

WOOFER LF18X400

Professional Low Frequency Transducer

Incredibly 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 LF18X400 uses a fibre loaded cone assembly along with a high excursion triple roll, constant geometry surround. A fully optimised T-pole design generate the minimum amount of flux modulation. The T-pole also features RCF Precision's spaced gap demodulation technology, progressively braking the voice coil, providing a much smoother transition for the moving mass as it reaches its maximum excursion limits. Forced air venting system.

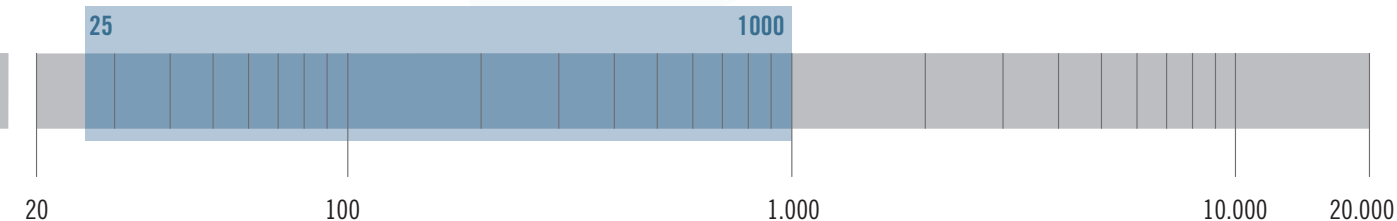
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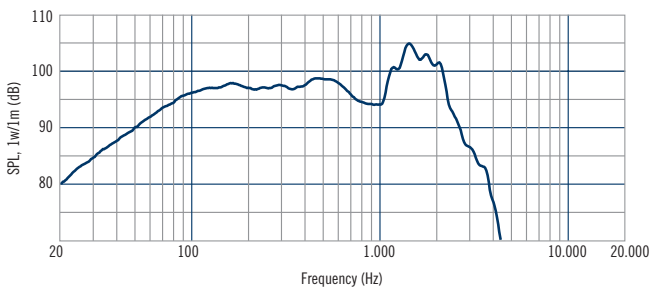
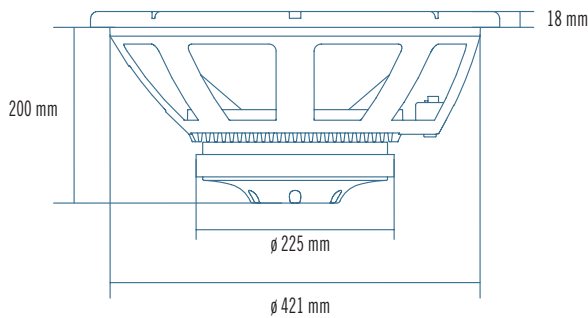
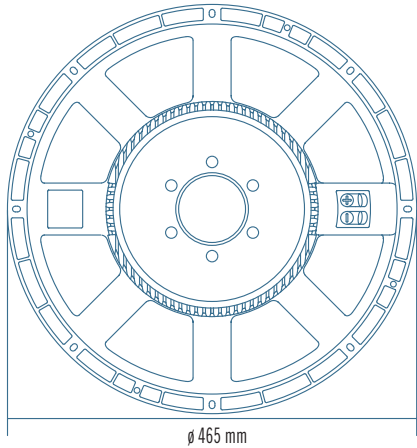
Features

- 4-inch Inside/outside copper voice coil
- 2000 Watt continuous program power handling
- 97.5 dB Sensitivity
- 25 Hz - 1 kHz Frequency range
- Progressive, spaced, aluminum demodulation rings
- Forced air ventilation and 14 mm top plate for minimum power compression
- Dual spider design with silicon based dampening control
- Triple-roll surround and corrugated straight cone geometry

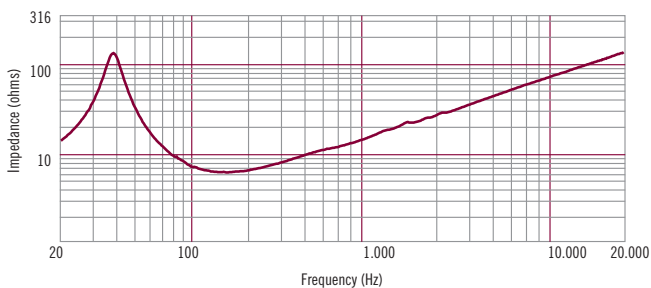
Applications

The LF18X400 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 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.





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 ¹	2000	Watts
Power handling capacity ²	1000	Watts
Sensitivity ³	97.5	dB
Frequency Range	25 - 1000	
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	
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
Effective piston area	Sd	0.122	m ²
Max. linear excursion (mathematical) ⁵	Xmax	9.0	mm
Voice - coil inductance @ 1KHz	Le1K	2.3	mH
Half-space efficiency	Eff	2.63	%

Mounting Information

Overall Diameter	465/18.3	mm/inch
Bolt Circle Diameter	442 - 447	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	liters/ft ³

Shipping Information

Net Weight	13.3/29.3	Kg/Lbs
Shipping Weight	14.3/31.5	Kg/Lbs