



RADIO FREQUENCY SYSTEMS

RF CABLE SOLUTIONS SELECTION GUIDE

Edition 2 / 04.2026



Cables / Jumpers / Connectors
High Performance Communication

RFS TRANSMISSION LINE SOLUTIONS



RADIO FREQUENCY SYSTEMS

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CELLFLEX® SETS THE STANDARD FOR COMMUNICATION CABLES

In 1961, RFS pioneered CELLFLEX, the industry's first foam dielectric corrugated coaxial cables. They quickly became the preferred choice for base station applications and have since proven 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. CELLFLEX cables are also easier to reuse and recycle than competing cables because the layers are not bonded.

This rugged flexibility makes installations faster, easier and lower risk than installations using smooth wall cables.

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.

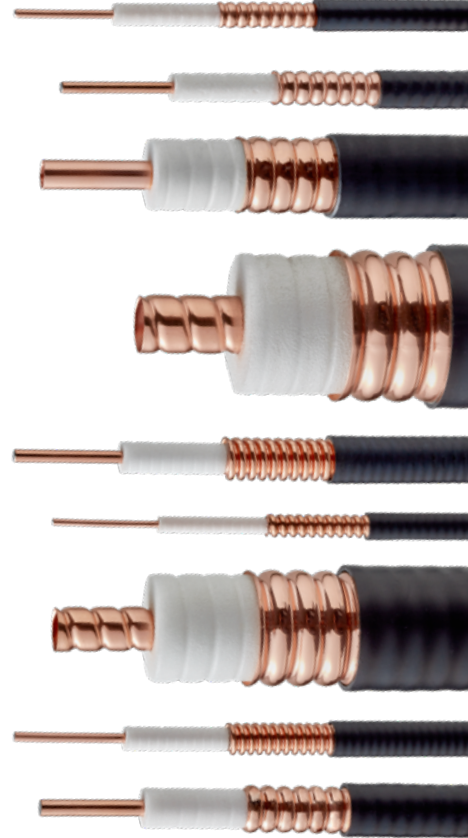
With 20 CELLFLEX cable models ranging from 1/4-inch to 1 5/8-inch in diameter, there's a CELLFLEX cable for even the most complicated and demanding applications.

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



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.

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.

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™ 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 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.



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	7.8
Min. Bending Radius, Repeated	mm	25
Bending Moment	Nm	0.7
Tensile Strength	N	600
Recommended/Maximum Clamp Spacing	m	0.2 / 0.2

TEMPERATURE SPECIFICATIONS		
Installation	°C	-40 to 60
Installation - JFNA	°C	-25 to 60
Storage	°C	-70 to 85
Operation	°C	-50 to 85

ATTENUATION		
Frequency, MHz	dB per 100 m	Power, kW
800	17.30	0.38
1800	26.90	0.25
2400	31.30	0.21
3500	39.10	0.17
5000	48.00	0.14
6000	53.40	0.12
8000	63.40	0.10
10000	72.60	0.09
12000	81.00	0.08
16000	97.00	0.07
18000	105.00	0.06
20400	113.00	0.06

RELATED PRODUCTS

Premium Connector Series E01

Model Number	Type
NM-SCF14-E01	N Male
NF-SCF14-E01	N Female
43M-SCF14-E01	4.3-10 Male

Tools for Series E01

TRIM-SET-S14-D01	Universal Trimming Tool
TRIM-T05	Torque-Key Set

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	10.2
Min. Bending Radius, Repeated	mm	25
Bending Moment	Nm	1.4
Tensile Strength	N	600
Recommended/Maximum Clamp Spacing	m	0.25 / 0.25

TEMPERATURE SPECIFICATIONS		
Installation	°C	-40 to 60
Installation - JFNA	°C	-25 to 60
Storage	°C	-70 to 85
Operation	°C	-50 to 85

ATTENUATION		
Frequency, MHz	dB per 100 m	Power, kW
800	12.73	0.62
1800	20.05	0.39
2400	23.70	0.33
3500	29.50	0.27
5000	36.60	0.22
6000	41.00	0.19
8000	49.00	0.16
10000	56.50	0.14
12000	63.50	0.12
13400	68.30	0.12

RELATED PRODUCTS

Premium Connector Series E01

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

Tool for Series E01

TRIM-SET-S38-D01	Universal Trimming Tool
TRIM-T05	Torque-Key Set

Accessories

Model Number	Type
RSB-S38/L14	RSB-Clip (incl. clamp lining)
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	13.7
Min. Bending Radius, Repeated	mm	32
Bending Moment	Nm	2.5
Tensile Strength	N	650
Recommended/Maximum Clamp Spacing	m	0.3 / 0.5

TEMPERATURE SPECIFICATIONS		
Installation	°C	-40 to 60
Installation - JFNA	°C	-25 to 60
Storage	°C	-70 to 85
Operation	°C	-50 to 85

ATTENUATION		
Frequency, MHz	dB per 100 m	Power, kW
800	9.57	0.74
1800	14.90	0.47
2400	17.50	0.40
3500	21.80	0.32
5000	26.80	0.26
6000	29.80	0.24
8000	35.50	0.20
10000	40.60	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
43F-SCF12-C03	4.3-10 Female
NM-SCF12-C03	N Male
NF-SCF12-C03	N Female
716MR-SCF12-C03	7-16 Male Right Angle
43MR-SCF12-C03	4.3-10 Male Right Angle

Tool for Series C03

TRIM-SET-S12-C02	Universal Trimming Tool
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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 Male
NF-SCF12-E01	N Female
716MR-SCF12-E01	7-16 Male Right Angle
43MR-SCF12-E01	4.3-10 Male Right Angle
NMR-SCF12-E01	N Male Right Angle

Tools for Series E01

TRIM-SET-S12-D01	Universal Trimming Tool
TRIM-T05	Torque-Key Set

Accessories

Model Number	Type
RSB-S12	Stainless Steel Clamp
RSB-S12/12	RSB Clamp Lining
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	10
Min. Bending Radius, Single	mm	40
Min. Bending Radius, Repeated	mm	85
Bending Moment	Nm	1.9
Tensile Strength	N	890
Recommended/Maximum Clamp Spacing	m	0.5 / 1

TEMPERATURE SPECIFICATIONS		
Installation	°C	-40 to 60
Installation - JFNA	°C	-25 to 60
Storage	°C	-70 to 85
Operation	°C	-50 to 85

ATTENUATION		
Frequency, MHz	dB per 100 m	Power, kW
800	12.40	0.59
1800	19.10	0.38
2400	22.30	0.33
3500	27.50	0.27
5000	33.70	0.22
6000	37.40	0.20
8000	44.10	0.17
10000	50.30	0.15
12000	56.10	0.13
15800	66.20	0.11

RELATED PRODUCTS

Premium Connector Series E01

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

Tool for Series E01

TRIM-SET-L14-D01	Universal Trimming Tool
TRIM-T05	Torque-Key Set

Accessories

Model Number	Type
RSB-S38/L14	RSB-Clip (incl. clamp lining)
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	11.2
Min. Bending Radius, Single	mm	50
Min. Bending Radius, Repeated	mm	95
Bending Moment	Nm	1.9
Tensile Strength	N	530
Recommended/Maximum Clamp Spacing	m	0.5 / 1

TEMPERATURE SPECIFICATIONS		
Installation	°C	-40 to 60
Installation - JFNA	°C	-25 to 60
Storage	°C	-70 to 85
Operation	°C	-50 to 85

ATTENUATION		
Frequency, MHz	dB per 100 m	Power, kW
800	10.10	0.72
1800	15.50	0.47
2400	18.20	0.40
3500	22.40	0.32
5000	27.40	0.27
6000	30.30	0.24
8000	35.80	0.20
10000	40.80	0.18
12000	45.50	0.16
13500	48.80	0.15

RELATED PRODUCTS

Standard Connectors

Model Number	Type
NM-LCF38-070	N Male
NF-LCF38-070	N Female

Premium Connector Series E01

Model Number	Type
43M-LCF38-E01	4.3-10 Male
NM-LCF38-E01	N Male
NF-LCF38-E01	N Female

Tools for Series E01

TRIM-SET-L38-E01	Universal Trimming Tool
TRIM-T05	Torque-Key Set

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	15.9
Min. Bending Radius, Single	mm	70
Min. Bending Radius, Repeated	mm	125
Bending Moment	Nm	6.5
Tensile Strength	N	Copper 1050 Aluminum 800
Recommended/Maximum Clamp Spacing	m	0.6 / 1

TEMPERATURE SPECIFICATIONS		
Installation	°C	-40 to 60
Installation - JFNA	°C	-25 to 60
Storage	°C	-70 to 85
Operation	°C	-50 to 85

ATTENUATION				
Frequency, MHz	dB per 100 m		Power, kW	
Version	JA	JL	JA	JL
800	6.48	6.94	1.16	1.28
1800	10.10	10.70	0.75	0.83
2200	11.30	11.90	0.67	0.75
2600	12.40	13.10	0.61	0.68
3500	14.70	15.40	0.51	0.58
5000	18.00	18.80	0.42	0.47
6000	20.70	20.80	0.37	0.43
8000	23.80	24.50	0.32	0.36
8800	25.20	25.90	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
43F-LCF12-C03	4.3-10 Female
NM-LCF12-C03	N Male
NF-LCF12-C03	N Female
716MR-LCF12-C03	7/16 Male Right Angle
43MR-LCF12-C03	4.3-10 Male Right Angle
NMR-LCF12-C02	N Male Right Angle

Tools for Series C03

TRIM-SET-L12-C02	Universal Trimming Tool
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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 Male
NF-LCF12-E01	N Female
716MR-LCF12-E01	7/16 Male Right Angle
43MR-LCF12-E01	4.3-10 Male Right Angle
NMR-LCF12-E01	N Male Right Angle

Tools for Series E01

TRIM-SET-L12-D01	Universal Trimming Tool
TRIM-T05	Torque-Key Set

Accessories

Model Number	Type
HOIST1-12L	Hoisting Grip
GKSPEED20-12P	Grounding Kit
JSTRIP-12-3	Jacket Stripping Tool
RSB-12	Stainless Steel Clamp
TRIM-T01	Hand Tool Kit

Multi-Block Hangers

MBH12-*F	Clamps are available in different versions
MBHS12-*F	

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	27.8
Min. Bending Radius, Single	mm	120
Min. Bending Radius, Repeated	mm	250
Bending Moment	Nm	13
Tensile Strength	N	1440
Recommended/Maximum Clamp Spacing	m	0.8 / 1

TEMPERATURE SPECIFICATIONS		
Installation	°C	-40 to 60
Installation - JFNA	°C	-25 to 60
Storage	°C	-70 to 85
Operation	°C	-50 to 85

ATTENUATION				
Frequency, MHz	dB per 100 m		Power, kW	
Version	JA	JL	JA	JL
800	3.48	3.72	2.41	2.85
1800	5.44	5.76	1.54	1.84
2200	6.09	6.43	1.38	1.65
2600	6.70	7.05	1.25	1.50
3600	8.30	8.47	1.03	1.25
4000	8.60	8.98	0.97	1.18
5000	9.81	10.20	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
43F-LCF78-C03	4.3-10 Female
NM-LCF78-C03	N Male
NF-LCF78-C03	N Female

Tool for Series C03

TRIM-SET-L78-C02	Universal Trimming Tool
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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 Male
NF-LCF78-E01	N Female

Tool for Series E01

TRIM-SET-L78-D01	Universal Trimming Tool
TRIM-T05	Torque-Key Set

Accessories

Model Number	Type
HOIST1-78L	Hoisting Grip
GKSPEED20-78P	Grounding Kit
JSTRIP-78-2	Jacket Stripping Tool
RSB-78	Stainless Steel Clamp
TRIM-T01	Hand Tool Kit

Multi-Block Hangers

MBH12-*F	Clamps are available in different versions
MBHS12-*F	

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

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS		
Dimensions Over Jacket	mm	39
Min. Bending Radius, Single	mm	200
Min. Bending Radius, Repeated	mm	380
Bending Moment	Nm	Copper 43 Aluminum 22
Tensile Strength	N	Copper 2490 Aluminum 1850
Recommended/Maximum Clamp Spacing	m	1 / 1.2

TEMPERATURE SPECIFICATIONS		
Installation	°C	-40 to 60
Installation - JFNA	°C	-25 to 60
Storage	°C	-70 to 85
Operation	°C	-50 to 85

ATTENUATION		
Frequency, MHz	dB per 100 m	Power, kW
800	2.47	4.45
1900	4.00	2.75
2200	4.35	2.53
2600	4.80	2.29
2700	4.90	2.24
3000	5.21	2.11
3300	5.51	2.00
3600	5.80	1.90
3700	5.90	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

Tool for Series C02

TRIM-SET-L114-C02	Universal Trimming Tool
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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

Tool for Series E01

TRIM-SET-L114-D01	Universal Trimming Tool
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Accessories

Model Number	Type
HOIST1-114L	Hoisting Grip
GKSPEED20-114P	Grounding Kit,
JSTRIP-114-2	Jacket Stripping Tool
RSB-114	Stainless Steel Clamp
TRIM-T01	Hand Tool Kit

Multi-Block Hangers

MBH12-*-F	Clamps are available in different versions
MBHS12-*-F	

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	50.2
Min. Bending Radius, Single	mm	200
Min. Bending Radius, Repeated	mm	500
Bending Moment	Nm	42
Tensile Strength	N	2500
Recommended/Maximum Clamp Spacing	m	1.2 / 1.5

ATTENUATION		
Frequency, MHz	dB per 100 m	Power, kW
800	1.98	5.66
1700	3.06	3.66
2000	3.36	3.34
2200	3.56	3.15
2400	3.75	2.99
2600	3.93	2.85
2700	4.02	2.79
2750	4.07	2.75

TEMPERATURE SPECIFICATIONS		
Installation	°C	-40 to 60
Installation - JFNA	°C	-25 to 60
Storage	°C	-70 to 85
Operation	°C	-50 to 85

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 Male
NF-LCF158-C02	N Female

Tool for Series C02

TRIM-SET-L158-C02	Universal Trimming Tool
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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 Male
NF-LCF158-E01	N Female

Tool for Series E01

TRIM-SET-L158-D01	Universal Trimming Tool
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Accessories

Model Number	Type
HOIST1-158L	Hoisting Grip
GKSPEED20-158P	Grounding Kit
JSTRIP-158-2	Jacket Stripping Tool
RSB-158	Stainless Steel Clamp
TRIM-T01	Hand Tool Kit

Multi-Block Hangers

MBH12-*-F	Clamps are available in different versions
MBHS12-*-F	

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	50.2
Min. Bending Radius, Single	mm	200
Min. Bending Radius, Repeated	mm	500
Tensile Strength	N	1800
Recommended/Maximum Clamp Spacing	m	1.2 / 1.5

ATTENUATION		
Frequency, MHz	dB per 100 m	Power, kW
800	2.17	5.39
1700	3.33	3.51
2000	3.67	3.19
2200	3.88	3.02
2400	4.08	2.87
2600	4.28	2.73
2700	4.38	2.67
2750	4.43	2.64

TEMPERATURE SPECIFICATIONS		
Installation	°C	-40 to 60
Installation - JFNL	°C	-25 to 60
Storage	°C	-70 to 85
Operation	°C	-50 to 85

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 Male
NF-LCF158-C02	N Female

Tool for Series C02

TRIM-SET-L158-C02	Universal Trimming Tool
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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 Male
NF-LCF158-E01	N Female

Tools for Series E01

TRIM-SET-L158-D01	Universal Trimming Tool
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Accessories

Model Number	Type
HOIST1-158L	Hoisting Grip
GKSPEED20-158P	Grounding Kit
JSTRIP-158-2	Jacket Stripping Tool
RSB-158	Stainless Steel Clamp
TRIM-T01	Hand Tool Kit

Multi-Block Hangers

MBH12-*-F	Clamps are available in different versions
MBHS12-*-F	



ROBUST JACKET CONSTRUCTION ENABLES THE HIGHEST CPR CLASSIFICATIONS

RFS CPR-compliant coax and radiating cables feature a specially developed jacket that allows them to achieve best-in-class ratings for burning droplets (d0), low smoke emission (s1) and corrosivity (a1), the most important criteria for fire safety in cables that are installed indoors and underground.

All RFS cables are tested and certified by an external notified body according to EN 50575. In addition, RFS' manufacturing facility in Hannover, Germany, has been audited and meets the highest system 1+ requirements for type approvals, regular production audits, as well as regular sampling and testing of products by the notified body.

FIND CPR-COMPLIANT CABLES FOR ANY APPLICATION

All RFS CPR-compliant cables are also designated as low-smoke, zero-halogen (LSZH) and meet International Electrotechnical Commission (IEC) standards for flame spread, smoke acidity and low smoke emission. They are compatible with existing RFS connectors, factory-assembled jumpers, grounding kits and clamps, as well as trimming and preparation tools.

NEW RFS HANNOVER BURN CHAMBER

The in 2024 installed burn chamber extends RFS's testing capabilities and operates in accordance with the international standard EN50399 which refers to the important CPR (Construction Product Regulation) directive of the European Union. Combined with existing fire testing facilities, it gives RFS one of the most comprehensive in-house fire resistance testing capabilities of any organization in the cable space. This will allow RFS to continue offering solutions that meet fire safety standards worldwide.

EUROPEAN CLASS CODE LABELING EXAMPLE

This table explains the CPR class codes using the rating for our **CELLFLEX** cables as an example: **B2ca s1 d0 a1**.

B2	ca	s1	d1	a1
Fire performance class	Application to cable	Smoke ratio	Droplets rating	Acidity rating

 Smoke opacity	 Droplets	 Acidity
s1	d0	a1
s2	d1	a2
s3	d2	a3

CPR-COMPLIANT CABLES ARE IDEAL FOR INDOOR APPLICATIONS

A BROAD PORTFOLIO OF CPR-COMPLIANT CABLES FOR INDOOR APPLICATIONS

Since July 1, 2017, all communications cables installed in buildings in the European Union (EU) must meet the fire performance requirements in European standard EN 50575 and include the CE marking to comply with EU Construction Products Regulation (CPR) No. 305/2011.

RFS was the first cable vendor to offer RF communications cables with the highest CPR classifications for fire safety. Today, we offer a wide range of CELLFLEX® coaxial cables and RADIAFLEX® radiating cables that comply with European CPR No. 305/2017. This directive requires that coax and radiating cables meet the fire performance standards in the EN 50575 standard and be classified according to the EN 13501-6 standard.

RFS cables are classified according to the CPR test standards and criteria listed below.

		CPR CLASSIFICATION			
		B2ca: +++	Cca: ++	Dca: +	Eca: -
Test Standard and Measurement					
IEC 60332-1-2	Flame spread	≤ 425 mm	≤ 425 mm	≤ 425 mm	≤ 425 mm
EN 50399	Flame spread	≤ 1.5 m	≤ 2.0 m	-	-
EN 50399	Total heat release	≤ 15 MJ	≤ 30 MJ	≤ 70 MJ	-
EN 50399	Peak heat release	≤ 30 kW	≤ 40 kW	≤ 400 kW	-
EN 50399	Fire grow rate	≤ 150 Ws ⁻¹	≤ 3000 Ws ⁻¹	≤ 1300 Ws ⁻¹	-
ADDITIONAL CLASSIFICATIONS					
EN 50399	Smoke emission	s1, s2, s3	s1, s2, s3	s1, s2, s3	-
EN 61034	Smoke density	s1a, s1b	s1a, s1b	s1a, s1b	-
EN 50399	Burning droplets	d0, d1, d2	d0, d1, d2	d0, d1, d2	-
EN 6754-2	Corrosivity	a1, a2, a3	a1, a2, a3	a1, a2, a3	-

The CPR burning droplets classification is particularly important because burning particles can ignite other cables or infrastructure. Only class d0 cables create no burning particles to deliver the highest levels of fire protection in buildings and tunnels.



SAFETY IS KEY

FIRE SAFETY STANDARDS & REGULATIONS

FLAME AND FIRE-RETARDANT JACKETS				
STANDARD (International, European & National)		JACKET OPTION		
		CPR	JFN ¹	JFL ¹
IEC 60754-1/-2	Halogen free, non-corrosive	✓	✓	✓
IEC 60332-1 EN 50265-2-1 DIN VDE 0482 Teil 265-2-1	Flame test	✓	✓	✓
IEC 60332-3-24 (Category C) EN 50266-2-4 DIN VDE 0482 Teil 266-2-4	Cable bundle test	✓	✓ ²	✓
IEC 61034 EN 50268-2 DIN VDE 0482 Teil 268-2	Low smoke emission	✓	✓ ³	✓



1. This includes additional design/tuning options indicated with an additional letter, e.g. new A-series of Radiaflex cables: JA, JFNA, JFLA
2. Not for RCF and RSF type
3. RFS RADIAFLEX® radiating cables with jacket option JFN are low smoke and exhibit excellent flame and fire retardant performance. To characterize the low smoke behavior of RFS cables under fire conditions, RFS applies the test method as described in IEC 61034 low smoke emission. Considering the application of radiating cables (not installed in bundles) the test is done with one sample for all cable sizes.

CELLFLEX Flame-Retardant Cables

SIZE	CABLE	CHARACTERISTIC
1/2"	SCF12-50 JFN	Superflexible
1/2"	LCF12-50 JFN	Low Loss
7/8"	LCF78-50 JFNA	Low Loss
1-1/4"	LCFS114-50 JFNA	Low Loss
1-5/8"	LCF158-50 JFNA	Low Loss
1-5/8"	LCF158-50 CPR	Low Loss

**Low
attenuation**
*enables extremely
efficient signal
transfers.*



Declaration of Performance (DoP)

Check the last status:

www.rfsworld.com/cpr/declarations-of-performance-dop



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	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

INSTALLATION VIDEOS

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
- Watch these and more on the RFS YouTube channel



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

RFS is a global leader in RF jumper cables and offers a complete 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.

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, flame-retardant or flame-retardant EN 50575 rated
- Connector type for each endpoint: NEX10, 4.3-10, N-Type or 7-16 DIN straight or right-angled connectors
- Performance: Premium PIM
- Length: 1 m to 20 m

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.

To ensure optimal attenuation over longer distances, rely on our low-loss 1/2-inch jumper cables.



PRODUCT TEST DATA TOOL



Fast & easy access to performance test data, product information:

- Streamline installation
- Save time and money
- Instantly verify project data wherever you are

Scan the RFS product code from any mobile device to:

- See performance test data, including PIM and VSWR details
- Review technical specs
- Read installation instructions

IN THE FIELD, ON THE GO
GET THE INFORMATION YOU NEED,
WHEN YOU NEED IT



Learn More



Instant Project
Verification



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.





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
LCF	12 - 50		J	L
LCF CABLE TYPE	12 CABLE SIZE	50 CABLE IMPEDENCE	J JACKET TYPE	L CABLE SUFFIX
LCF Low loss foam dielectric	14 1/4-inch	50 50 Ohm	J Standard PE Jacket	L Light cable – Aluminum OC
SCF Superflexible	38 3/8-inch		JFN Flame Retardant Jacket	TC Phase stabilized after temerature cycles
	12 1/2-inch		CPR Flame Retardant Jacket	
	78 7/8-inch			
	114 1-1/4-inch			
	158 1-5/8-inch			



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	L12	1/2" Low Loss Coax	F	JFN Flame Retardant	0100	1 meter	FPP	Factory-Fit Premium
7F	7-16 Female	S12	1/2" Superflexible Coax	Blank	PE Jacket	0200	2 meter		
7MR	7-16 Male Right Angle					1000	10 meter		
43M	4.3-10 Male					1500	15 meter		
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								

NOTES:

* Others lengths available on request



RADIO FREQUENCY SYSTEMS

**TO SERVE YOU BETTER**

Any questions, comments or suggestions that would help us improve our products and services? **Scan this QR Code!**