

- 95 dB 1W/1m sensitivity
- 3000W program power handling
- 100mm (4in) ISV Tetracoil technology for maximum power handling
- 45 mm (1,77 in) peak to peak excursion
- Symmetric flux density and inductance behaviour
- Straight ribbed, water repellent composite cone
- Suitable for vented, horn loaded and bandpass subwoofer designs

The 15TLW3000 is an 15 inch diameter high performance subwoofer, specifically designed for high SPL subwoofer applications in either a reflex, bandpass or horn loaded configuration. For optimum results we recommend the usage of power amplifiers able to deliver 3600W program power without clipping

The 15TLW3000 uses Eighteen Sound proprietary Tetracoil technology, where two different, axially separated magnetic gaps and two inside-outside 4" diameter voice coils are wound on the same former and suspended evenly in the two magnetic gaps.

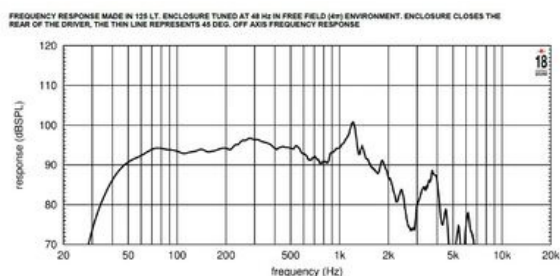
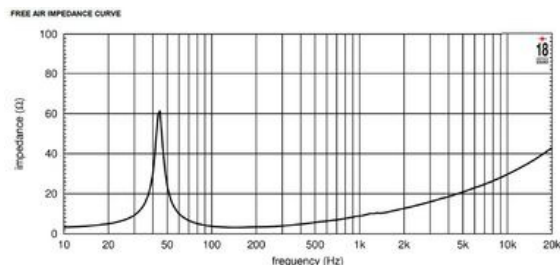
The Tetracoil design key advantages are:

- 1) a symmetric flux density versus displacement behavior, that minimizes the even distortion products;
- 2) a very symmetric and flat inductance curve;
- 3) the equivalent voice coil diameter of a 4" Tetracoil speaker is greater than 6". Consequently heat dissipation occurs over a larger surface area, driving AES power handling up to 1500 W.

15TLW3000 design features include a large displacement suspension system which, in conjunction with a fiberglass reinforced, straight ribbed cone allows an ultra-linear piston action and provides full mechanical control across the entire working range.

In order to furtherly increase power handling and reduce power compression figure, a low density material air diffractor is placed into the backplate venting hole acting as a cooling system, increasing power handling capability and lowering the power compression figure.

15TLW3000 is able to perform properly under inclement weather conditions: the exclusive cone treatment improves pulp strength and gives water repellent properties to both sides of the membrane. In addition, magnetic structure metal plates coating is far more resistant than standard zinc coating to the corrosive effects of salts and oxidization.



SPECIFICATIONS

| | |
|--|-----------------|
| Nominal Diameter | 380 mm (in) |
| Nominal Impedance | 4 Ω |
| Minimum Impedance | 3.6 Ω |
| Nominal Power Handling ¹ | 1500 W |
| Continuous Power Handling ² | 3000 W |
| Sensitivity ³ | 95.0 dB |
| Frequency Range | 48 - 2200 Hz |
| Voice Coil Diameter | 100 mm (4.0 in) |

DESIGN

| | |
|------------------------|---|
| Surround Shape | Triple roll |
| Cone Shape | Straight |
| Woofers Cone Treatment | Water,UV repellent |
| Recommended Enclosure | 100.0 dm ³ (3.53 ft ³) |
| Recommended Tuning | 50 Hz |

PARAMETERS⁴

| | |
|---------------------|---|
| Resonance Frequency | 44 Hz |
| Re | 2.5 Ω |
| Qes | 0.41 |
| Qms | 9.8 |
| Qts | 0.39 |
| Vas | 80.0 dm ³ (2.83 ft ³) |
| Sd | 881.0 cm ² (136.56 in ²) |
| η _o | 1.6 % |
| X _{max} | 9.0 mm |
| M _{ms} | 177.0 g |
| Bl | 18.0 Txm |
| Le | 1.0 mH |
| EBP | 107 Hz |

MOUNTING AND SHIPPING INFO

| | |
|-----------------------------|--|
| Overall Diameter | 393 mm (15.47 in) |
| Bolt Circle Diameter | 371 mm (14.61 in) |
| Baffle Cutout Diameter | 354.0 mm (13.94 in) |
| Depth | 245 mm (9.65 in) |
| Flange and Gasket Thickness | 12 mm (0.47 in) |
| Net Weight | 12.5 kg (27.56 lb) |
| Shipping Weight | 13.5 kg (29.76 lb) |
| Shipping Box | 400x400x260 mm mm (15.75x15.75x10.24 in) |

1. 2 hours test made with continuous pink noise signal within the range Fs-10Fs. Power calculated on rated minimum impedance. Loudspeaker in free air.
2. Power on Continuous Program is defined as 3 dB greater than the Nominal rating.
3. Applied RMS Voltage is set to 2.83 V for 8 ohms Nominal Impedance.
4. Thiele-Small parameters are measured after a high level 20 Hz sine wave preconditioning test.