

## WOOFER

# LF21N401

Professional Low Frequency Transducer

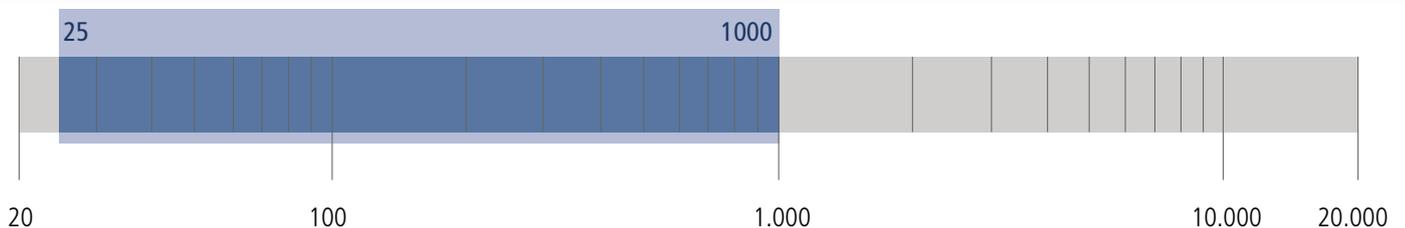
PART NUMBER **11100120**

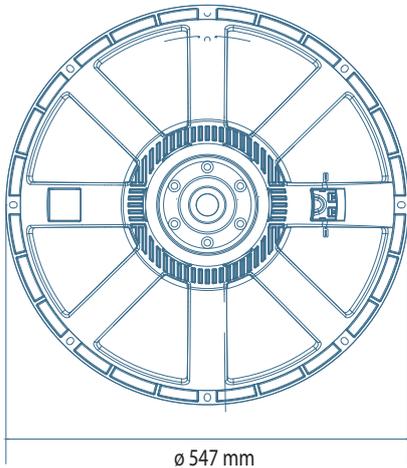
The LF21N401 is a high power handling and efficiency transducer specially designed to provide powerful and accurate sub-bass frequencies with low distortion and low power compression. With a fast time response, the LF21N401 uses a fiber loaded cone assembly along a large triple roll surround. This combination provides remarkable strength and control. Double silicon spider system ensures excellent control during large excursions. A fully optimized T-pole design generate the minimum amount of flux modulation. The Dual-forced air venting system provides a very efficient voice coil ventilation to minimize the power compression.

- 4,0 - inch Inside/Outside copper voice coil
- 3000 Watt continuous program power handling
- 98.0dB Sensitivity
- 25Hz - 1kHz Frequency range
- Dual-forced air ventilation for minimum power compression
- Dual spider designed with silicon based damping control
- BL of 27.6 T/m to provide a faster and accurate low frequency

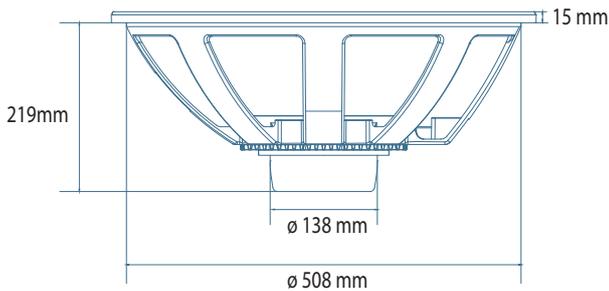
## APPLICATIONS

The LF21N401 is ideal in applications where ultra-light weight, high BL and power handling are required. Ideal for touring, perfect for powerful lows in bass reflex designs.



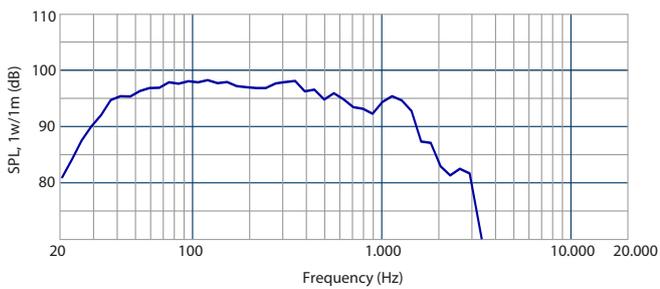


ø 547 mm

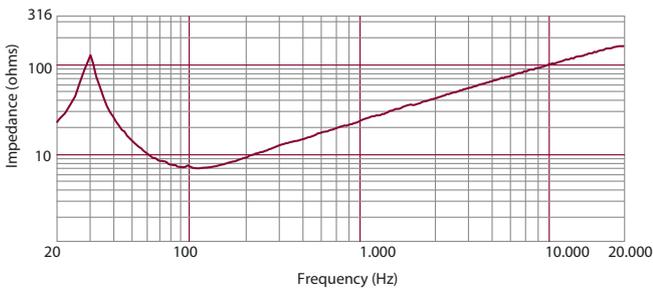


219mm

ø 508 mm



Frequency response curve of the loudspeaker made in a hemispherical, free field and mounted in a reflex box with an internal volume of 55 litres and tuned at 60Hz, applying a sinusoidal signal of 2.83 V @ 8 at 1m.



Impedance magnitude curve measured in free air

## GENERAL SPECIFICATIONS

Nominal Diameter	530/21	mm/inch
Rated Impedance	8	ohm
Program Power <sup>1</sup>	3000	Watts
Power handling capacity <sup>2</sup>	1500	Watts
Sensitivity <sup>3</sup>	98	dB
Frequency Range	25 - 1000	Hz
Effective Piston Diameter	470/18.5	mm/inch
Max Excursion Before Damage (peak to peak)	60/2.36	mm/inch
Minimum Impedance	6.9	ohm
Voice Coil Diameter	100/4	mm/inch
Voice Coil Material	Copper	
Voice Coil Winding Depth	31/1.22	mm/inch
Number of layers	2	
Kind of layer	inside/outside	
Top Plate Thickness	15/0.6	mm/inch
Cone Material	No pressed pulp	
Cone Design	Curved	
Surround Material	Polycotton	
Surround Design	Triple roll	

## THIELE - SMALL PARAMETERS <sup>4</sup>

Resonance frequency	Fs	30	Hz
DC resistance	Re	5.0	ohm
Mechanical factor	Qms	6.8	
Electrical factor	Qes	0.40	
Total factor	Qts	0.37	
BL Factor	BL	27.6	T · m
Effective Moving Mass	Mms	318	gr
Equivalent Cas air load	Vas	374	liters
Effective piston area	Sd	0.122	m <sup>2</sup>
Max. linear excursion (mathematical) <sup>5</sup>	Xmax	11.4	mm
Voice - coil inductance @ 1KHz	Le1K	1.7	mH
Half-space efficiency	Eff	2.50	%

## MOUNTING INFORMATION

Overall Diameter	547/21.5	mm/inch
Bolt Circle Diameter	527/20.7	mm/inch
Bolt Hole Diameter	6.5/0.25	mm/inch
Front Mount Baffle Cut-out	512/20.1	mm/inch
Rear Mount Baffle Cut-out	512/20.1	mm/inch
Depth	219/8.62	mm/inch
Volume occupied by the driver <sup>6</sup>	6.5/0.229	liters/ft3

## SHIPPING INFORMATION

Net Weight	8.8/19	Kg/Lbs
Shipping Weight	10/22	Kg/Lbs

## NOTES TO SPECIFICATIONS

1 Program Power is defined as 3 dB greater than AES power. - 2 AES standard. - 3 Sensitivity measurement is based on a 500-2,5 kHz pink noise signal with input power of 2.83V @ 8 Ohms. - 4 Thiele-Small parameters are measured after a 2 hour warm up period running the loudspeaker at full power handling capacity. - 5 The maximum linear excursion is calculated as:  $(Hvc \cdot Hg)/2 + Hg/4$  where Hvc is the voice coil depth and Hg the gap depth. - 6 Calculated for front mounting on 18 mm thick board.

The data are not binding; RCF reserves the right to modify the data at any time and without previous notice.