WOOFER LF18G400

Professional Low Frequency Transducer

PART NUMBER **11185008**

The LF18G400 is a 18-inch woofer with linear frequency response characteristics and very high power handling. The LF18G400 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. Special features of this 18 are the unique T-pole, curved against voice coil overdriving and the 14 mm top plate for best control and power handling.

Features

- 4-inch, fibreglass inside-outside copper voice coil
- 2000 Watt continuous program power handling
- 97.5 dB Sensitivity
- 25 Hz 1 kHz Frequency range
- T-pole, curved on top. 14 mm top plate for minimum power compression
- Dual spider design with silicon based dampening control
- Triple-roll surround and corrugated straight cone geometry

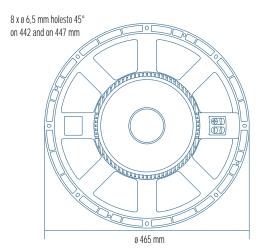
Applications

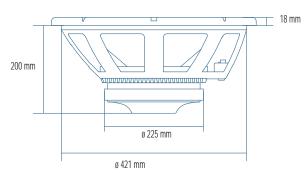
The LF18G400 is ideal for use in applications where incredible power handling, long excursion and perfect control is required. Ideal for high quality professional bass reflex and bass-horn systems. The robust mechanical design and optimised weight of the device make it desirable for use in fixed installation or portable professional loudspeaker systems.

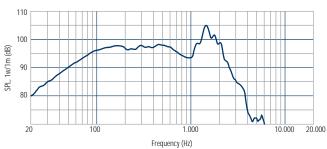




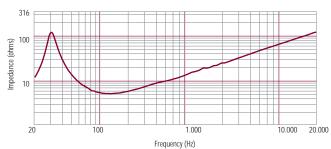








Frequency response curve of the loudspeaker taken in a hemispherical, free field environment and mounted in a closed box with an internal volume of 600 litres $(21,2\,\mathrm{cu}.ft)$ enclosing the rear of the driver.



Impedance magnitude curve measured in free air.

General Specifications

| Nominal Diameter | 460/18 | mm/inch |
|--|-----------------|---------|
| Rated Impedance | 8 | ohm |
| Program Power 1 | 2000 | Watts |
| Power handling capacity ² | 1000 | Watts |
| Sensitivity ³ | 97.5 | dB |
| Frequency Range | 25 - 1000 | Hz |
| Effective Piston Diameter | 395/15.6 | mm/inch |
| Max Excursion Before Damage (peak to peak) | 50/2.0 | mm/inch |
| Minimum Impedance | 6.0 | ohm |
| Voice Coil Diameter | 100/4 | mm/inch |
| Voice Coil Material | Copper | |
| Voice Coil Winding Depth | 25/1.0 | mm/inch |
| Number of layers | 2 | |
| Kind of layer | inside/outside | |
| Top Plate Thickness | 14/0.55 | mm/inch |
| Cone Material | No pressed pulp | |
| Cone Design | Straight | |
| Surround Material | Polycotton | |
| Surround Design | Triple roll | |
| | | |

Thiele - Small Parameters 4

| Resonance frequency | Fs | 28 | Hz |
|--|------|-------|----------------|
| DC resistance | Re | 5.1 | ohm |
| Mechanical factor | Qms | 4.6 | |
| Electrical factor | Qes | 0.29 | |
| Total factor | Qts | 0.27 | |
| BL Factor | BL | 24.2 | T · m |
| Effective Moving Mass | Mms | 190 | gr |
| Equivalent Cas air load | Vas | 360 | liters |
| Effettive piston area | Sd | 0.122 | m ² |
| Max. linear excursion (mathematical) 5 | Xmax | 9.0 | mm |
| Voice - coil inductance @ 1KHz | Le1K | 2.5 | mH |
| Half-space efficiency | Eff | 2.63 | % |

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 | 210/8.3 | mm/inch |
| Volume occupied by the driver ⁶ | 7.0/0.25 | liters/ft3 |

Shipping Information

| Net Weight | 13.3/29.3 | Kg/Lbs |
|-----------------|-----------|--------|
| Shipping Weight | 14.3/31.5 | 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 board.