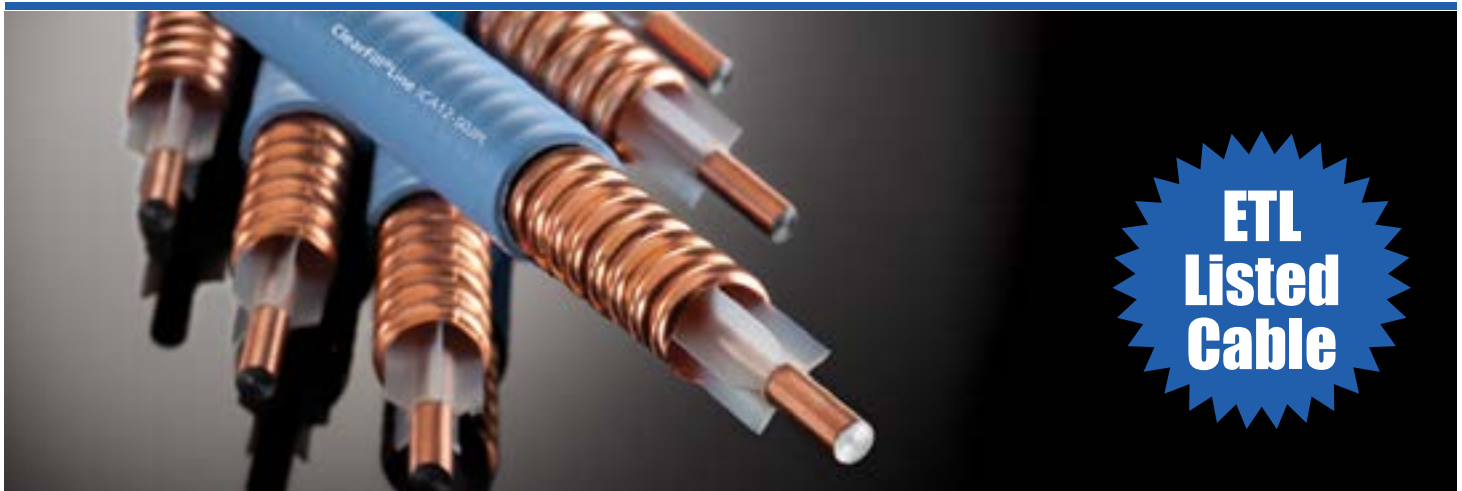


## ICA12-50JPL: 1/2" Plenum-Rated Cables

Our ClearFill®Line plenum-rated, wideband, copper cables feature outstanding electrical performance and support all wireless in-building applications



### Exceptional Electrical and Mechanical Performance

Our plenum-rated wideband cables, tested up to 6 GHz, deliver outstanding electrical performance and support all wireless in-building applications. These air-dielectric 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 plenum-rated cables are ideal for use within the ceiling area defined as the "environmental air handling space," as well as for more traditional plenum applications. Their solid outer conductor creates a continuous RFI/EMI shield that minimizes system interference. Intermodulation is virtually eliminated with the solid inner and outer conductors and state-of-the-art manufacturing. It has a star-shaped continuous dielectric, providing total support to the cable that eliminates electrical or mechanical problems in tight bending areas.

RFS Technologies, Inc plenum-rated cables are tested in accordance with the U.S. National Fire Protection Agency (NFPA) testing method 262, ensuring they meet the most stringent flame-retardant and smoke-suppressant requirements. Our wideband 1/2" plenum cable offers the best VSWR performance in the industry. Due to their low attenuation, outstanding heat transfer properties, and temperature-stabilized dielectric materials, they offer a safe, long-term operating life at high transmit power levels.

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**Our 1/2" plenum-rated cable meets the most stringent industry standards for maximum safety**

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### Exclusive Features and Benefits

*Key performance and design enhancements*

- **Plenum-rated – CMP, ETL listed to UL444**  
*Meets the most stringent industry standards for maximum safety*
- **Complete Shielding**  
*The solid outer conductor creates a continuous RFI/EMI shield that minimizes system interference*
- **Outstanding Electrical Performance**  
*Best VSWR specification in the market improves coverage for less dropped calls*  
*Best average power rating in the market provides high system efficiency*
- **Continuous (star-shaped) dielectric for total inner conductor support**  
*Eliminates electrical or mechanical problems in tight bending areas; minimizes kinks*
- **Wideband Operation – Up to 6 GHz**  
*Suitable for all in-building applications for maximum flexibility*
- **Supports multiple frequencies and technologies**  
*Ideal solution for LMR, Public Safety, Cellular, Paging, PCS/AWS, WiFi, WiMAX, WMTS and 700MHz LTE*

## ICA12-50JPL Product Specifications

Size	1/2"
Jacket	Plenum, Blue or White
Maximum Return Loss, dB (VSWR)	18 (1.228:1) -in the specified bands
Impedance, Ohm	50 +/-2
Maximum Frequency, GHz	6
Return Loss (VSWR) Performance	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
Velocity, percent	91
Peak Power Rating, kW	21.4
Inner Conductor dc Resistance, ohm/1000 m (ohm/1000 ft)	1.48 (0.45)
Outer Conductor dc Resistance, ohm/1000 m (Ohm/1000 ft)	1.90 (0.58)
RF Peak Voltage, Volts	1500
Jacket Spark, Volt RMS	8000
Capacitance, pF/m (pF/ft)	76 (23.2)
Inductance, µH/m (µH/ft)	0.190 (0.058)
Outer Conductor Material	Annularly Corrugated Copper
Inner Conductor Material	Copper-Clad Aluminum Wire
Diameter over Jacket Nominal, mm (in)	15.93 (0.627)
Diameter Outer Conductor, mm (in)	13.8 (0.54)
Diameter Inner Conductor, mm (in)	4.8 (0.19)
Minimum Bending Radius, Single Bend, mm (in)	76 (3)
Minimum Bending Radius, Repeated Bends, mm (in)	127 (5)
Cable Weight, kg/m (lb/ft)	0.4 (0.27)
Tensile Strength, N (lb)	1112 (250)
Recommended / Maximum Clamp Spacing, m (ft)	0.5 / 0.9 ( 1.8 / 3.0 )
Crush Strength, kg/mm (lb/in)	1.964 (110)
Installation Temperature, °C (°F)	-20 to +60 (-4 to +140)
Storage Temperature, °C (°F)	-40 to +85 (-40 to +185)
Operation Temperature, °C (°F)	-40 to +85 (-40 to +185)
Regulatory Compliance	NEC Article 800 Communication Circuits CMP-rated, ETL Listed to UL444, Canadian CSA C.22.2/FT6

## Connectors

Model Number	Cable Type / Size	Description	Sealing Method	Conductor Attachment		Trim Tool Series
				Inner	Outer	
NF-LCF12-C02-6	ICA/LCF, 1/2"	N Female	O-Ring	Basket	Spring C-Ring	TRIM-ICA12-C02
NM-LCF12-C02-6	ICA/LCF, 1/2"	N Male	O-Ring	Basket	Spring C-Ring	TRIM-ICA12-C02
NF-LCF12-C03	ICA/LCF, 1/2"	N Female	O-Ring	Basket	Spring C-Ring	TRIM-ICA12-C02
NM-LCF12-C03	ICA/LCF, 1/2"	N Male	O-Ring	Basket	Spring C-Ring	TRIM-ICA12-C02
NF-LCF12-D01	ICA/LCF, 1/2"	N Female	Polymer claw + 360° Compression	Basket	360° clamping	TRIM-SET-L12-D01
NM-LCF12-D01	ICA/LCF, 1/2"	N Male	Polymer claw + 360° Compression	Basket	360° clamping	TRIM-SET-L12-D01