

MID-BASS LF15N301

Professional Low Frequency Transducer

PART NUMBER **11100073**

Features

- 3.0-inch, fibreglass inside/outside copper voice coil
- 1000 Watt continuous program power handling
- 99 dB Sensitivity
- 40Hz –3.0KHz Frequency range
- Dual-forced air ventilation for minimum power compression
- Triple-roll surround and exponential cone geometry

The LF15N301 is a high power 15" 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.

The Triple-roll surround offers a great displacement linearity and a precise control of the cone.

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 40 Hertz, makes the LF15N301 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.



40 3000

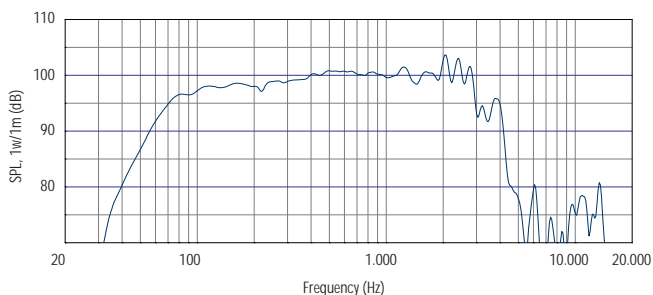
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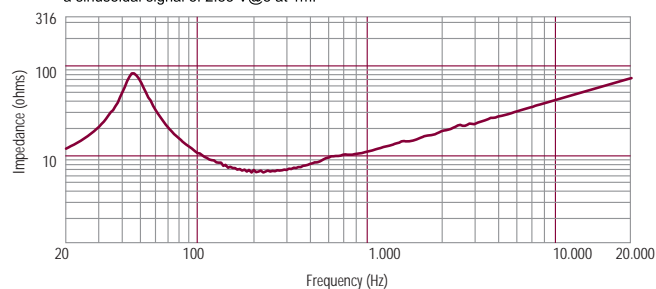
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Frequency response curve of the loudspeaker made in a hemispherical, free field and mounted in a reflex box with an internal volume of 80 litres and tuned at 50Hz, applying a sinusoidal signal of 2.83 V@8 at 1m.



Impedance magnitude curve measured in free air.

General Specifications

Nominal Diameter	380/15	mm/inch
Rated Impedance	8	ohm
Program Power ¹	1000	Watts
Power handling capacity ²	500	Watts
Sensitivity ³	99	dB
Frequency Range	40 - 3000	Hz
Effective Piston Diameter	330/13.0	mm/inch
Max Excursion Before Damage (peak to peak)	40/1.57	mm/inch
Minimum Impedance	5.9	ohm
Voice Coil Diameter	76/3.0	mm/inch
Voice Coil Material	Copper	
Voice Coil Winding Depth	19/0.75	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	Triple-roll	

Thiele - Small Parameters ⁴

Resonance frequency	Fs	45	Hz
DC resistance	Re	5.0	ohm
Mechanical factor	Qms	4.0	
Electrical factor	Qes	0.30	
Total factor	Qts	0.28	
BL Factor	BL	21.1	T · m
Effective Moving Mass	Mms	101	gr
Equivalent Cas air load	Vas	135	liters
Effettive piston area	Sd	0.086	m ²
Max. linear excursion (mathematical) ⁵	Xmax	7.0	mm
Voice - coil inductance @ 1KHz	Le1K	1.6	mH
Half-space efficiency	Eff	3.80	%

Mounting Information

Overall Diameter	388/15.3	mm/inch
Bolt Circle Diameter	369-373.5/14.5-14.7	mm/inch
Bolt Hole Diameter	5.5/0.22	mm/inch
Front Mount Baffle Cut-out	357/14.06	mm/inch
Rear Mount Baffle Cut-out	358/14.09	mm/inch
Depth	152/5.98	mm/inch
Volume occupied by the driver ⁶	3.0/0.11	liters/ft3

Shipping Information

Net Weight	3.7/8.16	Kg/Lbs
Shipping Weight	4.7/10.36	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.