

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

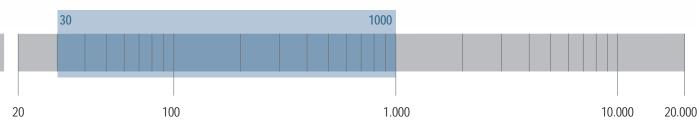
# **Features**

- 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

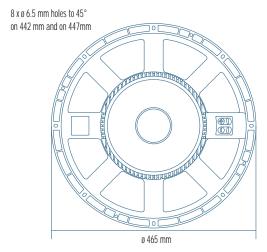
# **Applications**

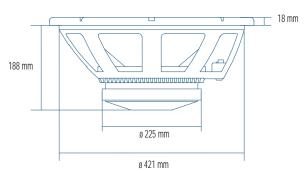
The LF18G401 is ideal for use in applications whereincredible power handling, long excursion and perfect control is required. Ideal for high quality professional bass reflex and bass-horn systems. The robust mechanical design and optimised weight of the device make it desirable for use in fixed installation or portable professional loudspeaker systems.

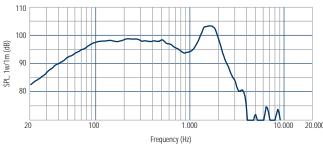




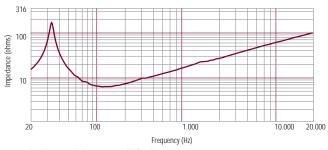








Frequency response curve of the loudspeaker taken in a hemispherical, free field environment and mounted in a closed box with an internal volume of 600 litres (21,2 cu.ft) enclosing the rear of the driver.



Impedance magnitude curve measured in free air.

#### **General Specifications**

Nominal Diameter	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 4

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) 5	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

#### 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 0hms. - 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 hoard