

# **LF18N451**

### WOOFFR

#### **DESCRIPTION**

The LF18N451 is a very high power handling and efficiency transducer specially designed to provide powerful and accurate sub-bass frequencies with low distortion and low power compression. Ultra fast time response. The LF18N451 uses a fibre loaded cone assembly along a large triple roll surround, this combination provides remarkable strength and control. Double silicon spider sysetm ensures excellent control during large excursions.

A fully optimazed T-pole design generate the minimum amount of flux modulation. The Dual-forced air venting system provides a very efficient voice coil ventilation to minimize the power compression



## **FEATURES**

- 4,5 inch Inside/Outside copper voice coil
- 3000 Watt continuous program power handling
- 97.5 dB Sensitivity
- 30 Hz 1 kHz Frequency range
- Dual-forced air ventilation for minimum power compression
- Dual spider designed with silicon based damping control
- BL of 30.2 Txm to provide a faster and accurate low frequency

Rev. C Last update: 27/06/2023



#### **TECHNICAL SPECIFICATIONS**

**General specifications** Nominal Diameter: 18 inch / 457 mm

Rated Impedance: 8 ohm
Program Power (watt): 3000 W
Power handling capacity: 1500 W
Sensitivity: 97.5 dB
Frequency range: 30 - 1000 Hz

Effective piston diameter: 395 mm / 15.55 inch

Max. Excursion Before Damage: 60 mm / 2.36 inch

Minimum Impedance (ohm): 6.3 ohm

Voice Coil Diameter: 4.5 inch / 114 mm

Voice Coil Winding Material: Copper

Voice Coil Length: 26 mm / 1.02 inch

Number of layers: 2

Kind of layers: inside/outside

Top Plate Thickness: 15 mm / 0.59 inch

Cone Design: Curved
Surround Material: Polycotton
Surround Design: Triple roll
Magnets: Neodymium

Dual-force air ventilation:

Spider: Dual with silicon based damping control

**Thiele - small parameters** Resonance frequency (Fs): 31 Hz

5.00 ohm DC resistance (Re) (ohm): Mechanical factor: 6.00 Qms Electrical factor: 0.25 Qes Total factor: 0.24 Qts BI factor (BI) (T x m): 30.20 T x m Effective moving mass (Mms): 235.0 g Equivalent Cas air loaded (Vas): 245.0 liters 0.120 m2 Effective piston area (Sd): Max. linear excursion (Xmax): 9 mm Voice coil inductance @ 1kHz (Le1k): 2.60 mH Half-space efficency (Eff): 2 54%

**Mounting information** Overall diameter: 465 mm / 18.31 inches

Bolt circle diameter: 442-447 mm / 17.4-17.6 inch

Bolt hole diameter: 7 mm / 0.28 inch
Front mount baffle cut-out: 424 mm / 16.69 inch
Rear mount baffle cut-out: 425 mm / 16.73 inch
Volume occupied by the driver: 5.5 liters / 0.22 ft3

**Standard compliance** Safety agency: CE compliant

## DATASHEET



 Size
 Height:
 223 mm / 8.78 inches

 Diameter:
 465 mm / 18.31 inches

 Weight:
 10.5 kg / 23.15 lbs

**Shipping information** Package Height: 240 mm / 9.45 inches

Package Width: 510 mm / 20.08 inches
Package Depth: 480 mm / 18.9 inches
Package Weight: 12.5 kg / 27.56 lbs

### **PART NUMBER**

· 11100046

LF18N451 8ohm







