RADIO FREQUENCY SYSTEMS

ALLIANCE™ CORPORATION

THE POWER OF BEING CONNECTED.

RF CABLE SOLUTIONS
SELECTION GUIDE

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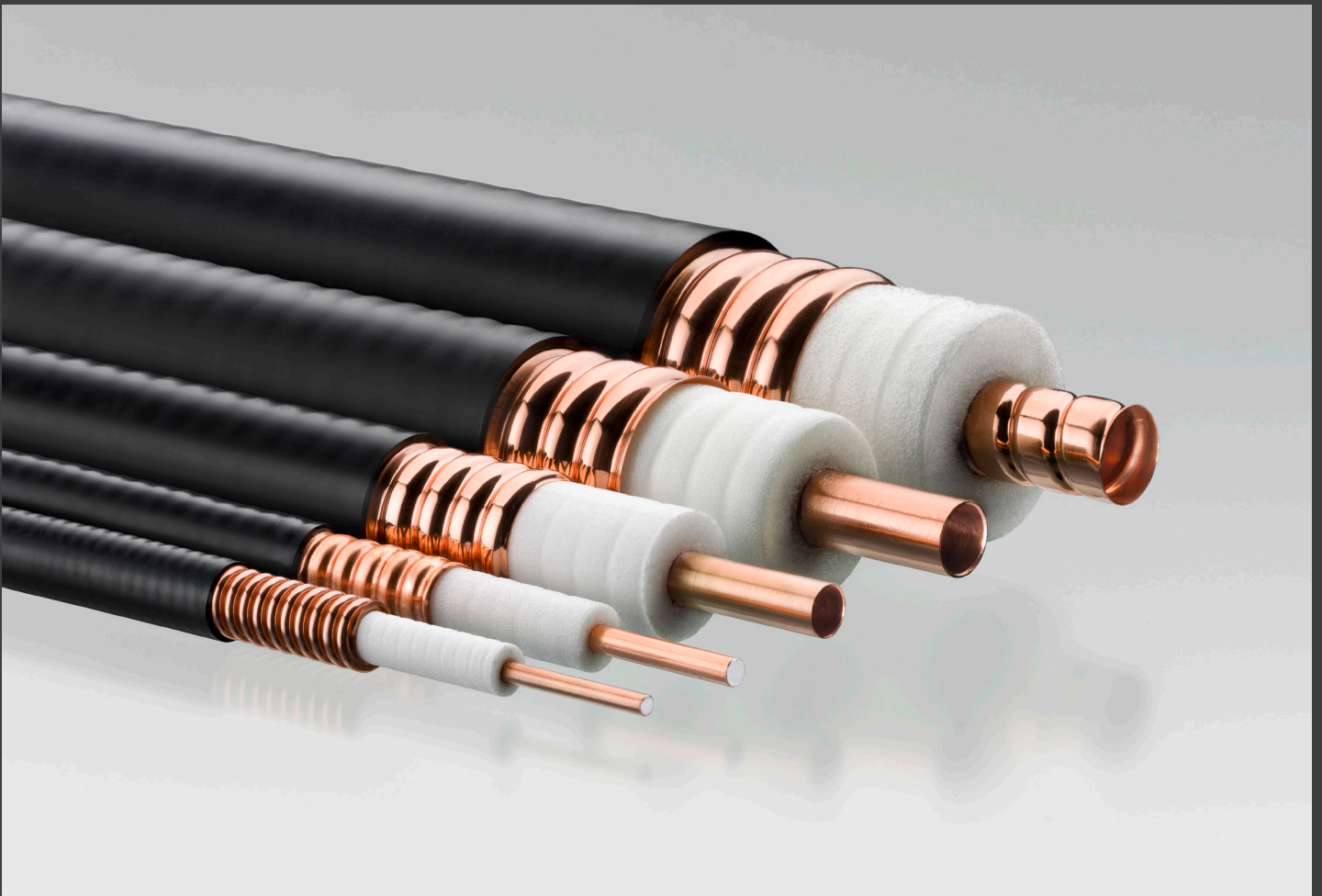
RADIO FREQUENCY SYSTEMS

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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.

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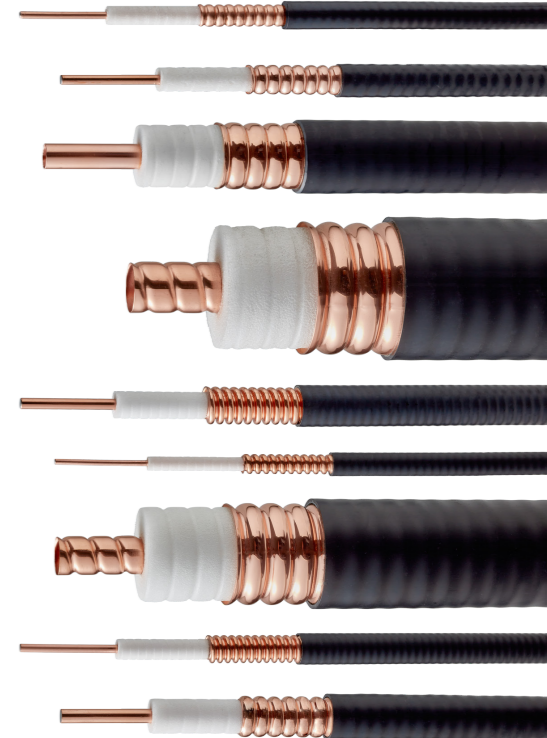
With 20 CELLFLEX cable models ranging from 1/4-inch to 1 5/8-inch in diameter, there's a CELLFLEX cable for even the most complicated and demanding applications.

Together, CELLFLEX and CELLFLEX Lite make up the largest corrugated transmission-line portfolio in the wireless infrastructure industry.

MEETING THE WORLD'S HIGHEST FIRE SAFETY STANDARDS

CELLFLEX cables have achieved the top Construction Products Regulation (CPR) rating of B2ca with a d0 droplets rating. They also meet international flame- and fire-retardancy standards, including:

- IEC 60754-1/-2: Halogen-free and non-corrosive jacket tests
- IEC 60332-1: Flame tests
- IEC 60332-3-24: Cable bundle tests
- IEC 61034: Low-smoke emission tests

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®
LITE

Reduce your reliance on copper cables

When we invented CELLFLEX Lite foam dielectric corrugated coaxial cables in 2006, they were the first in the industry to combine an aluminum outer conductor with a copper inner conductor.

These lightweight cables are the ideal alternative to CELLFLEX copper cables when fluctuating copper prices rise and in areas where copper theft is an issue. They're easy to transport, handle and install. And they offer an unbeatable price-performance combination.

CELLFLEX Lite communications cables deliver world-class electrical performance that meets or exceeds that of many other vendors' copper cables.

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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® and CELLFLEX Lite 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 E01 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.

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 E01 series connectors include a built-in seal against the outer conductor and against the cable jacket so there's no need for external sealing. They can be installed using the same tools and following the same principles as the previous generation D01 connectors.

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.

NEW PRODUCT

CELLFLEX® MULTIFLEX ALL-IN-ONE SOLUTION

Accelerate Installations

CELLFLEX MultiFlex cabling solutions feature 1-meter (3-ft) CELLFLEX jumpers connected to each end of a CELLFLEX feeder cable of any length with OMNI FIT™ connectors. You choose the jumper, cable and connector combination you need, and we take care of assembly.

With a pre-assembled CELLFLEX MultiFlex solution, you'll save time and effort across indoor and outdoor installations. And you'll have the ultimate combination: The flexibility of jumpers, the outstanding performance of larger feeder cables and the reliability of factory-installed connectors.

All CELLFLEX MultiFlex solutions support frequencies up to 6 GHz to get you to 5G faster anywhere in the world.

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CELLFLEX LOW-LOSS
FOAM-DIELECTRIC COAXIAL CABLE

SCF14 Series: 20.4 GHz

ORDERING INFORMATION

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

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS		
Dimensions Over Jacket	mm (in)	7.8 (0.307)
Min. Bending Radius, Repeated	mm (in)	25 (0.984)
Jacket Type		Polyethylene, PE
Bending Moment	Nm (lb-ft)	0.7 (0.5)
Tensile Strength	N (lb)	600 (135)
Recommended/Maximum Clamp Spacing	m (ft)	0.2 / 0.2 (0.67 / 0.67)

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

ELECTRICAL SPECIFICATIONS		
Operating Frequency Band	GHz	20.4
Max. VSWR / Return Loss	dB (VSWR)	Standard 20 (1.222) Premium 23 (1.152) Premium 24 (1.135)

ATTENUATION			
Frequency, MHz	dB per 100 m	dB per 100 ft	Power, kW
800	17.30	5.27	0.38
1800	26.90	8.20	0.25
2400	31.30	9.60	0.21
3500	39.10	11.90	0.17
5000	48.00	14.60	0.14
6000	53.40	16.30	0.12
8000	63.40	19.30	0.10
10000	72.60	22.10	0.09
12000	81.00	24.80	0.08
16000	97.00	29.60	0.07
18000	105.00	31.90	0.06
20400	113.00	34.60	0.06

RELATED PRODUCTS

Premium Connector Series E01

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

Tools for Series E01

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

Accessories

Model Number	Type
TRIM-T01	Hand Tool Kit

CELLFLEX LOW-LOSS
FOAM-DIELECTRIC COAXIAL CABLE

SCF38 Series: 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	mm (in)	10.2 (0.402)
Min. Bending Radius, Repeated	mm (in)	25 (0.984)
Jacket Type		Polyethylene, PE
Bending Moment	Nm (lb-ft)	1.4 (1)
Tensile Strength	N (lb)	600 (135)
Recommended/Maximum Clamp Spacing	m (ft)	0.25 / 0.25 (0.8 / 0.8)

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

ELECTRICAL SPECIFICATIONS		
Operating Frequency Band	GHz	13.4
Max. VSWR / Return Loss	dB (VSWR)	Standard 20 (1.222) Premium 23 (1.152) Premium 24 (1.135)

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

RELATED PRODUCTS

Premium Connector Series E01

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

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

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

ELECTRICAL SPECIFICATIONS		
Operating Frequency Band	GHz	10.6
Max. VSWR / Return Loss	dB (VSWR)	Standard 20 (1.222) Premium 23 (1.152) Premium 24 (1.135)

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

RELATED PRODUCTS

Standard Connectors

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 E01

Model Number	Type
716M-SCF12-E01	7-16 Male
716F-SCF12-E01	7-16 Female
43M-SCF12-E01	4.3-10 Male
43F-SCF12-E01	4.3-10 Female
NM-SCF12-E01	N Type Male
NF-SCF12-E01	N Type Female
716MR-SCF12-E01	7-16 Male Right Angle
43MR-SCF12-E01	4.3-10 Male Right Angle
NMR-SCF12-E01	N Type Male Right Angle

Tools for Series E01

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

Accessories

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

CELLFLEX LOW-LOSS
FOAM-DIELECTRIC COAXIAL CABLE

LCF14 Series: 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	mm (in)	10 (0.394)
Min. Bending Radius, Single	mm (in)	40 (1.575)
Min. Bending Radius, Repeated	mm (in)	85 (3.346)
Jacket Type		Polyethylene, PE
Bending Moment	Nm (lb-ft)	1.9 (1.4)
Tensile Strength	N (lb)	890 (200)
Recommended/Maximum Clamp Spacing	m (ft)	0.5 / 1 (1.75 / 3.25)

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

ELECTRICAL SPECIFICATIONS		
Operating Frequency Band	GHz	15.8
Max. VSWR / Return Loss	dB (VSWR)	Standard 20 (1.222) Premium 23 (1.152) Premium 24 (1.135)

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

RELATED PRODUCTS

Premium Connector Series E01/D01

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 D01

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: 13.5 GHz

ORDERING INFORMATION

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

PRODUCT SPECIFICATIONS

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

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

ELECTRICAL SPECIFICATIONS		
Operating Frequency Band	GHz	13.5
Max. VSWR / Return Loss	dB (VSWR)	Standard 20 (1.222) Premium 23 (1.152) Premium 24 (1.135)

ATTENUATION			
Frequency, MHz	dB per 100 m	dB per 100 ft	Power, kW
800	10.10	3.07	0.72
1800	15.50	4.74	0.47
2400	18.20	5.54	0.40
3500	22.40	6.82	0.32
5000	27.40	8.34	0.27
6000	30.30	9.25	0.24
8000	35.80	10.90	0.20
10000	40.80	12.40	0.18
12000	45.50	13.90	0.16
13500	48.80	14.90	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 for Series C03
Model Number	Type
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
Model Number	Type
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: 8.8 GHz

ORDERING INFORMATION

Jacketing Options	Premium Attenuation Cable Model Numbers	Lite Low-Loss Cable Model Numbers
Outdoor standard:	LCF12-50J	LCF12-50JL
Indoor flame retardant:	LCF12-50JFN	LCF12-50JFNL

PRODUCT SPECIFICATIONS

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

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

ELECTRICAL SPECIFICATIONS		
Operating Frequency Band	GHz	8.8
Max. VSWR / Return Loss	dB (VSWR)	Standard 20 (1.222) Premium 23 (1.152) Premium 24 (1.135)

ATTENUATION					
Frequency, MHz	dB per 100 m		dB per 100 ft		Power, kW	
Version	JA	JL	JA	JL	JA	JL
800	6.48	6.94	1.98	2.12	1.16	1.28
1800	10.10	10.70	3.07	3.26	0.75	0.83
2200	11.30	11.90	3.44	3.63	0.67	0.75
2600	12.40	13.10	3.78	3.98	0.61	0.68
3500	14.70	15.40	4.47	4.69	0.51	0.58
5000	18.00	18.80	5.50	5.72	0.42	0.47
6000	20.70	20.80	6.30	6.34	0.37	0.43
8000	23.80	24.50	7.26	7.47	0.32	0.36
8800	25.20	25.90	7.69	7.90	0.30	0.34

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
Model Number	Type
TRIM-SET-L12-C02	Universal Trimming Tool
TRIM-IL12-C02	Trimming Tool Insert

Premium Connector Series E01
Model Number	Type
716M-LCF12-E01	7/16 Male
716F-LCF12-E01	7/16 Female
43M-LCF12-E01	4.3-10 Male
43F-LCF12-E01	4.3-10 Female
NM-LCF12-E01	N Type Male
NF-LCF12-E01	N Type Female
716MR-LCF12-E01	7/16 Male Right Angle
43MR-LCF12-E01	4.3-10 Male Right Angle
NMR-LCF12-E01	N Type Male Right Angle

Tools for Series E01
Model Number	Type
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
HOIST1-12L	Hoisting Grip
GKSPEED20-12C	Grounding Kit, CCA Wire
GKSPEED20-12P	Grounding Kit, Premium
GKSPEED20-12S	Grounding Kit, Standard
GKSPEED60-12S	Grounding Kit, High Speed
JSTRIP-12-3	Jacket Stripping Tool
CEAR-12	Connector Grounding Kit
BOOT4-12-4	Feed Through Assembly
BOOT-CP-12	Cushion Plug
RSB-12	Stainless Steel Clamp
TRIM-T01	Hand Tool Kit

Multi-Block Hangers
Model Number	Type
MBH12-2-F	2 per layer, 1 layer, 2 runs
MBH12-6-F	2 per layer, 3 layers, 6 runs
MBHS12-1-F	1 per layer, 1 layer, 1 run
MBHS12-2-F	1 per layer, 2 layers, 2 runs
MBHS12-3-F	1 per layer, 3 layers, 3 runs

RFS

CELLFLEX LOW-LOSS
FOAM-DIELECTRIC COAXIAL CABLE

LCF78 Series: 5 GHz

ORDERING INFORMATION

Jacketing Options	Premium Attenuation Cable Model Numbers	Lite Low-Loss Cable Model Numbers
Outdoor standard:	LCF78-50JA	LCF78-50JL
Indoor flame retardant:	LCF78-50JFNA	LCF78-50JFNL

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS

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

TEMPERATURE SPECIFICATIONS

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

ELECTRICAL SPECIFICATIONS

Operating Frequency Band	GHz	5
Max. VSWR / Return Loss	dB (VSWR)	Standard 20 (1.222) Premium 23 (1.152) Premium 24 (1.135)

ATTENUATION

Frequency, MHz	dB per 100 m		dB per 100 ft		Power, kW	
Version	JA	JL	JA	JL	JA	JL
800	3.48	3.72	1.06	1.13	2.41	2.85
1800	5.44	5.76	1.66	1.76	1.54	1.84
2200	6.09	6.43	1.86	1.96	1.38	1,65
2600	6.70	7.05	2.04	2.15	1.25	1.50
3600	8.30	8.47	2.53	2.58	1.03	1.25
4000	8.60	8.98	2.62	2.74	0.97	1.18
5000	9.81	10.20	2.99	3.11	0.85	1.04

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

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

Premium Connector Series E01

Model Number	Type
716M-LCF78-E01	7/16 Male
716F-LCF78-E01	7/16 Female
43M-LCF78-E01	4.3-10 Male
43F-LCF78-E01	4.3-10 Female
NM-LCF78-E01	N Type Male
NF-LCF78-E01	N Type Female

Tools for Series E01

Model Number	Type
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

Accessories

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

Multi-Block Hangers

Model Number	Type
MBH78-2-F	2 per layer, 1 layer, 2 runs
MBH78-6-F	2 per layer, 3 layers, 6 runs
MBHS78-1-F	1 per layer, 1 layer, 1 run
MBHS78-2-F	1 per layer, 2 layers, 2 runs
MBHS78-3-F	1 per layer, 3 layers, 3 runs

CELLFLEX LOW-LOSS
FOAM-DIELECTRIC COAXIAL CABLE

LCFS114 Series: 3.7 GHz

ORDERING INFORMATION

Jacketing Options	Premium Attenuation Cable Model Numbers
Outdoor standard:	LCFS114-50JA
Indoor flame retardant:	LCFS114-50JFNA
Indoor CPR certified	LCFS114-50CPR

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS

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

TEMPERATURE SPECIFICATIONS

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

ELECTRICAL SPECIFICATIONS

Operating Frequency Band	GHz	3.7
Max. VSWR / Return Loss	dB (VSWR)	Standard 20 (1.222) Premium 23 (1.152) Premium 24 (1.135)

ATTENUATION

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

RELATED PRODUCTS

Standard Connector Series C02

Model Number	Type
716M-LCF114-C02	7/16 Male
716F-LCF114-C02	7/16 Female
NM-LCF114-C02	N Type Male
NF-LCF114-C02	N Type Female

Tools for Series C02

Model Number	Type
TRIM-SET-L114-C02	Universal Trimming Tool
TRIM-IL114-C02	Trimming Tool Insert

Premium Connector Series E01

Model Number	Type
716M-LCF114-E01	7/16 Male
716F-LCF114-E01	7/16 Female
43M-LCF114-E01	4.3-10 Male
43F-LCF114-E01	4.3-10 Female
NM-LCF114-E01	N Type Male
NF-LCF114-E01	N Type Female

Tools for Series E01

Model Number	Type
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

Multi-Block Hangers

Model Number	Type
MBHS114-1-F	1 per layer, 1 layer, 1 run
MBHS114-2-F	1 per layer, 2 layers, 2 runs
MBHS114-3-F	1 per layer, 3 layers, 3 runs

RFS

CELLFLEX LOW-LOSS
FOAM-DIELECTRIC COAXIAL CABLE

LCF158 Series: 2.75 GHz

ORDERING INFORMATION

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

PRODUCT SPECIFICATIONS

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

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

ELECTRICAL SPECIFICATIONS		
Operating Frequency Band	GHz	2.75
Max. VSWR / Return Loss	dB (VSWR)	Standard 20 (1.222) Premium 23 (1.152) Premium 24 (1.135)

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

RELATED PRODUCTS

Standard Connector Series C02

Model Number	Type
716M-LCF158-C02	7/16 Male
716F-LCF158-C02	7/16 Female
NM-LCF158-C02	N Type Male
NF-LCF158-C02	N Type Female

Tools for Series C02

TRIM-SET-L158-C02	Universal Trimming Tool
TRIM-IL158-C02	Trimming Tool Insert

Premium Connector Series E01

Model Number	Type
716M-LCF158-E01	7/16 Male
716F-LCF158-E01	7/16 Female
43M-LCF158-E01	4.3-10 Male
43F-LCF158-E01	4.3-10 Female
NM-LCF158-E01	N Type Male
NF-LCF158-E01	N Type Female

Tools for Series E01

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

Multi-Block Hangers

Model Number	Type
MBH158-2-F	2 per layer, 1 layer, 2 runs
MBH158-6-F	2 per layer, 3 layers, 6 runs
MBHS158-1-F	1 per layer, 1 layer, 1 run
MBHS158-2-F	1 per layer, 2 layers, 2 runs

CELLFLEX LOW-LOSS
FOAM-DIELECTRIC COAXIAL CABLE

LCF158 J Series: 2.75 GHz

ORDERING INFORMATION

Jacketing Options	Lite Low-Loss Cable Model Numbers
Outdoor standard:	LCF158-50JL
Indoor flame retardant:	LCF158-50JFNL

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS		
Dimensions Over Jacket	mm (in)	50.2 (1.98)
Min. Bending Radius, Single	mm (in)	200 (8)
Min. Bending Radius, Repeated	mm (in)	500 (20)
Jacket Type		Polyethylene, PE
Bending Moment	Nm (lb-ft)	40.7 (30.7)
Tensile Strength	N (lb)	1800 (405)
Recommended/Maximum Clamp Spacing	m (ft)	1.2 / 1.5 (4 / 5)

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

ELECTRICAL SPECIFICATIONS		
Operating Frequency Band	GHz	2.75
Max. VSWR / Return Loss	dB (VSWR)	Standard 20 (1.222) Premium 23 (1.152) Premium 24 (1.135)

ATTENUATION			
Frequency, MHz	dB per 100 m	dB per 100 ft	Power, kW
800	2.17	0.66	5.39
1700	3.33	1.02	3.51
2000	3.67	1.12	3.19
2200	3.88	1.18	3.02
2400	4.08	1.24	2.87
2600	4.28	1.31	2.73
2700	4.38	1.34	2.67
2750	4.43	1.35	2.64

RELATED PRODUCTS

Standard Connector Series C02

Model Number	Type
716M-LCF158-C02	7/16 Male
716F-LCF158-C02	7/16 Female
NM-LCF158-C02	N Type Male
NF-LCF158-C02	N Type Female

Tools for Series C02

TRIM-SET-L158-C02	Universal Trimming Tool
TRIM-IL158-C02	Trimming Tool Insert

Premium Connector Series E01

Model Number	Type
716M-LCF158-E01	7/16 Male
716F-LCF158-E01	7/16 Female
43M-LCF158-E01	4.3-10 Male
43F-LCF158-E01	4.3-10 Female
NM-LCF158-E01	N Type Male
NF-LCF158-E01	N Type Female

Tools for Series E01

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

Multi-Block Hangers

Model Number	Type
MBH158-2-F	2 per layer, 1 layer, 2 runs
MBH158-6-F	2 per layer, 3 layers, 6 runs
MBHS158-1-F	1 per layer, 1 layer, 1 run
MBHS158-2-F	1 per layer, 2 layers, 2 runs

CLEARFILL®LINE
PLENUM-RATED CABLES

RFS ClearFill®Line plenum-rated wideband cables deliver outstanding electrical and mechanical performance, and operate in frequencies from 380 MHz 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.

IMPROVE IN-BUILDING WIRELESS NETWORK PERFORMANCE
ClearFill®Line plenum-rated cables provide low attenuation and excellent return loss.
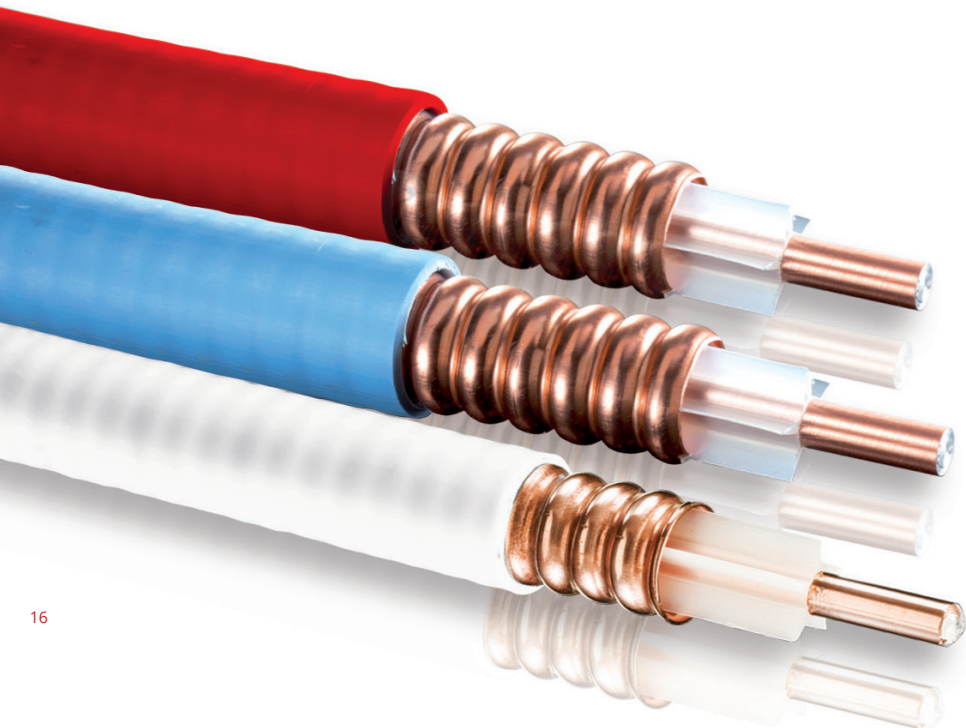
FREQUENCY RANGE (MHz)	RETURN LOSS (dB)	VSWR
698-960	24	1.13
1395-1432	24	1.13
1700-2155	24	1.13
2300-2700	20	1.22
3550-4200	18	1.29
5150-6000	18	1.29

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.

LEVERAGE NEW SPECTRUM
With wideband spectrum support up to 6 GHz, ClearFillLine 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.

Wideband
operation
Support technologies and applications in bands ranging from 380MHz
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	ICA12-50JPLLR
White	ICA12-50JPLW	ICA12-50JPLLW

PRODUCT SPECIFICATIONS

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

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

ATTENUATION						
Frequency, MHz	dB per 100 m		dB per 100 ft		Power, kW	
Version	JPL	JPLL	JPL	JPLL	JPL	JPLL
800	6.64	7.28	2.02	2.22	1.09	1.06
1800	10.50	11.5	3.2	3.49	0.69	0.67
2200	11.80	12.80	3.59	3.92	0.62	0.61
2600	13.00	14.2	3.96	4.31	0.56	0.55
3600	15.80	17.10	4.81	5.22	0.47	0.46
4000	16.80	18.30	5.13	5.56	0.44	0.43
5000	19.30	20.90	5.88	6.36	0.38	0.38
6000	21.6	23.3	6.58	7.11	0.34	0.34

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

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

Model Number	Type
TRIM-ICA12-C02	Universal Trimming Tool

Premium Connector Series E01

Model Number	Type
716M-LCF12-E01	7/16 Male
716F-LCF12-E01	7/16 Female
43M-LCF12-E01	4.3-10 Male
43F-LCF12-E01	4.3-10 Female
NM-LCF12-E01	N Type Male
NF-LCF12-E01	N Type Female

Tools for Series E01

Model Number	Type
TRIM-SET-L12-D01	Universal Trimming Tool

Accessories

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

Multi-Block Hangers

Model Number	Type
MBH78-2-F	2 per layer, 1 layer, 2 runs
MBH78-6-F	2 per layer, 3 layers, 6 runs
MBHS78-1-F	1 per layer, 1 layer, 1 run
MBHS78-2-F	1 per layer, 2 layers, 2 runs
MBHS78-3-F	1 per layer, 3 layers, 3 runs

RFS

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

RFS is 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:

- SCF14
- **Super-flexible SCF Jumpers** — SCF38, SCF12
- **RFS CELLFLEX Jumpers**
- **Low-Loss LCF Jumpers** — LCF38, LCF12

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.

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 new 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.

LEARN MORE

PROTECT CRITICAL CONNECTIONS WITH THE
ULTIMATE WEATHERPROOFING BOOT

RFS 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.

CELLFLEX SecureFit Booted Jumpers are available in a wide variety of RFS jumper cables sizes, for all RFS-supported connector types and in all RFS jumper configurations. In 2022, RFS has added smaller cable sizes and more models with right-angle and NEX10 connectors to the product portfolio.

With the addition of the new jumper models, RFS' SecureFit Booted Jumper portfolio now includes the following jumper sizes and factory-installed connectors:

- 1/4-inch and 3/8-inch jumpers with 4.3-10 or NEX10 connectors
- 1/2-inch jumpers with right-angle connectors
- 1/2-inch jumpers with NEX10 connectors

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.

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

UNLIMITED CONNECTIONS WITH
THE RFS ADAPTER SERIES

CONNECTIONS IN THE FIELD JUST GOT EASIER

RFS' 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	43F-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

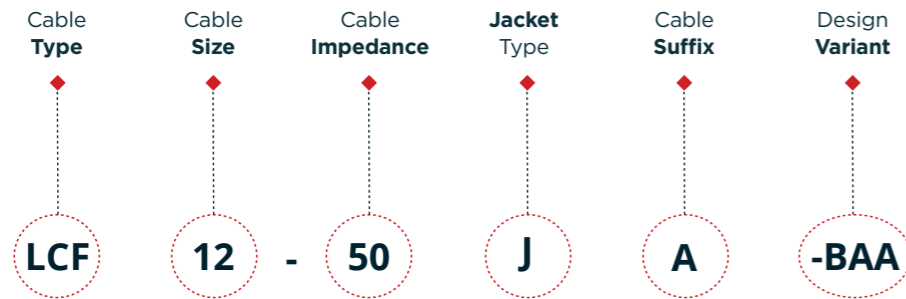**RFS offers a wide range of videos to make installation fast and easy:**

- Install premium and standard connectors on CELLFLEX® cables of all sizes
- Install connectors onto RADIAFLEX® cables
- DragonSkin™ premium and standard connector installation
- Watch these and more on the RFS YouTube channel

UNDERSTANDING **CABLE MODEL NAMES**

All RFS coaxial cable model names are based on a naming structure that tells you:
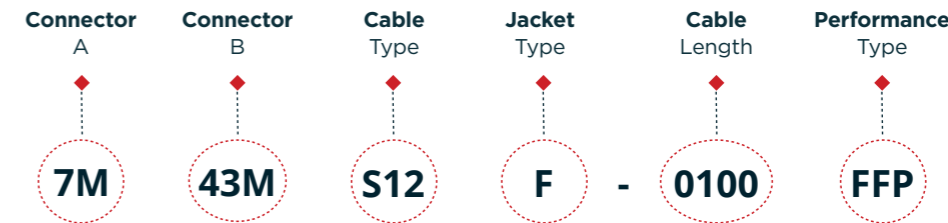
Cable **Type**	Cable **Size**	Cable **Impedance**	Jacket **Type**	Cable **Suffix**	Design **Variant**
LCF	12	- 50	J	A	-BAA

LCF CABLE TYPE		**12** CABLE SIZE		**50** CABLE IMPEDENCE		**J** JACKET TYPE		**A** CABLE SUFFIX		**-BAA** DESIGN VARIANT	
LCF	Low attenuation foam dielectric, corrugated	14	1/4-inch	50	50 Ohm	J	Standard PE Jacket	A	Low Loss Premium Attenuation	-C	China
LCFS	Corrugated IC	38	3/8-inch	75	75 Ohm	JFN	Flame Retardant LSZH Jacket	B	B Type – Lower technical performance	-D	Germany
SCF	Superflexible	12	1/2-inch			CPR	Specific CPR Jacket	L	Light cable – Aluminum OC	-U	USA
SCFS	Superflexible, standardized version	78	7/8-inch					GR	Grey Jacket RAL7004	-BAA	Compliant to the Buy America Act
UCF	Ultraflexible, corrugated IC	114	1-1/4-inch					RP	Rodent Protection – Nylon Jacket	-B2	CPR rating B2
		158	1-5/8-inch					TC	Phase stabilized after temerature cycles	-B2d2	CPR rating B2d2
								W	White Jacket	-B2d0	CPR rating B2d0
										-Cd2	CPR rating Cd2
										-Cd0	CPR rating Cd0
										-Dx	CPR rating D?

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		**S12** CABLE TYPE		**F** JACKET TYPE		**0100** CABLE LENGTH*		**FFP** JUMPER PERFORMANCE	
7M	7-16 Male	L38	3/8" Low Loss Coax	F	JFN Flame Retardant	0100	1 meter	FFP	Factory-Fit Premium
7F	7-16 Female	L12	1/2" Low Loss Coax	Blank	PE	0200	2 meter	UPM	Ultra PIM Performance**
7MR	7-16 Male Right Angle	S14	1/4" Superflexible Coax			0250	2.5 meter		
43M	4.3-10 Male	S38	3/8" Superflexible Coax			1000	10 meter		
43F	4.3-10 Female	S12	1/2" Superflexible Coax			1500	15 meter		
43MR	4.3-10 Male Right Angle					030	3 feet		
NM	N-Type Male					060	6 feet		
NF	N-Type Female					100	10 feet		
NMR	N-Type Male Right Angle					150	15 feet		
NXM	NEX10 Male					200	20 feet		
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								

NOTES:

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

** Available on request

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TO SERVE YOU BETTER
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