NF-SCF38-D01	N Type Female
43M-SCF38-E01	4.3-10 Male

Tools for Series D01 / E01

TRIM-SET-S38-D01	Universal Trimming Tool
TRIM-IS38-D01	Univ. Trimming Tool Insert

Accessories

Model Number	Type
RSB-S38/L14	Stainless Steel Clamp
TRIM-T01	Hand Tool Kit

CELLFLEX LOW-LOSS
FOAM-DIELECTRIC COAXIAL CABLE

SCF12 Series: up to 10.6 GHz

ORDERING INFORMATION

Jacketing Options	Standard Attenuation Cable Model Numbers
Outdoor standard:	SCF12-50J
Indoor flame retardant:	SCF12-50JFN

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS		
Dimensions Over Jacket	in (mm)	0.539 (13.7)
Min. Bending Radius, Repeated	in (mm)	1.3 (32)
Jacket Type		Polyethylene, PE
Bending Moment	lb-ft (Nm)	1.84 (2.5)
Tensile Strength	lb (N)	146 (650)
Recommended/Maximum Clamp Spacing	ft (m)	1/1.64 (0.3/0.5)

ELECTRICAL SPECIFICATIONS		
Maximum Frequency	GHz	10.6
Max. VSWR / Return Loss	dB (VSWR)	20 (1.22) @ 450-617 MHz 24 (1.13) @ 617-960 MHz 24 (1.13) @ 1695-2200 MHz 20 (1.22) @ 2300-2700 MHz 18 (1.28) @ 3500-4200 MHz 16 (1.37) @ 5150-6000 MHz

TEMPERATURE SPECIFICATIONS		
Installation	°F (°C)	-40 to 140 (-40 to 60)
Installation - JFNA	°F (°C)	-13 to 140 (-25 to 60)
Storage	°F (°C)	-94 to 185 (-70 to 85)
Operation	°F (°C)	-58 to 185 (-50 to 85)

ATTENUATION			
Frequency, MHz	**dB per 100 ft**	**dB per 100 m**	**Power, kW**
800	2.92	9.57	0.74
1800	4.55	14.90	0.47
2400	5.35	17.50	0.40
3500	6.63	21.80	0.32
5000	8.16	26.80	0.26
6000	9.09	29.80	0.24
8000	10.80	35.50	0.20
10000	12.40	40.60	0.17

RELATED PRODUCTS

Standard Connector Series C03

Model Number	Type
716M-SCF12-C03	7-16 Male
716F-SCF12-C03	7-16 Female
43M-SCF12-C03	4.3-10 Male
43MH-SCF12-C03	4.3-10 Male, Hand Screw
43MP-SCF12-C03	4.3-10 Male, Push-Pull
43F-SCF12-C03	4.3-10 Female
NM-SCF12-C03	N Type Male
NF-SCF12-C03	N Type Female
716MR-SCF12-C03	7-16 Male Right Angle
43MR-SCF12-C03	4.3-10 Male Right Angle

Tools for Series C03

TRIM-SET-S12-C02	Universal Trimming Tool

Premium Connector Series D01

Model Number	Type
716M-SCF12-D01	7-16 Male
716F-SCF12-D01	7-16 Female
43M-SCF12-D01	4.3-10 Male
43F-SCF12-D01	4.3-10 Female
NM-SCF12-D01	N Type Male
NF-SCF12-D01	N Type Female
716MR-SCF12-D01	7-16 Male Right Angle
43MR-SCF12-D01	4.3-10 Male Right Angle
NMR-SCF12-D01	N Type Male Right Angle

Tools for Series D01

TRIM-SET-S12-D01	Universal Trimming Tool
TRIM-IS12-D01	Univ. Trimming Tool Insert

Compression Connector Series CP01

Model Number	Type
716M-SCF12-CP01	7-16 DIN Male
43M-SCF12-CP01	4.3-10 Male
NM-SCF12-CP01	N Male

Tools for Series CP01

AFBXD05-13	Prep Tool
HCG-FRAMESET-1/2	Frameset
AFBXD07-3	Foam Remover

Accessories

Model Number	Type
RSB-S12	Stainless Steel Clamp
RSB-S12/78	Stainless Steel Clamp
TRIM-T01	Hand Tool Kit

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CELLFLEX LOW-LOSS
FOAM-DIELECTRIC COAXIAL CABLE

LCF14 Series: up to 15.8 GHz

ORDERING INFORMATION

Jacketing Options	Standard Attenuation Cable Model Numbers
Outdoor standard:	LCF14-50J
Indoor flame retardant:	LCF14-50JFN

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS		
Dimensions Over Jacket	in (mm)	0.394 (10)
Min. Bending Radius, Single	in (mm)	1.575 (40)
Min. Bending Radius, Repeated	in (mm)	3.346 (85)
Jacket Type		Polyethylene, PE
Bending Moment	lb-ft (Nm)	1.4 (1.9)
Tensile Strength	lb (N)	200 (890)
Recommended/Maximum Clamp Spacing	ft (m)	1.75/3.25 (0.5/1)

ELECTRICAL SPECIFICATIONS		
Maximum Frequency	GHz	15.8
Max. VSWR / Return Loss	dB (VSWR)	20 (1.22) @ 450-617 MHz 24 (1.13) @ 617-960 MHz 24 (1.13) @ 1695-2200 MHz 20 (1.22) @ 2300-2700 MHz 18 (1.28) @ 3500-4200 MHz 16 (1.37) @ 5150-6000 MHz

TEMPERATURE SPECIFICATIONS		
Installation	°F (°C)	-40 to 140 (-40 to 60)
Installation - JFNA	°F (°C)	-13 to 140 (-25 to 60)
Storage	°F (°C)	-94 to 185 (-70 to 85)
Operation	°F (°C)	-58 to 185 (-50 to 85)

ATTENUATION			
Frequency, MHz	**dB per 100 ft**	**dB per 100 m**	**Power, kW**
800	3.77	12.40	0.59
1800	5.82	19.10	0.38
2400	6.81	22.30	0.33
3500	8.39	27.50	0.27
5000	10.30	33.70	0.22
6000	11.40	37.40	0.20
8000	13.50	44.10	0.17
10000	15.30	50.30	0.15
12000	17.10	56.10	0.13
15800	20.20	66.20	0.11

RELATED PRODUCTS

Premium Connector Series E01

Model Number	Type
43M-LCF14-E01	4.3-10 Male
NM-LCF14-E01	N Type Male
NF-LCF14-E01	N Type Female
NMR-LCF14-E01	N Type Male Right Angle

Tools for Series E01

TRIM-SET-L14-D01	Universal Trimming Tool
TRIM-IL14-D01	Univ. Trimming Tool Insert

Accessories

Model Number	Type
RSB-S38/L14	Stainless Steel Clamp
GKSPEED20-14C	Grounding Kit, CCA Wire
GKSPEED20-14P	Grounding Kit, Premium
TRIM-T01	Hand Tool Kit

CELLFLEX LOW-LOSS
FOAM-DIELECTRIC COAXIAL CABLE

LCF38 Series: up to 13.5 GHz

ORDERING INFORMATION

acketing Options	Standard Attenuation Cable Model Numbers
Outdoor standard:	LCF38-50J
Indoor flame retardant:	LCF38-50JFN

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS		
Dimensions Over Jacket	in (mm)	0.441 (11.2)
Min. Bending Radius, Single	in (mm)	2 (50)
Min. Bending Radius, Repeated	in (mm)	4 (95)
Jacket Type		Polyethylene, PE
Bending Moment	lb-ft (Nm)	1.4 (1.9)
Tensile Strength	lb (N)	119 (530)
Recommended/Maximum Clamp Spacing	ft (m)	1.75/3.25 (0.5/1)

TEMPERATURE SPECIFICATIONS		
Installation	°F (°C)	-40 to 140 (-40 to 60)
Installation - JFNA	°F (°C)	-13 to 140 (-25 to 60)
Storage	°F (°C)	-94 to 185 (-70 to 85)
Operation	°F (°C)	-58 to 185 (-50 to 85)

ELECTRICAL SPECIFICATIONS		
Maximum Frequency	GHz	13.5
Max. VSWR / Return Loss	dB (VSWR)	20 (1.22) @ 450-617 MHz 24 (1.13) @ 617-960 MHz 24 (1.13) @ 1695-2200 MHz 20 (1.22) @ 2300-2700 MHz 18 (1.28) @ 3500-4200 MHz 16 (1.37) @ 5150-6000 MHz

ATTENUATION			
Frequency, MHz	**dB per 100 ft**	**dB per 100 m**	**Power, kW**
800	3.07	10.10	0.72
1800	4.74	15.50	0.47
2400	5.54	18.20	0.40
3500	6.82	22.40	0.32
5000	8.34	27.40	0.27
6000	9.25	30.30	0.24
8000	10.90	35.80	0.20
10000	12.40	40.80	0.18
12000	13.90	45.50	0.16
13500	14.90	48.80	0.15

RELATED PRODUCTS

Standard Connectors

Model Number	Type
NM-LCF38-070	N Type Male
NF-LCF38-070	N Type Female
NMR-LCF38-071	N Type Male Right Angle
Tools	
TRIM-38-L03	Combination Prep Tool

Premium Connector Series E01

Model Number	Type
43M-LCF38-E01	4.3-10 Male
NM-LCF38-E01	N Type Male
NF-LCF38-E01	N Type Female
NMR-LCF38-E01	N Type Male Right Angle
Tools for Series E01	
TRIM-SET-L38-E01	Universal Trimming Tool
TRIM-IL38-E01	Univ. Trimming Tool Insert

Accessories

Model Number	Type
RSB-38/12	RSB Clamp Lining
RSB-12	RSB Clip (in Combination)
TRIM-T01	Hand Tool Kit

CELLFLEX LOW-LOSS
FOAM-DIELECTRIC COAXIAL CABLE

LCF12 Series: up to 8.8 GHz

ORDERING INFORMATION

Jacketing Options	Premium Attenuation Cable Model Numbers
Outdoor standard:	LCF12-50J
Indoor flame retardant:	LCF12-50JFN

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS		
Dimensions Over Jacket	in (mm)	0.62 (15.9)
Min. Bending Radius, Single	in (mm)	3 (70)
Min. Bending Radius, Repeated	in (mm)	5 (125)
Jacket Type		Polyethylene, PE
Bending Moment	lb-ft (Nm)	4.8 (6.5)
Tensile Strength	lb (N)	Copper 236 (1050) Aluminum 180 (800)
Recommended/Maximum Clamp Spacing	ft (m)	2/3.25 (0.6/1)

ELECTRICAL SPECIFICATIONS		
Maximum Frequency	GHz	8.8
Max. VSWR / Return Loss	dB (VSWR)	20 (1.22) @ 450-617 MHz 24 (1.13) @ 617-960 MHz 24 (1.13) @ 1695-2200 MHz 20 (1.22) @ 2300-2700 MHz 18 (1.28) @ 3500-4200 MHz 16 (1.37) @ 5150-6000 MHz

TEMPERATURE SPECIFICATIONS		
Installation	°F (°C)	-40 to 140 (-40 to 60)
Installation - JFNA	°F (°C)	-13 to 140 (-25 to 60)
Storage	°F (°C)	-94 to 185 (-70 to 85)
Operation	°F (°C)	-58 to 185 (-50 to 85)

ATTENUATION			
Frequency, MHz	**dB per 100 ft**	**dB per 100 m**	**Power, kW**
800	1.98	6.48	1.16
1800	3.07	10.10	0.75
2200	3.44	11.30	0.67
2600	3.78	12.40	0.61
3500	4.47	14.70	0.51
5000	5.50	18.00	0.42
6000	6.30	20.70	0.37
8000	7.26	23.80	0.32
8800	7.69	25.20	0.30

RELATED PRODUCTS

Standard Connector Series C03

Model Number	Type
716M-LCF12-C03	7/16 Male
716F-LCF12-C03	7/16 Female
43M-LCF12-C03	4.3-10 Male
43MH-LCF12-C03	4.3-10 Male, Hand Screw
43MP-LCF12-C03	4.3-10 Male, Push-Pull
43F-LCF12-C03	4.3-10 Female
NM-LCF12-C03	N Type Male
NF-LCF12-C03	N Type Female
716MR-LCF12-C03	7/16 Male Right Angle
43MR-LCF12-C03	4.3-10 Male Right Angle
NMR-LCF12-C02	N Type Male Right Angle
Tools for Series C03	
TRIM-SET-L12-C02	Universal Trimming Tool
TRIM-IL12-C02	Trimming Tool Insert

Premium Connector Series D01

Model Number	Type
716M-LCF12-D01	7/16 Male
716F-LCF12-D01	7/16 Female
43M-LCF12-D01	4.3-10 Male
43F-LCF12-D01	4.3-10 Female
NM-LCF12-D01	N Type Male
NF-LCF12-D01	N Type Female
716MR-LCF12-D01	7/16 Male Right Angle
43MR-LCF12-D01	4.3-10 Male Right Angle
NMR-LCF12-D01	N Type Male Right Angle
Tools for Series D01	
TRIM-SET-L12-D01	Universal Trimming Tool
TRIM-IL12-D01	Univ. Trimming Tool Insert
TRIM-LCF12-D01-A	Automatic Trimming Tool
TRIM-B13	Blades for Automatic Tool

Compression Connector Series CP01

Model Number	Type
716M-LCF12-CP01	7-16 DIN Male
716F-LCF12-CP01	7-16 DIN Female
43M-LCF12-CP01	4.3-10 Male, torque type
43F-LCF12-CP01	4.3-10 Female
NM-LCF12-CP01	N Male
NF-LCF12-CP01	N Female
Tools for Series CP01	
TRIM-SET-L12-D01	Universal Trimming Tool
TRIM-IL12-D01	Univ. Trimming Tool Insert
TRIM-LCF12-D01-A	Automatic Trimming Tool
TRIM-B13	Blades for Automatic Tool

Accessories

Model Number	Type	Model Number	Type
HOIST1-12L	Hoisting Grip	GKSPEED60-12S	Grounding Kit, High Speed
GKSPEED20-12C	Grounding Kit, CCA Wire	JSTRIP-12-3	Jacket Stripping Tool
GKSPEED20-12P	Grounding Kit, Premium	CEAR-12	Connector Grounding Kit
GKSPEED20-12S	Grounding Kit, Standard	BOOT4-12-4	Feed Through Assembly
		BOOT-CP-12	Cushion Plug

RFS Technologies
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CELLFLEX LOW-LOSS
FOAM-DIELECTRIC COAXIAL CABLE

LCF78 Series: up to 4.2GHz

ORDERING INFORMATION

Jacketing Options	Premium Attenuation Cable Model Numbers
Outdoor standard:	LCF78-50JA
Indoor flame retardant:	LCF78-50JFNA

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS		
Dimensions Over Jacket	in (mm)	1.094 (27.8)
Min. Bending Radius, Single	in (mm)	5 (120)
Min. Bending Radius, Repeated	in (mm)	10 (250)
Jacket Type		Polyethylene, PE
Bending Moment	lb-ft (Nm)	10 (13)
Tensile Strength	lb (N)	324 (1440)
Recommended/Maximum Clamp Spacing	ft (m)	2.75/3.25 (0.8/1)

TEMPERATURE SPECIFICATIONS		
Installation	°F (°C)	-40 to 140 (-40 to 60)
Installation - JFNA	°F (°C)	-13 to 140 (-25 to 60)
Storage	°F (°C)	-94 to 185 (-70 to 85)
Operation	°F (°C)	-58 to 185 (-50 to 85)

ELECTRICAL SPECIFICATIONS		
Maximum Frequency	GHz	5
Max. VSWR / Return Loss	dB (VSWR)	20 (1.22) @ 450-617 MHz 24 (1.13) @ 617-960 MHz 24 (1.13) @ 1695-2200 MHz 20 (1.22) @ 2300-2700 MHz 18 (1.28) @ 3500-4200 MHz

ATTENUATION			
Frequency, MHz	**dB per 100 ft**	**dB per 100 m**	**Power, kW**
800	1.06	3.48	2.41
1800	1.66	5.44	1.54
2200	1.86	6.09	1.38
2600	2.04	6.70	1.25
3600	2.53	8.30	1.03
4000	2.62	8.60	0.97
5000	2.99	9.81	0.85

RELATED PRODUCTS

Standard Connector Series C03

Model Number	Type
716M-LCF78-C03	7/16 Male
716F-LCF78-C03	7/16 Female
43M-LCF78-C03	4.3-10 Male
43MH-LCF78-C03	4.3-10 Male, Hand Screw
43MP-LCF78-C03	4.3-10 Male, Push-Pull
43F-LCF78-C03	4.3-10 Female
NM-LCF78-C03	N Type Male
NF-LCF78-C03	N Type Female

Tools for Series C03

TRIM-SET-L78-C02	Universal Trimming Tool
TRIM-IL78-C02	Trimming Tool Insert
TRIM-FL78	Flaring Tool

Premium Connector Series D01

Model Number	Type
716M-LCF78-D01	7/16 Male
716F-LCF78-D01	7/16 Female
43M-LCF78-D01	4.3-10 Male
43F-LCF78-D01	4.3-10 Female
NM-LCF78-D01	N Type Male
NF-LCF78-D01	N Type Female

Tools for Series E01

TRIM-SET-L78-D01	Universal Trimming Tool
TRIM-IL78-D01	Univ. Trimming Tool Insert
TRIM-LCF78-D01-A	Automatic Trimming Tool
TRIM-FL78	Flaring Tool

Compression Connector Series CP01

Model Number	Type
716M-LCF78-CP01	7-16 DIN Male
716F-LCF78-CP01	7-16 DIN Female
43M-LCF78-CP01	4.3-10 Male, torque type
43F-LCF78-CP01	4.3-10 Fmale
NF-LCF78-CP01	N Female
43M-HCA78-CP01	4.3-10 Male

Tools for Series CP01

AFBXD05-41	Prep Tool
HCG-FRAMESET-7/8	Frameset

Accessories

Model Number	Type	Model Number	Type
HOIST1-78L	Hoisting Grip	JSTRIP-78-2	Jacket Stripping Tool
GKSPEED20-78C	Grounding Kit, CCA Wire	CEAR-78	Connector Grounding Kit
GKSPEED20-78P	Grounding Kit, Premium	BOOT4-78-4	Feed Through Assembly
GKSPEED20-78S	Grounding Kit, Standard	BOOT-CP-78	Cushion Plug
GKSPEED60-78S	Grounding Kit, High Speed	RSB-78	Stainless Steel Clamp
		TRIM-T01	Hand Tool Kit

RFS Technologies
an Amphenol Company

CELLFLEX LOW-LOSS
FOAM-DIELECTRIC COAXIAL CABLE

UCF114 Series: up to 4.1 GHz

ORDERING INFORMATION

Jacketing Options	Premium Attenuation Cable Model Numbers
Outdoor standard:	UCF114-50JA
Indoor flame retardant:	UCF114-50JFNA

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS		
Dimensions Over Jacket	in (mm)	1.54 (39)
Min. Bending Radius, Single	in (mm)	8 (200)
Min. Bending Radius, Repeated	in (mm)	15 (380)
Jacket Type		Polyethylene, PE
Bending Moment	lb-ft (Nm)	Copper 32 (43) Aluminum 16.2 (22)
Tensile Strength	lb (N)	Copper 560 (2490) Aluminum 416 (1850)
Recommended/Maximum Clamp Spacing	ft (m)	3.25/4 (1/1.2)

ELECTRICAL SPECIFICATIONS		
Maximum Frequency	GHz	3.7
Max. VSWR / Return Loss	dB (VSWR)	20 (1.22) @ 450-617 MHz 24 (1.13) @ 617-960 MHz 24 (1.13) @ 1695-2200 MHz 20 (1.22) @ 2300-2700 MHz 15 (1.43) @ 3500-4100 MHz

TEMPERATURE SPECIFICATIONS		
Installation	°F (°C)	-40 to 140 (-40 to 60)
Installation - JFNA	°F (°C)	-13 to 140 (-25 to 60)
Storage	°F (°C)	-94 to 185 (-70 to 85)
Operation	°F (°C)	-58 to 185 (-50 to 85)

ATTENUATION			
Frequency, MHz	**dB per 100 ft**	**dB per 100 m**	**Power, kW**
800	0.75	2.47	4.45
1900	1.22	4.00	2.75
2200	1.33	4.35	2.53
2600	1.46	4.80	2.29
2700	1.49	4.90	2.24
3000	1.59	5.21	2.11
3300	1.68	5.51	2.00
3600	1.77	5.80	1.90
3700	1.80	5.90	1.86

RELATED PRODUCTS

Standard Connector Series C03

Model Number	Type
716M-LCF114-C03	7/16 Male
716F-LCF114-C03	7/16 Female
NM-LCF114-C03	N Type Male
NF-LCF114-C03	N Type Female
Tools for Series C03	
TRIM-SET-L114-C02	Universal Trimming Tool
TRIM-IL114-C02	Trimming Tool Insert

Premium Connector Series D01

Model Number	Type
716M-LCF114-D01	7/16 Male
716F-LCF114-D01	7/16 Female
43M-LCF114-D01	4.3-10 Male
43F-LCF114-D01	4.3-10 Female
NM-LCF114-D01	N Type Male
NF-LCF114-D01	N Type Female
Tools for Series D01	
TRIM-SET-L114-D01	Universal Trimming Tool
TRIM-IL114-D01	Univ. Trimming Tool Insert

Accessories

Model Number	Type
HOIST1-114L	Hoisting Grip
GKSPEED20-114C	Grounding Kit, CCA Wire
GKSPEED20-114P	Grounding Kit, Premium
GKSPEED60-114S	Grounding Kit, High Speed
JSTRIP-114-2	Jacket Stripping Tool
CEAR-114	Connector Grounding Kit
RSB-114	Stainless Steel Clamp
TRIM-T01	Hand Tool Kit

CELLFLEX LOW-LOSS
FOAM-DIELECTRIC COAXIAL CABLE

LCF158 Series: up to 3.98 GHz

ORDERING INFORMATION

Jacketing Options	Premium Attenuation Cable Model Numbers
Outdoor standard:	LCF158-50JA
Indoor flame retardant:	LCF158-50JFNA

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS		
Dimensions Over Jacket	in (mm)	1.98 (50.2)
Min. Bending Radius, Single	in (mm)	8 (200)
Min. Bending Radius, Repeated	in (mm)	20 (500)
Jacket Type		Polyethylene, PE
Bending Moment	lb-ft (Nm)	31 (42)
Tensile Strength	lb (N)	562 (2500)
Recommended/Maximum Clamp Spacing	ft (m)	4/5 (1.2/1.5)

ELECTRICAL SPECIFICATIONS		
Maximum Frequency	GHz	2.75
Max. VSWR / Return Loss	dB (VSWR)	20 (1.22) @ 450-617 MHz 24 (1.13) @ 617-960 MHz 24 (1.13) @ 1695-2200 MHz 20 (1.22) @ 2300-2700 MHz 12 (1.67) @ 3500-3980 MHz

TEMPERATURE SPECIFICATIONS		
Installation	°F (°C)	-40 to 140 (-40 to 60)
Installation - JFNA	°F (°C)	-13 to 140 (-25 to 60)
Storage	°F (°C)	-94 to 185 (-70 to 85)
Operation	°F (°C)	-58 to 185 (-50 to 85)

ATTENUATION			
Frequency, MHz	**dB per 100 ft**	**dB per 100 m**	**Power, kW**
800	0.60	1.98	5.66
1700	0.93	3.06	3.66
2000	1.03	3.36	3.34
2200	1.08	3.56	3.15
2400	1.14	3.75	2.99
2600	1.20	3.93	2.85
2700	1.23	4.02	2.79
2750	1.24	4.07	2.75

RELATED PRODUCTS

Standard Connector Series C03

Model Number	Type
716M-LCF158-C03	7/16 Male
716F-LCF158-C03	7/16 Female
NM-LCF158-C03	N Type Male
NF-LCF158-C03	N Type Female
Tools for Series C03	
TRIM-SET-L158-C02	Universal Trimming Tool
TRIM-IL158-C02	Trimming Tool Insert

Premium Connector Series D01

Model Number	Type
716M-LCF158-D01	7/16 Male
716F-LCF158-D01	7/16 Female
43M-LCF158-D01	4.3-10 Male
43F-LCF158-D01	4.3-10 Female
NM-LCF158-D01	N Type Male
NF-LCF158-D01	N Type Female
Tools for Series D01	
TRIM-SET-L158-D01	Universal Trimming Tool
TRIM-IL158-D01	Univ. Trimming Tool Insert

Accessories

Model Number	Type
HOIST1-158L	Hoisting Grip
GKSPEED20-158C	Grounding Kit, CCA Wire
GKSPEED20-158P	Grounding Kit, Premium
GKSPEED60-158S	Grounding Kit, High Speed
JSTRIP-158-2	Jacket Stripping Tool
CEAR-158	Connector Grounding Kit
BOOT4-158-1	Feed Through Assembly
RSB-158	Stainless Steel Clamp
TRIM-T01	Hand Tool Kit

SCF14-50JPL*
PLENUM-RATED SUPERFLEX CABLES

Our plenum-rated SCF14 foam cables, tested up to 20.4 GHz, deliver outstanding electrical performance and support all wireless in-building applications. These foam coaxial cables meet the most stringent plenum cable standards, CMP, ETL listed to UL444, and also comply with Canadian CSA C.22.2/FT6 standard, with low flame-spread and low-smoke characteristics. With this combination of features, RFS Technologies' plenum-rated foam SCF14 cables are ideal for use within the ceiling area defined as the "environmental air handling space," as well as for more traditional plenum applications where it requires plenum rated Jumpers. plenum applications where it requires plenum rated Jumpers.

IMPROVE IN-BUILDING WIRELESS NETWORK PERFORMANCE

RFS Technologies plenum-rated cables provide low attenuation and excellent return loss.

They also feature robust construction that reduces the risk of performance issues:

- A continuous, foam dielectric provides complete support for the inner conductor to eliminate electrical and mechanical problems in tight bending areas.
- The solid outer conductor creates a continuous RFI/EMI shield that minimizes system interference.

Plenum-Rated Cables

FREQUENCY RANGE (MHz)	RETURN LOSS (dB)	VSWR
450-617	20	1.22
617-960	24	1.13
1695-2200	24	1.13
2300-2700	20	1.22
3500-4200	18	1.28
5150-6000	16	1.37

Plenum-Rated Cables

SIZE	MODEL NUMBER	JACKET COLOR	CABLE WEIGHT lb/ft (kg/m)	OUTER CONDUCTOR MATERIAL
1/4"	**SCF14-50JPL**	Blue	0.05 (0.07)	Corrugated Copper
1/4"	**SCF14-50JPLW**	White	0.05 (0.07)	Corrugated Copper
1/4"	**SCF14-50JPLR**	Red	0.05 (0.07)	Corrugated Copper
1/4"	**SCF14-50JPLB**	Black	0.05 (0.07)	Corrugated Copper

*different jacket colors available

RELATED PRODUCTS

Premium Connector Series D01

Model Number	Type
NF-SCF14-D01	N Female
NM-SCF14-D01	N Male

Tools for Series D01

TRIM-T01	Hand tool kit

Compression Connector Series CP01

Model Number	Type
716M-SCF14-CP01	7-16 DIN Male
43M-SCF14-CP01	7-16 DIN Male

Tools for Series CP01

AFBXD05-32	Prep Tool
AFBXD07-1	Foam Remover
HCG-FRAMESET-1/4	Frameset

Accessories

Model Number	Type
EAR-14-S	Grounding Kit

CLEARFILL®LINE
PLENUM-RATED CABLES

RFS Technologies, inc. ClearFill®Line plenum-rated wideband cables deliver outstanding electrical and mechanical performance, and operate in frequencies from DC to 6 GHz to support all in-building wireless technologies and applications. These air dielectric coaxial cables are thoroughly tested for safe use within the “environmental air handling space” in ceilings as well as in more traditional plenum applications. They’re available in copper or lighter weight aluminum models to meet any installation requirements. Meets /Exceeds UL 910, NEC 820-53 (a) CMP, NFPA-262.

IMPROVE IN-BUILDING WIRELESS NETWORK PERFORMANCE

ClearFill®Line plenum-rated cables provide low attenuation and excellent return loss.

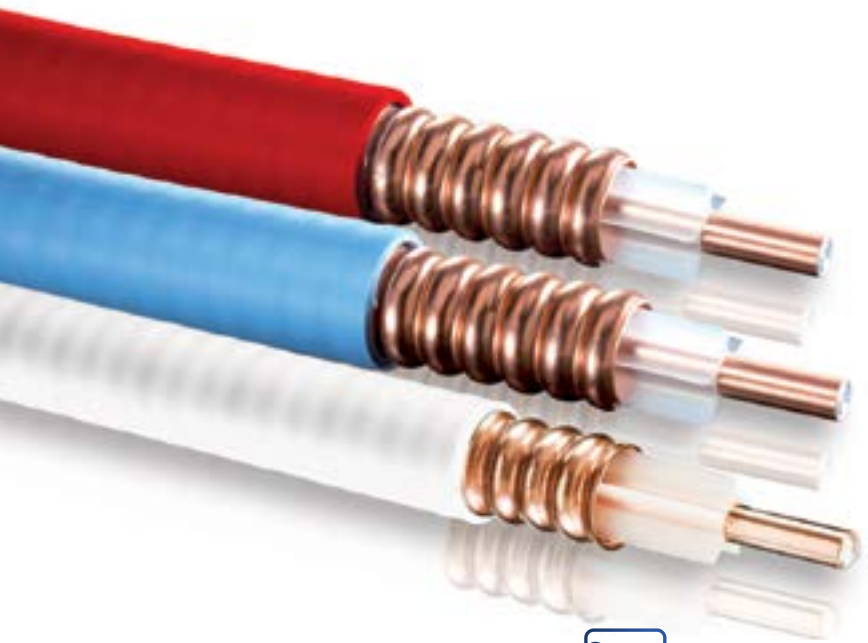
They also feature robust construction that reduces the risk of performance issues:

- A continuous, star-shaped dielectric provides complete support for the inner conductor to eliminate electrical and mechanical problems in tight bending areas.
- The solid outer conductor creates a continuous RFI/EMI shield that minimizes system interference

WIDEBAND SUPPORT

With wideband spectrum support up to 6 GHz, ClearFill Line plenum-rated cables make it easy to take advantage of newly available Citizens Broadband Radio Service (CBRS) spectrum in the 3.5 GHz band and LTE License Assisted Access (LAA) spectrum in the unlicensed 5 GHz band.

FREQUENCY RANGE (MHz)	RETURN LOSS (dB)	VSWR
698-960	24	1.13
1395-1432	24	1.13
1700-2155	24	1.13
2300-2700	20	1.22
3550-4200	18	1.29
5150-6000	18	1.29



Wideband operation

Support technologies and applications in bands ranging from DC

up to 6GHz

CLEARFILL®LINE
PLENUM-RATED CABLES

ICA12 Series: 6 GHz

ORDERING INFORMATION

1/2" Plenum-Rated Cables Jacket Color	Wideband Copper Cables Model Numbers	Wideband Aluminum Cables Model Numbers
Blue	ICA12-50JPL	ICA12-50JPLL
Red	ICA12-50JPLR	ICA12-50JPLLR
Black	ICA12-50JPLB	ICA12-50JPLLB
White	ICA12-50JPLW	ICA12-50JPLLW

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS		
Dimensions Over Jacket	in (mm)	0.627 (15.93)
Min. Bending Radius, Single	in (mm)	3 (76)
Min. Bending Radius, Repeated	in (mm)	5 (127)
Jacket Type		PVC, Plenum Rated, UV rated to ASTM G155, Water-resistant
Bending Moment	lb-ft (Nm)	Copper 3 (4.1) Aluminum 4 (5.4)
Tensile Strength	lb (N)	Copper 250 (1112) Aluminum 150 (549)
Recommended/Maximum Clamp Spacing	ft (m)	1.8/3 (0.5/0.9)

TEMPERATURE SPECIFICATIONS		
Installation	°F (°C)	-4 to 140 (-20 to 60)
Storage	°F (°C)	-40 to 185 (-40 to 85)
Operation	°F (°C)	-40 to 185 (-40 to 85)

ELECTRICAL SPECIFICATIONS		
Operating Frequency Band	GHz	6
Max. VSWR / Return Loss	dB (VSWR)	24 (1.13) @ 698-960 MHz 24 (1.13) @ 1395-1432 MHz 24 (1.13) @ 1700-2155 MHz 20 (1.22) @ 2300-2700 MHz 18 (1.29) @ 3550-4200 MHz 18 (1.29) @ 5150-6000 MHz

RELATED PRODUCTS

Standard Connector Series C03/C02

Model Number	Type
716M-LCF12-C03	7/16 Male
716F-LCF12-C03	7/16 Female
43M-LCF12-C03	4.3-10 Male
43F-LCF12-C03	4.3-10 Female
NM-LCF12-C02-6	N Type Male
NF-LCF12-C02-6	N Type Female
NM-LCF12-C03	N Type Male
NF-LCF12-C03	N Type Female

Tools for Series C03/C02

TRIM-ICA12-C02	Universal Trimming Tool

Premium Connector Series D01

Model Number	Type
716M-LCF12-D01	7/16 Male
716F-LCF12-D01	7/16 Female
43M-LCF12-D01	4.3-10 Male
43F-LCF12-D01	4.3-10 Female
NM-LCF12-D01	N Type Male
NF-LCF12-D01	N Type Female

Tools for Series D01

TRIM-SET-L12-D01	Universal Trimming Tool

Compression Connector Series CP01

Model Number	Type
716M-LCF12-CP01	7-16 DIN Male
716F-LCF12-CP01	7-16 DIN Female
43M-LCF12-CP01	4.3-10 Male, torque type
43F-LCF12-CP01	4.3-10 Female
NM-LCF12-CP01	N Male
NF-LCF12-CP01	N Female

Accessories

Model Number	Type	Model Number	Type
HOIST1-12L	Hoisting Grip	CEAR-12	Connector Grounding Kit
GKSPEED20-12C	Grounding Kit, CCA Wire	BOOT4-12-4	Feed Through Assembly
GKSPEED20-12P	Grounding Kit, Premium	BOOT-CP-12	Cushion Plug
GKSPEED20-12S	Grounding Kit, Standard	RSB-12	Stainless Steel Clamp
GKSPEED60-12S	Grounding Kit, High Speed	TRIM-T01	Hand Tool Kit
JSTRIP-12-3	Jacket Stripping Tool		

HCA78-50
AIR DIELECTRIC PLENUM-RATED CABLES

Air Dielectric cable is designed to support multiple RF signals and provides complete shielding due to its solid outer conductor, which creates a continuous RFI/EMI shield that minimizes system interference. The cable boasts outstanding intermodulation performance, with its solid inner and outer conductors virtually eliminating intermods, and this performance is confirmed with state-of-the-art equipment at the RFS factory. Additionally, Air Dielectric cable is versatile and can be used in a wide range of applications, including feedlines for plenum space installations within occupied buildings or structures.

IMPROVE IN-BUILDING WIRELESS NETWORK PERFORMANCE

ClearFill®Line plenum-rated cables provide low attenuation and excellent return loss.

They also feature robust construction that reduces the risk of performance issues:

- A continuous, star-shaped dielectric provides complete support for the inner conductor to eliminate electrical and mechanical problems in tight bending areas.
- The solid outer conductor creates a continuous RFI/EMI shield that minimizes system interference.

FREQUENCY RANGE (MHz)	RETURN LOSS (dB)	VSWR
698-798	21	(1.195)
824-960	21	(1.195)
1695-1780	21	(1.195)
1850-2020	21	(1.195)
2305-2320	21	(1.195)
2345-2360	21	(1.195)
2496-2700	21	(1.195)
27000-3000	18	(1.288)
3550-3770	15	(1.432)
3700-3900	13	(1.576)
3980-4200	11	(1.784)

Plenum-Rated Cables

SIZE	MODEL NUMBER	JACKET COLOR	CABLE WEIGHT lb/ft (kg/m)	OUTER CONDUCTOR MATERIAL
7/8"	HCA78-50JPL	Blue	0.05 (0.07)	Corrugated Copper
7/8"	HCA78-50JPLW	White	0.05 (0.07)	Corrugated Copper
7/8"	HCA78-50JFB	Black	0.05 (0.07)	Corrugated Copper

RELATED PRODUCTS

Premium Connector Series D01

Model Number	Type
43M-HCA78-D01	4.3-10 Male
43F-HCA78-D01	4.3-10 Female

Tools for Series D01

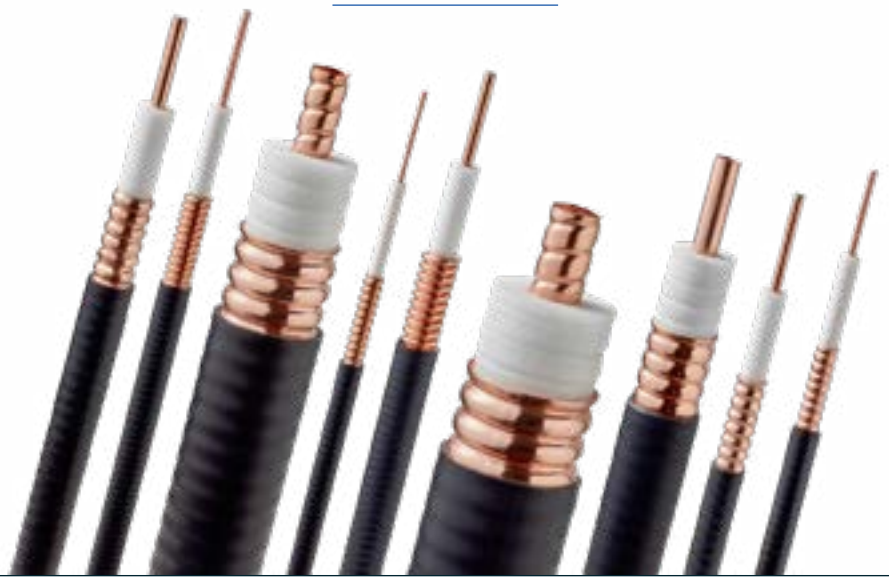
TRIM-SET-H78-D01	Universal Trimming Tool

Compression Connector Series CP01

Model Number	Type
43M-HCA78-CP01	4.3-10 Male, torque type
43F-LCF12-CP01	4.3-10 Female

Tools for Series CP01

AFBXD05-42	Prep Tool
HCG-FRAMESET-7/8	Frameset



UNDERSTANDING **CABLE MODEL NAMES**

All RFS coaxial cable model names are based on a naming structure that tells you:

Cable **Type**	Cable **Size**		Cable **Impedance**	**Jacket** Type	Cable **Suffix**	Design **Variant**
LCF	**12**	-	**50**	**J**	**A**	**-BAA**

LCF CABLE TYPE

LCF	Low attenuation foam dielectric, corrugated
SCF	Superflexible
UCF	Ultraflexible, corrugated IC

12 CABLE SIZE

14	1/4-inch
38	3/8-inch
12	1/2-inch
78	7/8-inch
114	1-1/4-inch
158	1-5/8-inch

50 CABLE IMPEDENCE

50	50 Ohm

J JACKET TYPE

J	Standard PE Jacket
JFN	Flame Retardant LSZH Jacket

A CABLE SUFFIX

A	Low Loss Premium Attenuation
L	Light cable – Aluminum OC
GR	Grey Jacket RAL7004
TC	Phase stabilized after temerature cycles
W	White Jacket

-BAA DESIGN VARIANT

-BAA	Compliant to the Buy America Act

GET HIGH-PERFORMANCE JUMPER CABLES FOR ANY APPLICATION, ANY SIZE

We are a global leader in RF jumper cables and offers a completes portfolio of jumper cables that meet any requirements. **CELLFLEX Factory-Fit Jumpers** are ideal for indoor environments and other locations where jumper connectors do not require weatherproofing.

CELLFLEX SecureFit Booted Jumpers are ideal for outdoor environments and other locations where jumper connectors need to be protected from the elements.
All of our CELLFLEX jumper cables support frequencies up to 6 GHz to simplify your network evolution and protect your investment.

CHOOSE FROM SUPER-FLEXIBLE AND LOW-LOSS JUMPER CABLES

CELLFLEX Factory-Fit Jumpers and CELLFLEX SecureFit Booted Jumpers are designed for seamless connection to our renowned CELLFLEX foam dielectric coaxial cables:

CELLFLEX super-flexible jumper cables combine outstanding bending characteristics and electrical performance to improve quality and efficiency in the most challenging deployment scenarios.

CELLFLEX low-loss jumper cables deliver extremely low attenuation that increases the efficiency of signal transfers in any RF system.

MIX AND MATCH JUMPER CABLE CONFIGURATIONS AND FEATURES TO MEET APPLICATION AND SITE REQUIREMENTS

We offer a variety of features and configuration options for each jumper cable type and size. Options include:

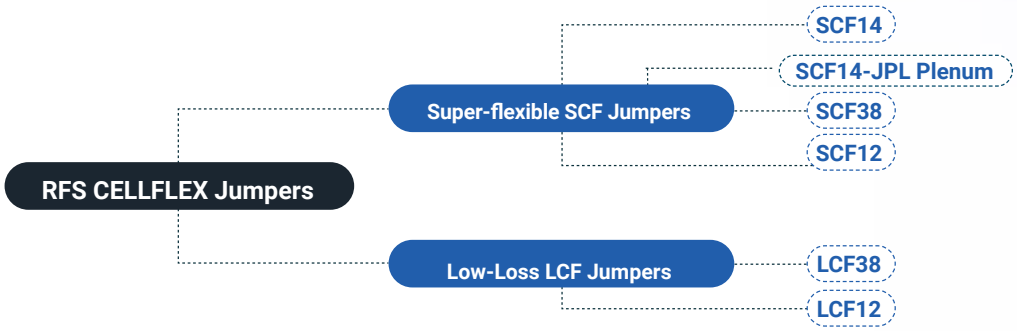
- Jacket type: Standard or flame-retardant
- Connector type for each endpoint: NEX10, 4.3-10, N-Type or 7-16 DIN right-angled or straight connectors
- Performance: UltraPIM or Premium PIM
- Length: 1 m to 20 m or 3 ft to 50 ft

We manufacture and stock the most popular combinations and can deliver custom lengths when required.

SIMPLIFY 4G, 5G AND SMALL CELL DEPLOYMENTS IN CROWDED URBAN ENVIRONMENTS

As you upgrade and add network technologies to already-crowded sites, the ability to make more coaxial cable connections in smaller spaces is crucial.

CELLFLEX super-flexible 1/4-inch jumpers with miniaturized NEX10 and 4.3-10 connectors make urban installations faster and easier. They're ideal for installations in highly constrained spaces, such as street poles, and for short-distance connections. To ensure optimal attenuation over longer distances, rely on our low-loss 1/2-inch jumper cables.



RFS Technologies
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GET HIGH-PERFORMANCE JUMPER CABLES
FOR ANY APPLICATION, ANY SIZE

MAINTAIN ULTRA-HIGH PERFORMANCE END-TO-END

You can't afford to compromise on performance. Jumper cables that provide the ultimate in electrical performance are essential to guarantee end-to-end transmission line performance and support the next generations of applications.

CELLFLEX jumper cables feature our industry-leading UltraPIM performance, and we guarantee the performance specifications for every jumper cable.

All of our jumpers are fully tested for PIM, VSWR (return loss) and interface performance. Test results are available online for products sold globally.

GET MORE VALUE FROM EXISTING EQUIPMENT

We understand your need to extract maximum value from the investments you've already made in network equipment.

While some jumper cable vendors are discontinuing older connector types, such as N-Type and 7-16 DIN, we continue to offer the interfaces.

BRING US YOUR TOUGHEST DEPLOYMENT CHALLENGES

We have the expertise and experience needed to adapt our jumper designs and deliver innovative, custom jumper cables that are designed to meet your unique requirements and resolve the most difficult installation challenges.

One of our recent innovations includes jumper cables with shortened, molded boots that fit within the available space on a specific outdoor small cell radio while still allowing a plastic cover to close over the end of the jumper.

SUPPORT DEPLOYMENTS ANYWHERE IN THE WORLD

We understand your need to extract maximum value from the investments you've already made in network equipment While some jumper cable vendors are discontinuing older connector types, such as N-Type and 7-16 DIN, we continue to offer the interfaces.

CLUSTER CONNECTORS

Make More Jumper Connections in Less Space

Our innovative jumper cables with RF cluster connectors are ideal for connecting to highly integrated antennas that have a large number of RF ports in a very compact footprint.

Each cluster connector supports connections to multiple RF ports to enable connections to more than 20 multiband 4T4R and 8T8R ports within the space of a typical antenna end cap.

Simplify your next deployment using cluster jumpers with MQ4/MQ5 connectors or M-LOC systems.

PROTECT CRITICAL CONNECTIONS WITH THE ULTIMATE WEATHERPROOFING BOOT

RFS Technologies CELLFLEX SecureFit Booted Jumpers feature specially designed, injection-molded weatherproof boots that protect jumper connections from all forms of moisture — from rain to snow and ice — as well as salt, sand, dust and other contaminants that can corrode connectors, degrade connection quality and reduce connector lifespan. The boot's sleek, close-fitting design results in a small footprint that's ideal to protect any connection, including connections to multi-port equipment with tight connector spacing.

CELLFLEX SECUREFIT BOOTED JUMPERS

We offer a wide variety of jumper cable sizes, compatible with all RFS Technologies-supported connector types, and available in all our jumper configurations.

UPGRADE TO FASTER, EASIER WEATHERPROOFING WITH CELLFLEX SECUREFIT BOOTED JUMPERS

With CELLFLEX SecureFit Booted Jumpers, you can quickly and easily add an additional level of sealing and strain relief to any connection with no need for installers to waste time and effort applying and removing sealing tape.

Installers can connect and disconnect our SecureFit Booted Jumpers far faster and easier than they can when sealing tape is used to protect connections. And no waste is generated, so installers never have to worry about garbage removal or clutter while they're working high on towers. There's also no that risk that jumper cables can be damaged or installers injured as is the case when a knife is used to remove sealing tape from connections.

ENSURE CONSISTENT AND RELIABLE WEATHERPROOFING ON ALL CONNECTIONS

The SecureFit boot design is the same no matter which connector type you're using or which equipment you're connecting to.

The ergonomic boot design allows installers to use a single hand to easily slide the boot into place over the connection and to remove the boot when needed. Installers quickly master the technique and can apply consistent and reliable weatherproofing across all connections with minimal training.

The lead time for CELLFLEX SecureFit Booted Jumpers is the same as our CELLFLEX Factory-Fit Jumpers, so there are no delays when booted jumpers are required.

Protect your network investment and maintain premium performance with a reliable and exceptionally easy weatherproofing solution from RFS Technologies, Inc.

RFS Technologies
an Amphenol Company

UNDERSTANDING **JUMPER MODEL NAMES**

All RFS jumper model names are based on a naming structure that tells you:

Connector A	Connector B	Cable Type	Jacket Type		Cable Length	Performance Type
7M	**43M**	**S12**	**F**	-	**0100**	**FFP**

7M & 43M CONNECTORS A & B

7M	7-16 Male
7F	7-16 Female
7MR	7-16 Male Right Angle
43M	4.3-10 Male
43F	4.3-10 Female
43MR	4.3-10 Male Right Angle
NM	N-Type Male
NF	N-Type Female
NMR	N-Type Male Right Angle
NXM	NEX10 Male
7MB	7-16 Male with Weatherboots
7MRB	7-16 Male Right Angle with Weatherboots
43MB	4.3-10 Male with Weatherboots
43MRB	4.3-10 Male Right Angle withWeatherboots
NMB	N-Type Male with Weatherboots
NMRB	N-Type Male Right Angle with Weatherboots
NXMB	NEX10 Male with Weatherboots

S12 CABLE TYPE

L38	3/8" Low Loss Coax
L12	1/2" Low Loss Coax
S14	1/4" Superflexible Coax
S38	3/8" Superflexible Coax
S12	1/2" Superflexible Coax

F JACKET TYPE

F	JFN Flame Retardant
P	Plenum Rated
Blank	Outdoor Use

0100 CABLE LENGTH*

0100	1 meter
0200	2 meter
0250	2.5 meter
1000	10 meter
1500	15 meter
030	3 feet
060	6 feet
100	10 feet
150	15 feet
200	20 feet

FFP JUMPER PERFORMANCE

FFP	Factory-Fit Premium
UPM	Ultra PIM Performance**

NOTES:

* 4 digits indicate meter length, 3 digits indicate feet length
Others lengths available on request

** Available on request

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UNLIMITED CONNECTIONS WITH
THE RFS TECHNOLOGIES ADAPTER SERIES

CONNECTIONS IN THE FIELD JUST GOT EASIER

Our new coaxial adapter series provides a fast, easy and cost-effective solution for jumper connections. With a large selection of both straight and right angle adapters, there is a model for every network requirement. Passive intermodulation specifications for all RFS adapters is < -163 dBc.

MODEL NUMBER (STRAIGHT)	MODEL NUMBER (RIGHT ANGLE)
716M-716F	716M-R-716F
716F-43F	716M-R-716M
716M-716M	43M-R-43F
716M-43M	NM-R-NM
716M-43F	NM-R-NF
716M-NM	716F-R-716F
716M-NF	716F-R-43M
43F-43F	716F-R-43F
43F-NM	716F-R-NM
43F-NF	716F-R-NF
43M-43M	716M-R-43M
43M-NM	716M-R-43F
43M-NF	716M-R-NM
NM-NM	716M-R-NF
NM-NF	43F-R-43F
NF-NF	43F-R-NM
716F-716F	43F-R-NF
716F-43M	43M-R-43M
716F-NM	43M-R-NM
716F-NF	43M-R-NF
43M-43F	NF-R-NF

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