

# LHF Plenum

Low Loss High Flexible Air Dielectric Feeder

## PRODUCT DESCRIPTION

LHF-12DP is a ½ inch, low loss 50 Ohm Plenum Rated RF coaxial cable that is installed in the plenum space of a building as part of an in-building DAS system to eliminate dead zones and spotty coverage. Designed with a copper clad aluminum center conductor, air dielectric center structure, helically corrugated copper tube outer conductor, and Plenum Rated outer jacket, the LHF-12DP is a high performing cable with low loss attenuation.

## APPLICATIONS

- In-building Wireless
- Distributed Antenna System (DAS)

## FEATURES

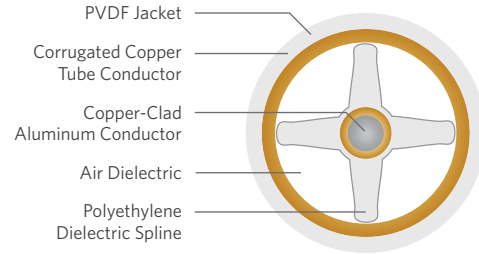
- Lowest attenuation
- Low passive intermodulation
- High-quality, white PVDF jacket
- ETL Certified CMP (UL® 444)
- Full range of easy to install connectors and an automated cable prep tool

## BENEFITS

- Highly efficient signal transfer
- Outperforms the industry requirements for low PIM
- Flame retardant and low smoke; blends with background for optimal building aesthetics
- Safe to use throughout a building, including air carrying plenum space
- Shortens installation time and expenses

## RELATED PRODUCTS

- Connectors CLHP-12xx
- Cable prep tool T-LHFA12DP



## SPECIFICATIONS

Inner Conductor Material	Copper-clad aluminum
Dielectric Material	Polyethylene
Outer Conductor Material	Corrugated copper tube
Jacket Material	White, PVDF
Recommended Operating Temperature °F (°C)	-4 to +167 (-20 to +75)

## PART NUMBERS AND PHYSICAL CHARACTERISTICS

Part Number	Cable Size in (mm)	Nominal Diameter in (mm)				Minimum Bend Radius in (mm)	Approx. Weight lbs/kft (kg/km)	Flat Plate Crush Resistance lbs/in (kg/mm)	Maximum Pulling Force lbs (kg)
		Inner Conductor	Dielectric	Outer Conductor	Jacket				
LHF-12DP	½ (12)	0.19 (4.8)	0.47 (12.0)	0.54 (13.8)	0.58 (14.8)	5.91 (150)	139 (207)	58 (1.05)	249 (113)

## ELECTRICAL SPECIFICATIONS

Part Number	Cable Size in (mm)	Conductor DC Resistance Ohms/kft (Ohms/km)		Minimum Insulation Resistance mΩ km	Dielectric Strength for 1 minute DC Potential - Volts	Velocity of Propagation %	Peak Power Rating kW	Maximum Operating Frequency GHz	Characteristic Impedance Ohms	Typical Return Loss dB
		Inner	Outer							
LHF-12DP	½ (12)	0.50 (1.6)	0.85 (2.8)	10,000	4,000	88	40	8.8	50 ± 2	19

Frequency MHz	Nominal Attenuation* dB/100 ft (dB/100 m)	Average Power Rating at Ambient 40 °C Inner Conductor 100 °C
		kW
30	0.35 (1.15)	4.70
100	0.65 (2.14)	2.54
150	0.80 (2.64)	2.06
450	1.43 (4.68)	1.15
824	1.97 (6.46)	0.83
890	2.05 (6.73)	0.80
960	2.14 (7.02)	0.77
1,000	2.18 (7.17)	0.75
1,700	2.92 (9.58)	0.56
1,800	3.01 (9.89)	0.54
2,000	3.19 (10.48)	0.51
2,400	3.53 (11.60)	0.46
3,000	4.07 (13.37)	0.40

Frequency MHz	VSWR
806-960	≤ 1.25
1,700-2,155	≤ 1.25

\*The attenuation may rise by 0.2%/°C with rising temperature.  
Maximum attenuation shall not exceed 105% of nominal value.  
Standard Conditions: VSWR 1.0, Ambient Temperature 20°C/Attenuation is typical value.  
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