WOOFER
LF12N301

Professional Low Frequency Transducer

PART NUMBER **11100072**

The LF12N301 is a high power 12" neodymium woofer with excellent sensitivity and excursion capabilities.
The magnetic structure is powered by a large neodymium magnet that provides an extremely high flux density in the gap.
The new hyper-vented aluminium basket and magnetic assembly design provide an excellent heat dissipation and lower power compression. Special air-forced ventilations are provided for voice coil, magnet assembly and basket.

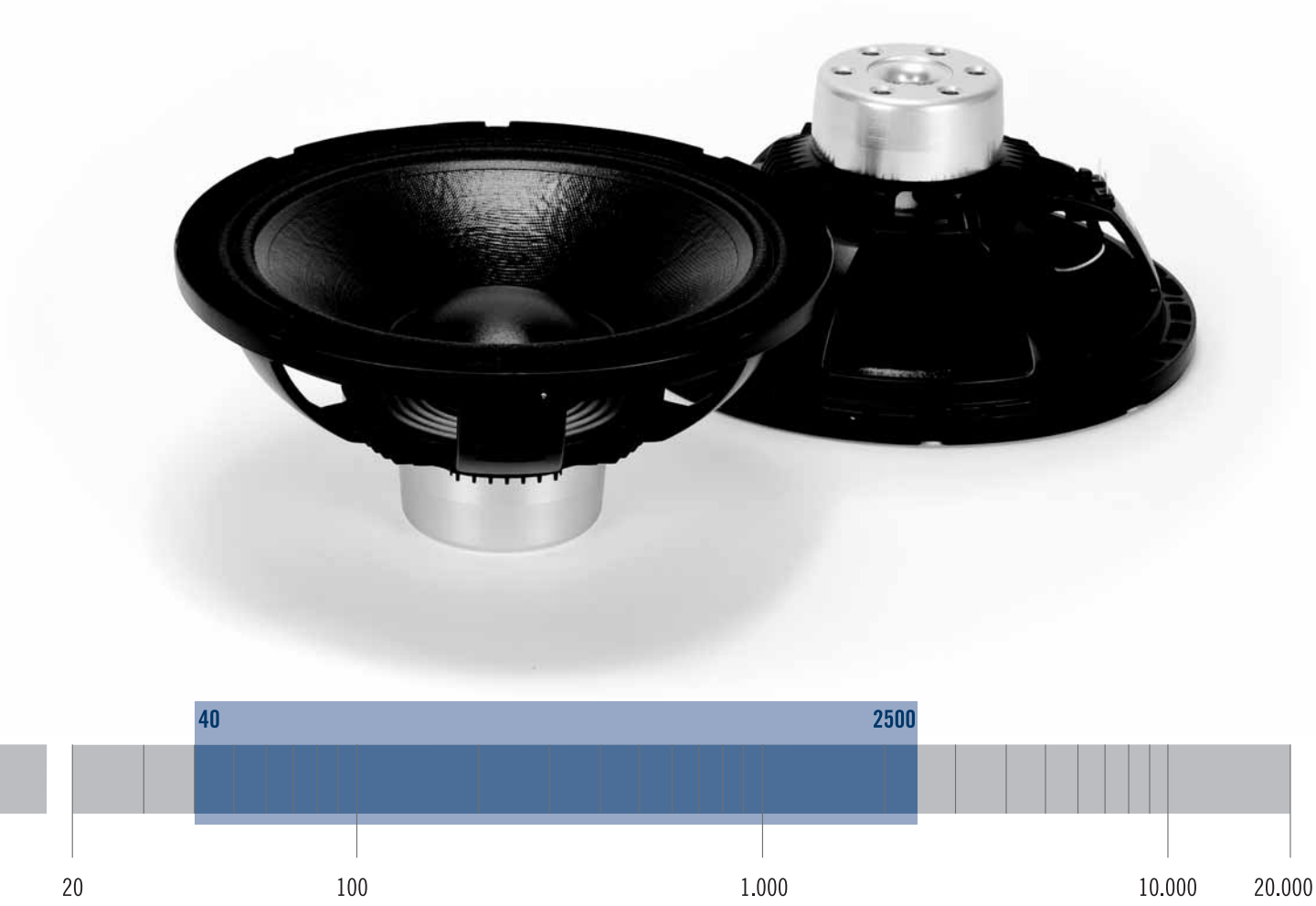
Features

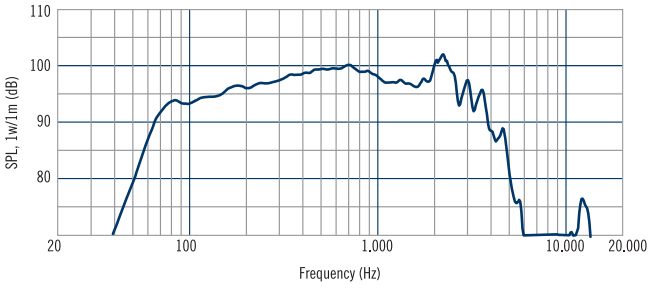
- 3.0-inch fiberglass inside/outside copper voice coil
- 1000 Watt continuous program power handling
- 97.5 dB Sensitivity
- 40 Hz - 2.5 kHz Frequency range
- Dual-forced air ventilation for minimum power compression
- M-roll surround and exponential cone geometry

The inside-outside copper voice coil design offer large signal linearity and great reliability.
The waterproof body cone treatment and polycotton surround ensure a durable performance in every application.

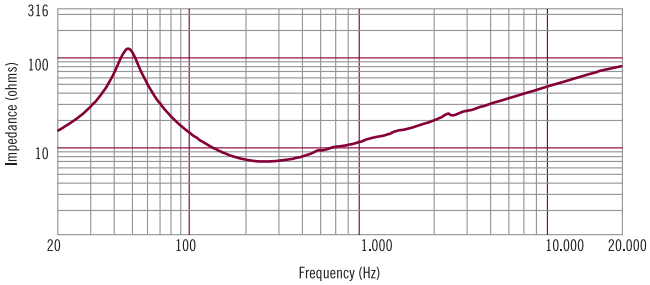
Applications

The excellent linear response, well controlled down to 50 Hertz, makes the LF12N301 especially suitable for small size bass reflex systems and band-pass subwoofers. It is a very good solution for two or three way system when a good BL and punch are required.





Frequency response curve of the loudspeaker make in a hemispherical, free field and mounted in a reflex box with an internal volume of 50 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	300/12	mm/inch
Rated Impedance	8	ohm
Program Power [1]	1000	Watts
Power handling capacity [2]	500	Watts
Sensitivity [3]	97.5	dB
Frequency Range	40 - 2500	Hz
Effective Piston Diameter	260/10.2	mm/inch
Max Excursion Before Damage (peak to peak)	34/1.34	mm/inch
Minimum Impedance	5.9	ohm
Voice Coil Diameter	76/3.0	mm/inch
Voice Coil Material	Copper	
Voice Coil Winding Depth	18.5/0.73	mm/inch
Number of layers	2	
Kind of layer	inside/outside	
Top Plate Thickness	10/0.39	mm/inch
Cone Material	No pressed pulp	
Cone Design	Curved	
Surround Material	Polycotton	
Surround Design	M-roll	

Thiele - Small Parameters [4]

Resonance frequency	Fs	48	Hz
DC resistance	Re	5.5	ohm
Mechanical factor	Qms	6.4	
Electrical factor	Qes	0.22	
Total factor	Qts	0.21	
BL Factor	BL	21.5	T · m
Effective Moving Mass	Mms	62	gr
Equivalent Cas air load	Vas	70	liters
Effettive piston area	Sd	0.053	m^2
Max. linear excursion (mathematical) [5]	Xmax	6.8	mm
Voice - coil inductance @ 1KHz	Le1K	1.8	mH
Half-space efficiency	Eff	3.10	%

Mounting Information

Overall Diameter	320/12.6	mm/inch
Bolt Circle Diameter	294.5-304/11.6-11.9	mm/inch
Bolt Hole Diameter	5.5/0.21	mm/inch
Front Mount Baffle Cut-out	288/11.3	mm/inch
Rear Mount Baffle Cut-out	288/11.3	mm/inch
Depth	133/5.24	mm/inch
Volume occupied by the driver [6]	2.2/0.08	liters/ft3

Shipping Information

Net Weight	3.4/7.5	Kg/Lbs
Shipping Weight	4.2/9.2	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 - 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.