

# WOOFER LF15G401

Professional Low Frequency Transducer

The LF15G401 is a 15-inch woofer with linear frequency response characteristics and very high power handling. The LF15G401 uses a fibre loaded cone assembly along with a high excursion triple roll, constant geometry surround. This combination provides remarkable strength and a peak to peak maximum excursion of 52 mm.

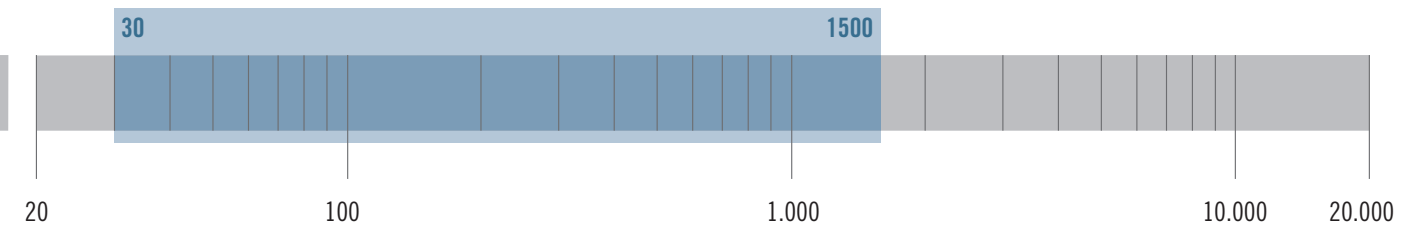
PART NUMBER **11100014**

## Features

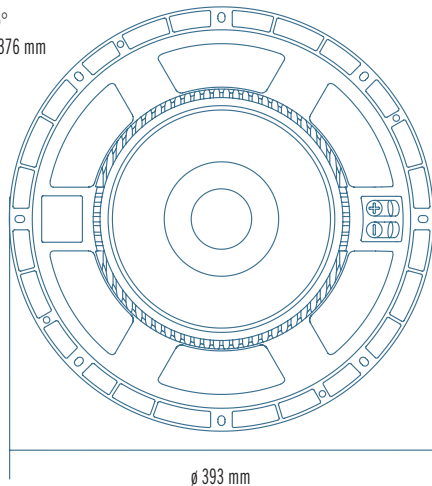
- 4-inch Inside/outside copper voice coil
- 1800 Watt continuous program power handling
- 97 dB Sensitivity
- 30 Hz - 1.5 kHz Frequency range
- Dual spider design with silicon based dampening control
- Triple-roll surround and corrugated straight cone geometry

## Applications

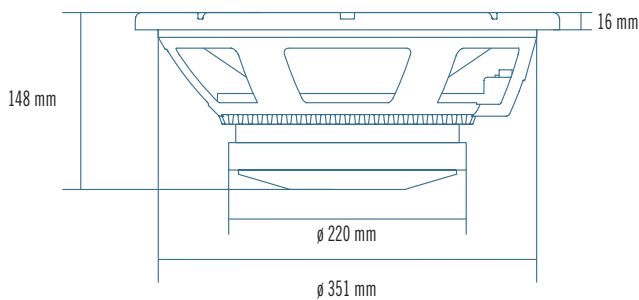
The LF15G401 is ideal for use in applications where incredible power handling, long excursion and perfect control is required. Ideal for high quality professional bass reflex and bass-horn systems. The robust mechanical design and optimised weight of the device make it desirable for use in fixed installation or portable professional loudspeaker systems. Very good for 3 way, extended low frequency configurations.



8 x  $\phi$  6.5 holes to 45°  
on 371 mm and on 376 mm



$\phi$  393 mm

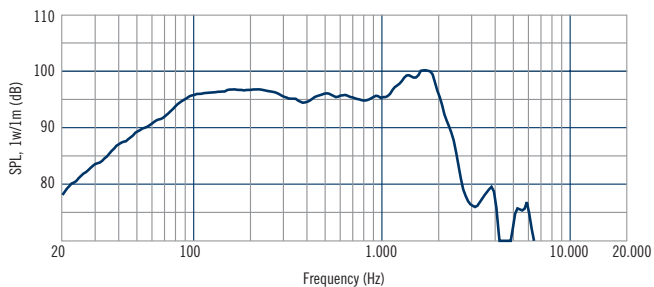


148 mm

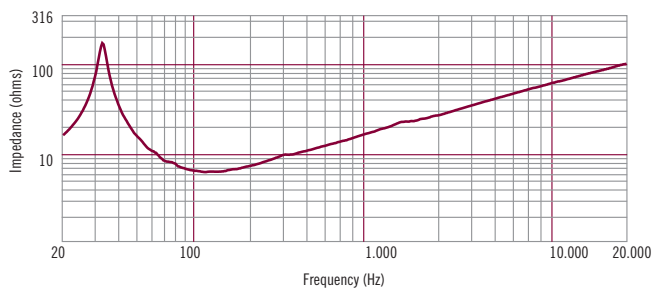
16 mm

$\phi$  220 mm

$\phi$  351 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.

## General Specifications

Nominal Diameter	380/15	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>	97	dB
Frequency Range	35 - 1500	
Effective Piston Diameter	340/13.4	mm/inch
Max Excursion Before Damage (peak to peak)	52/2.1	mm/inch
Minimum Impedance	6.1	ohm
Voice Coil Diameter	100/4	mm/inch
Voice Coil Material	Copper	
Voice Coil Winding Depth	23/0.9	mm/inch
Number of layers	2	
Kind of layer	inside/outside	
Top Plate Thickness	12/0.5	
Cone Material	No pressed pulp	
Cone Design	Straight	
Surround Material	Polycotton	
Surround Design	Triple roll	

## Thiele - Small Parameters<sup>4</sup>

Resonance frequency	Fs	36	Hz
DC resistance	Re	4.8	ohm
Mechanical factor	Qms	6.2	
Electrical factor	Qes	0.27	
Total factor	Qts	0.26	
BL Factor	BL	24.6	T · m
Effective Moving Mass	Mms	150	gr
Equivalent Cas air load	Vas	150	liters
Effettive piston area	Sd	0.091	m <sup>2</sup>
Max. linear excursion (mathematical) <sup>5</sup>	Xmax	8.5	mm
Voice - coil inductance @ 1KHz	Le1K	2.5	mH
Half-space efficiency	Eff	2.50	%

## Mounting Information

Overall Diameter	393/15.5	mm/inch
Bolt Circle Diameter	371 - 376	mm/inch
Bolt Hole Diameter	6.5/0.3	mm/inch
Front Mount Baffle Cut-out	352/13.9	mm/inch
Rear Mount Baffle Cut-out	360/14.2	mm/inch
Depth	158/6.2	mm/inch
Volume occupied by the driver <sup>6</sup>	4.3	liters/ft <sup>3</sup>

## Shipping Information

Net Weight	12.2/26.8	Kg/Lbs
Shipping Weight	12.8/28.4	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 100-500 Hz 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.