

# WOOFER LF18G401

Professional Low Frequency Transducer

The LF18G401 is a 18-inch woofer with linear frequency response characteristics and very high power handling. The LF18G401 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 50 mm.

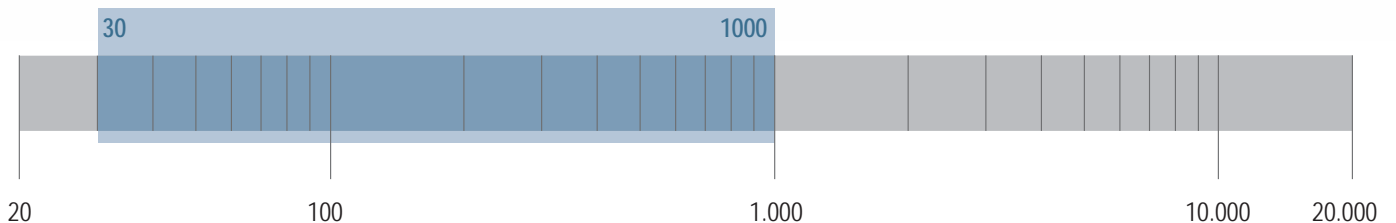
PART NUMBER 11100012

## Features

- 4-inch, fibreglass inside-outside copper voice coil
- 1800 Watt continuous program power handling
- 98 dB Sensitivity
- 30 Hz - 1 kHz Frequency range
- Dual spider design with silicon based dampening control
- Triple-roll surround and corrugated straight cone geometry

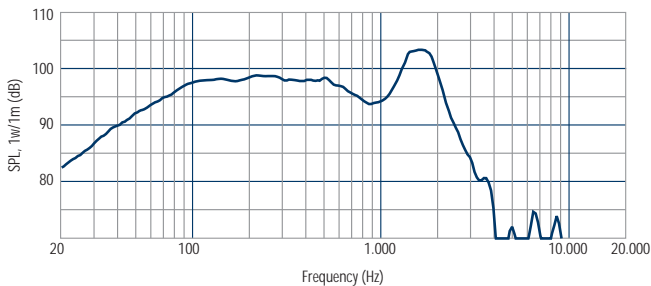
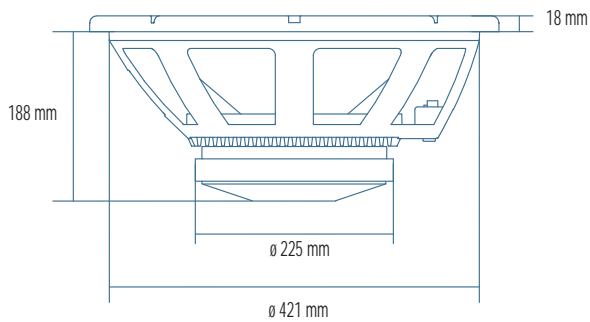
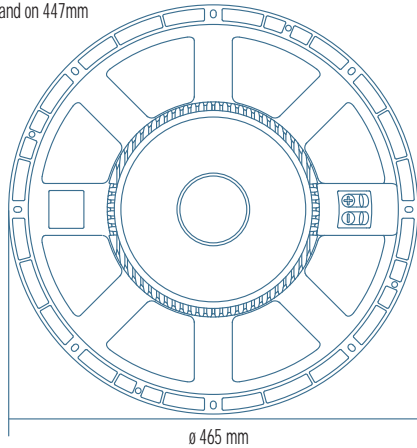
## Applications

The LF18G401 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.

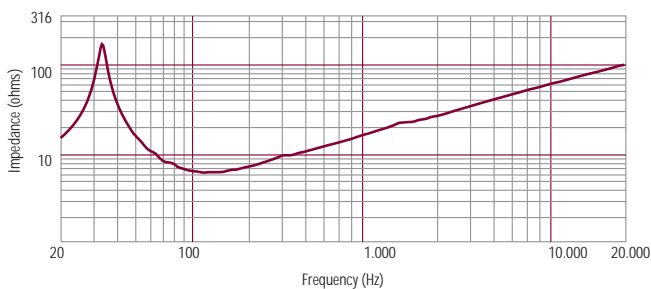




8 x  $\phi$  6.5 mm holes to 45°  
on 442 mm and on 447mm



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 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.

## General Specifications

Nominal Diameter	460/18	mm/inch
Rated Impedance	8	ohm
Program Power <sup>1</sup>	1800	Watts
Power handling capacity <sup>2</sup>	900	Watts
Sensitivity <sup>3</sup>	98	dB
Frequency Range	30 - 1000	Hz
Effective Piston Diameter	395/15.6	mm/inch
Max Excursion Before Damage (peak to peak)	50/2.0	mm/inch
Minimum Impedance	5,9	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	mm/inch
Cone Material	No pressed pulp	
Cone Design	Straight	
Surround Material	Polycotton	
Surround Design	Triple roll	

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

Resonance frequency	Fs	33	Hz
DC resistance	Re	4.8	ohm
Mechanical factor	Qms	7.6	
Electrical factor	Qes	0.30	
Total factor	Qts	0.29	
BL Factor	BL	24.6	T · m
Effective Moving Mass	Mms	182	gr
Equivalent Cas air load	Vas	268	liters
Effettive piston area	Sd	0.122	m <sup>2</sup>
Max. linear excursion (mathematical) <sup>5</sup>	Xmax	8.5	mm
Voice - coil inductance @ 1KHz	Le1K	2.4	mH
Half-space efficiency	Eff	3.09	%

## Mounting Information

Overall Diameter	465/18.3	mm/inch
Bolt Circle Diameter	442-447/17.4-17.6	mm/inch
Bolt Hole Diameter	6.5/0.3	mm/inch
Front Mount Baffle Cut-out	424/16.7	mm/inch
Rear Mount Baffle Cut-out	424/16.7	mm/inch
Depth	205/8.1	mm/inch
Volume occupied by the driver <sup>6</sup>	6.0/0.21	liters/ft3

## Shipping Information

Net Weight	13/28.9	Kg/Lbs
Shipping Weight	13.7/30.4	Kg/Lbs