

ICA12-50JPLLW: 1/2" Lite Plenum-Rated Cables

RFS ClearFill®Line aluminum plenum-rated wideband coaxial cable offers a cost-effective, lighter weight alternative to copper cabling



Outstanding Electrical and Mechanical Performance

Our 1/2" aluminum plenum-rated wideband cable, tested up to 6 GHz, delivers outstanding electrical performance and supports all wireless in-building applications. A cost-effective alternative to copper cabling, it maintains compatibility with existing connectors, tools and hanging hardware for easy and convenient installation.

ICA LITE is available in a white jacket (ICA12-50JPLLW) model. It utilizes the same Star-Dielectric Spline as our popular ICA12-50JPL plenum-rated copper cables, providing uniform support throughout the length of cable for superior performance by eliminating electrical and mechanical problems in tight bending areas. Additionally, the aluminum outer conductor minimizes system interference by providing a continuous RFI/EMI shield and ICA LITE's UV-resistant jacket allows it to withstand outdoor storage.

All of our wideband 1/2" plenum cable offers outstanding electrical performance and has met the most stringent plenum cable standards for maximum safety, including CMP, ETL listed to UL444, and also complies with Canadian CSA C.22.2/FT6 standard, with low-flame-spread and low-smoke characteristics. Due to low attenuation, outstanding heat transfer properties and temperature-stabilized dielectric materials, ICA LITE provides a safe, long-term operating life at high-transmit power levels.

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

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
- **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
- **Maintains compatibility with existing connectors, tools and hanging hardware**
Increases system flexibility and eases network planning
- **Lighter weight than copper**
Eases installation and reduces the number of hanging clamps
- **Copper-clad center conductor with AL outer conductor**
Provides good electrical performance
- **UV resistant jacket for outdoor storage**
Ensures product reliability

ICA12-50JPLLW Product Specifications

Size	1/2"
Jacket	Plenum, White
Maximum Return Loss, dB (VSWR)	19 (1.25:1) – in the specified bands
Impedance, Ohm	50 +/-1
Maximum Frequency, GHz	6
Return Loss / VSWR @ 806-960 MHz	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)	2.29 (0.70)
RF Peak Voltage, Volts	1500
Jacket Spark, Volt RMS	8000
Capacitance, pF/m (pF/ft)	75 (22.86)
Inductance, µH/m (µH/ft)	0.190 (0.058)
Outer Conductor Material	Annularly Corrugated Aluminum
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)	0.19 (0.13)
Tensile Strength, N (lb)	549 (150)
Recommended / Maximum Clamp Spacing, m (ft)	0.5 / 0.9 (1.8 / 3.0)
Crush Strength, kg/mm (lb/in)	0.893 (50)
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