

WOOFER LF12X401

Professional Low Frequency Transducer

PART NUMBER **11100096**

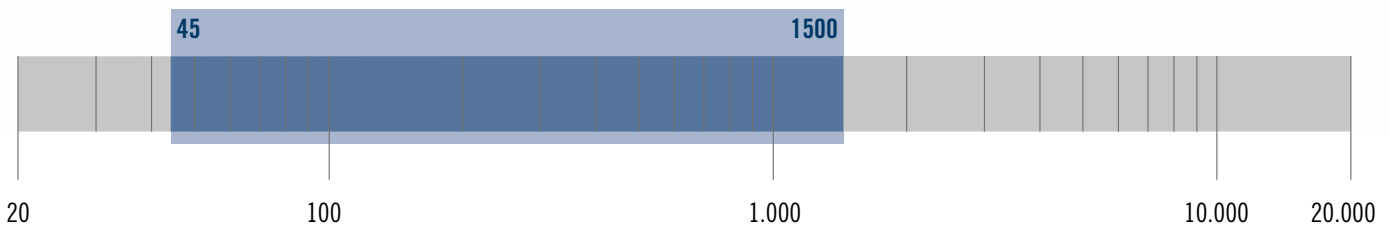
Features

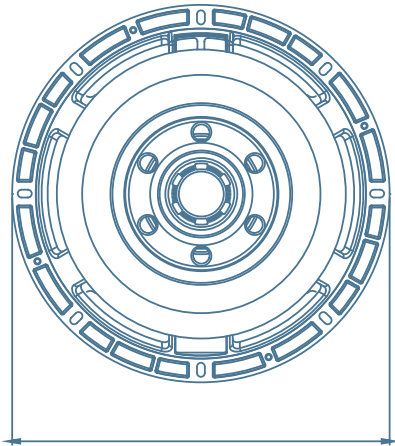
- 4.0 - inch, fibreglass inside-outside copper voice coil
- 2000 Watt continuous program power handling
- 96.5 dB Sensitivity
- 45 Hz – 1.5 kHz Frequency range
- 26.1 T/m BL
- 60 mm peak-to-peak excursion
- Dual-forced hyper-venting and 15mm top plate for minimum power compression
- Dual spider design with silicon based dampening control
- Triple-roll surround and curved cone geometry

Very linear frequency response characteristics, extreme high power handling while generating the lowest harmonic distortion of any comparable 18-inch transducer within its application range. The LF12X401 uses a fibre loaded cone assembly along with a high excursion triple roll surround. This combination provides remarkable strength and a peak to peak maximum excursion of 50 mm. The new dual forced hyper-venting system guarantee a very efficient voice coil ventilation for minimum power compression and incredible power handling.

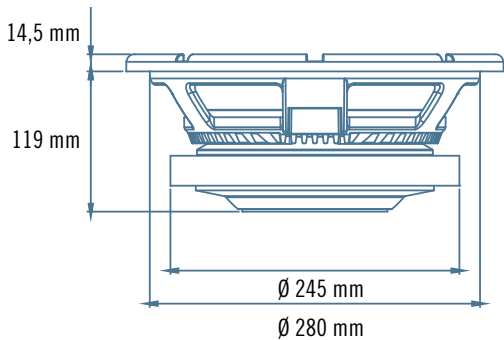
Applications

The LF12X401 is ideal for use in applications where sizable amounts of low frequency, long excursion and low distortion acoustic power is desired. The robust mechanical design and optimised weight of the device make it desirable for use in fixed installation or touring professional loudspeaker systems. The transducer's low frequency extension, coupled with its extremely low generation of harmonic distortion, also makes it ideal for use within critical listening applications such as studio monitoring subwoofer systems.





Ø 320 mm

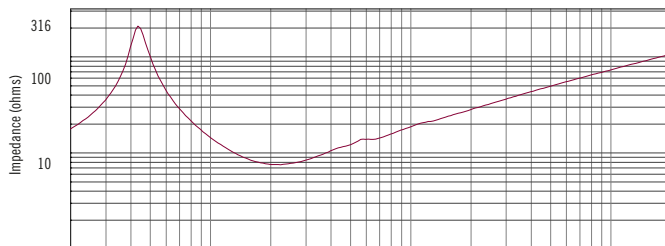
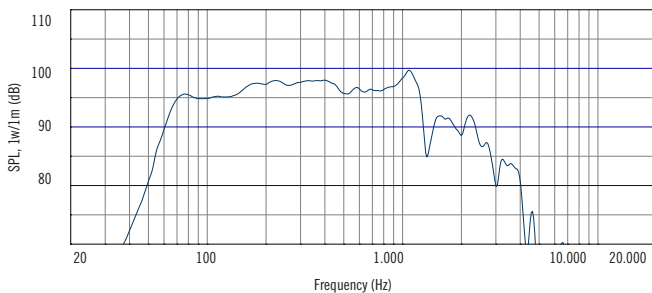


14,5 mm

119 mm

Ø 245 mm

Ø 280 mm



Notes to Specifications

1 Program Power is defined as 300 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.

General Specifications

| | | |
|--|-----------------|---------|
| Nominal Diameter | 300 / 12 | mm/inch |
| Rated Impedance | 8 | ohm |
| Program Power ¹ | 2000 | Watts |
| Power handling capacity ² | 1000 | Watts |
| Sensitivity ³ | 96,5 | dB |
| Frequency Range | 45-1500 | Hz |
| Effective Piston Diameter | 260 / 10,2 | mm/inch |
| Max Excursion Before Damage (peak to peak) | 60 / 2,36 | mm/inch |
| Minimum Impedance | 6,5 | ohm |
| Voice Coil Diameter | 100 / 4 | mm/inch |
| Voice Coil Material | Copper | |
| Voice Coil Winding Depth | 25 / 0,98 | mm/inch |
| Number of layers | 2 | |
| Kind of layer | inside/outside | |
| Top Plate Thickness | 15 / 0,6 | 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 | 5,2 | ohm |
| Mechanical factor | Qms | 5,4 | |
| Electrical factor | Qes | 0,22 | |
| Total factor | Qts | 0,21 | |
| BL Factor | BL | 26,1 | T · m |
| Effective Moving Mass | Mms | 100 | gr |
| Equivalent Cas air load | Vas | 50 | liters |
| Effective piston area | Sd | 0,053 | m ² |
| Max. linear excursion (mathematical) ⁵ | Xmax | 8,8 | mm |
| Voice - coil inductance @ 1KHz | Le1K | 2,1 | mH |
| Half-space efficiency | Eff | 2,0 | % |

Mounting Information

| | | |
|--|-------------------|------------|
| Overall Diameter | 320 / 12,6 | mm/inch |
| Bolt Circle Diameter | 293-304 / 11,5-12 | mm/inch |
| Bolt Hole Diameter | 6,5 / 0,25 | mm/inch |
| Front Mount Baffle Cut-out | 282 / 11,1 | mm/inch |
| Rear Mount Baffle Cut-out | 284 / 11,2 | mm/inch |
| Depth | 119 / 4.68 | mm/inch |
| Volume occupied by the driver ⁶ | 2,9 / 0,098 | liters/ft3 |

Shipping Information

| | | |
|-----------------|-------------|------------|
| Net Weight | 12,2 / 26,8 | Kg/Lbs Kg/ |
| Shipping Weight | 12,8 / 28,4 | Lbs |