WOOFER **LF18N402**

Professional Low Frequency Transducer

Incredibly fast time response characteristic, very high power handling, low power compression. The LF18N402 uses a fibre loaded cone assembly along with a small triple roll, progressive geometry surround. This combination provides remarkable strength and surround control. A fully optimised T-pole design generate the minimum amount of flux modulation, the unique Dual-forced air venting system guarantee a very efficient voice coil ventilation for minimum power compression and higher power handling.

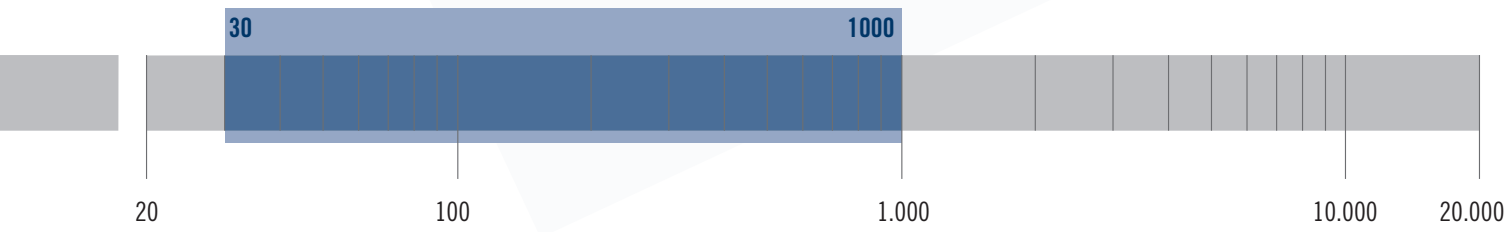
PART NUMBER **11100011**

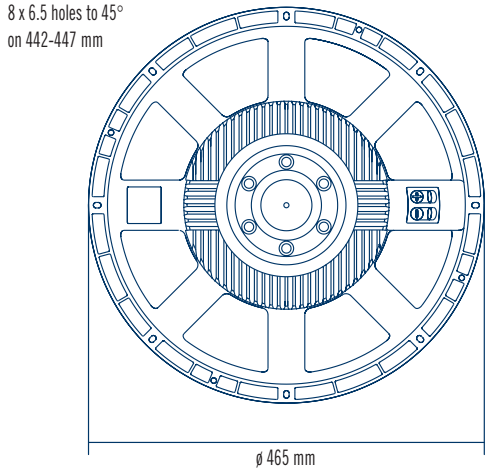
Features

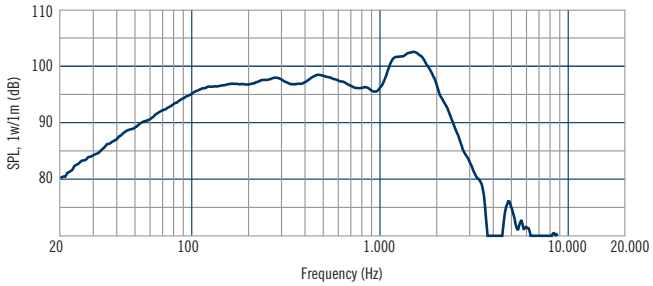
- **4-inch Inside/outside copper voice coil**
- **2000 Watt continuous program power handling**
- **98.5 dB Sensitivity**
- **30 Hz - 1 kHz Frequency range**
- **BL/Re maximized for loaded applications**
- **Dual-forced air ventilation and 15 mm top plate for minimum power compression**
- **Dual spider design with silicon based dampening control**
- **Triple-roll surround and corrugated straight cone geometry**

Applications

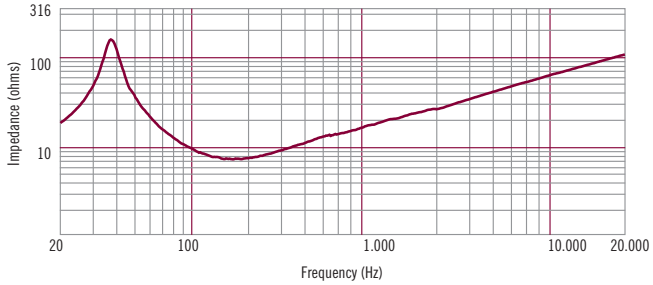
The LF18N402 is ideal for use in applications where incredible BL, very high power handling, light weight is required. Specially designed for touring, perfect for high quality professional bandpass and horn-loaded systems.
The transducer's low frequency extension and control also makes it ideal for use 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.

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]	98.5	dB
Frequency Range	30 - 1000	
Effective Piston Diameter	395/15.6	mm/inch
Max Excursion Before Damage (peak to peak)	54/2.1	mm/inch
Minimum Impedance	6.8	ohm
Voice Coil Diameter	100/4	mm/inch
Voice Coil Material	Copper	
Voice Coil Winding Depth	20.5/0.8	mm/inch
Number of layers	2	
Kind of layer	inside/outside	
Top Plate Thickness	15/0.6	
Cone Material	No pressed pulp	
Cone Design	Straight	
Surround Material	Polycotton	
Surround Design	Triple roll	

Thiele - Small Parameters [4]

Resonance frequency	Fs	36	Hz
DC resistance	Re	5.6	ohm
Mechanical factor	Qms	7.1	
Electrical factor	Qes	0.25	
Total factor	Qts	0.24	
BL Factor	BL	29	T · m
Effective Moving Mass	Mms	165	gr
Equivalent Cas air load	Vas	247	liters
Effettive piston area	Sd	0.122	m2
Max. linear excursion (mathematical) [5]	Xmax	7.3	mm
Voice - coil inductance @ 1KHz	Le1K	2.6	mH
Half-space efficiency	Eff	4.4	%

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	205/8.1	mm/inch
Volume occupied by the driver [6]	5.5	liters/ft3

Shipping Information

Net Weight	9.1/20.2	Kg/Lbs
Shipping Weight	9.8/21.8	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 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.