

# WOOFER LF12N401

Professional Low Frequency Transducer

The LF12N401 is designed to provide an excellent frequency response linearity with very low distortion. A very strong neodymium magnetic structure as LF18N401 guarantee dynamic and precision, the standard 4" voice coil design provides a very high power handling. The unique Dual-forced air venting system guarantee a very efficient voice coil ventilation to minimize the power compression and provide a good power handling.

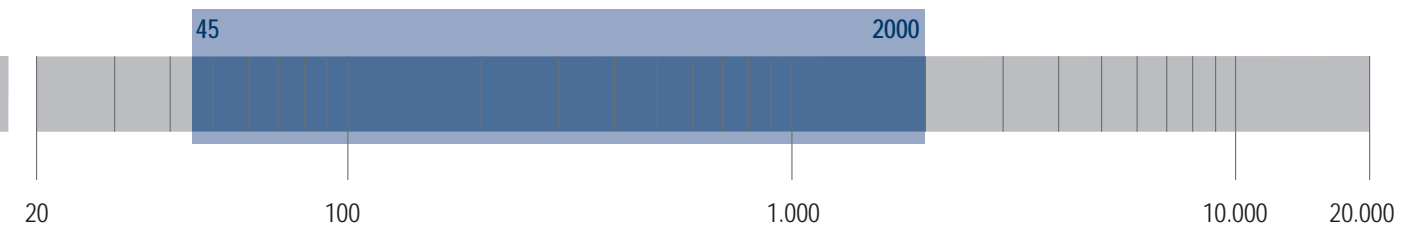
PART NUMBER 11100031

## Features

- 4-inch, fibreglass inside-outside copper voice coil
- 1600 Watt continuous program power handling
- 96 dB Sensitivity
- 45 Hz - 2 kHz Frequency range
- Dual-forced air ventilation for minimum power compression
- Single spider designed

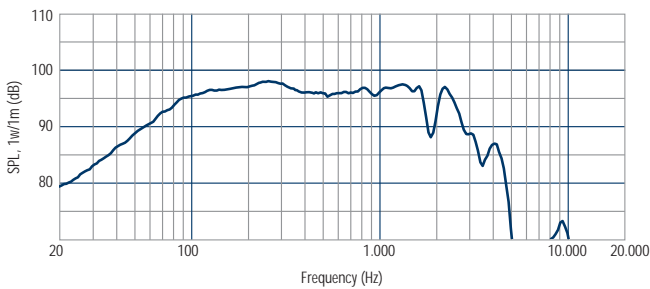
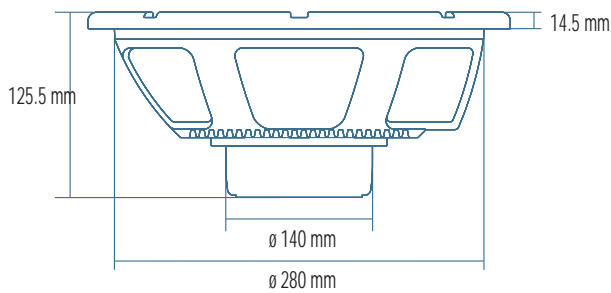
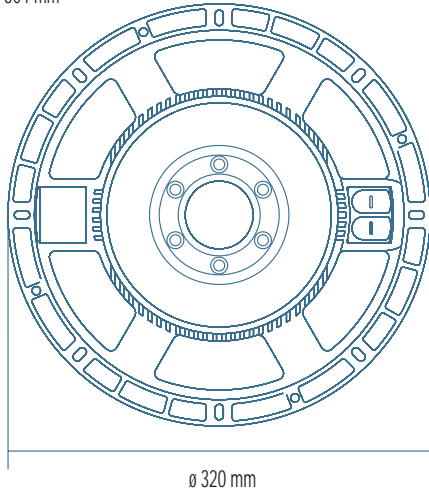
## Applications

The LF12N401 is ideal for use in applications where is required a low frequency in very small cabinet volume. Specially designed for touring, perfect for high professional bass reflex and horn loaded system.

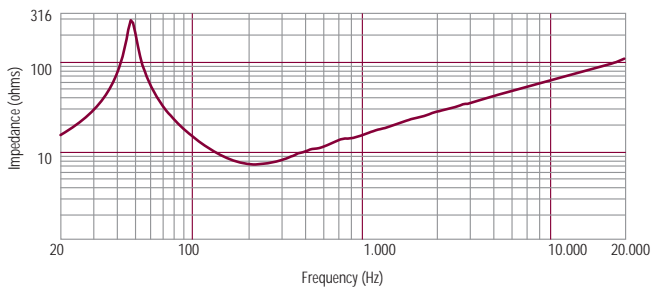




8 x  $\phi$  6.5 mm holes to 45°  
on 293.5 and on  $\phi$  304 mm



Frequency response curve of the loudspeaker taken in a hemispherical, free field environment and mounted in a closed box with an internal volume of 600 litres (21.2 cu.ft) enclosing the rear of the driver.



Impedance magnitude curve measured in free air.

## 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:  $(Hvc - Hg)/2 + Hg/4$  where Hvc is the voice coil depth and Hg the gap depth. - 6 Calculated for front mounting on 18 mm thick board.

## General Specifications

Nominal Diameter	300/12	mm/inch
Rated Impedance	8	ohm
Program Power <sup>1</sup>	1600	Watts
Power handling capacity <sup>2</sup>	800	Watts
Sensitivity <sup>3</sup>	96	dB
Frequency Range	45 - 2000	Hz
Effective Piston Diameter	260/10.2	mm/inch
Max Excursion Before Damage (peak to peak)	50/1.96	mm/inch
Minimum Impedance	7.2	ohm
Voice Coil Diameter	100/4	mm/inch
Voice Coil Material	Copper	
Voice Coil Winding Depth	21/0.82	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	48	Hz
DC resistance	Re	5.5	ohm
Mechanical factor	Qms	9,1	
Electrical factor	Qes	0.21	
Total factor	Qts	0.20	
BL Factor	BL	26	T · m
Effective Moving Mass	Mms	78	gr
Equivalent Cas air load	Vas	50	liters
Effettive piston area	Sd	0.053	m <sup>2</sup>
Max. linear excursion (mathematical) <sup>5</sup>	Xmax	7,3	mm
Voice - coil inductance @ 1KHz	Le1K	1.7	mH
Half-space efficiency	Eff	2,54	%

## Mounting Information

Overall Diameter	320/12.6	mm/inch
Bolt Circle Diameter	293-304/11.5-12	mm/inch
Bolt Hole Diameter	6.5/0.3	mm/inch
Front Mount Baffle Cut-out	282/11.1	mm/inch
Rear Mount Baffle Cut-out	284/11.2	mm/inch
Depth	140/5.5	mm/inch
Volume occupied by the driver <sup>6</sup>	2.9/0.098	liters/ft3

## Shipping Information

Net Weight	6,5/14,3	Kg/Lbs
Shipping Weight	7,5/16,5	Kg/Lbs