

LF drivers - 10.0 Inches



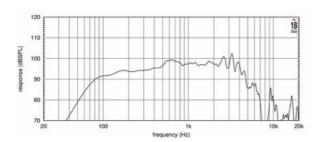
- 96 dB SPL 1W @ 1m average sensitivity
- 500W program power handling
- 65mm (2.4 in) Edgewound Aluminum Voice Coil
- Single Demodulating Ring (SDR) for lower distortion and
- Maximum sound clarity
- Weather protected cone and coated plates
- Ideal for compact two-way and multiway systems

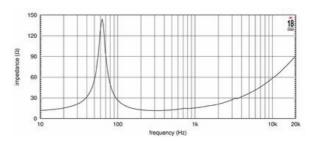
18 Sound's 10W650 ceramic low frequency transducer is a 10-inch woofer that combines excellent linearity with high power handling capabilities (700 W) and reduced power compression. The 65mm (2.5 in) state-of-the-art voice coil assembly incorporates a fine edge-wound aluminum wire together with a strong fiberglas former to get the necessary force factor, mass lightness and high power handling. The voice coil is cooled using airways between the chassis back plate and the magnet face plate, which allow heated air from the voice coil and gap to be channeled away and dissipated by the chassis basket. This technology is another product of 3D CAD resource application by our engineers. The magnetic structure has also been optimized using our in-house FEA CAD resource which has maximized the flux density in the voice coil gap.

A distortion reduction system has been implemented using a demodulating ring for flux modulation cancellation related to voice coil excursion. The cone is treated against extremely aggressive environment conditions and is carried by a double half-roll suspension composed of a material which is more resistant to aging and fatigue than traditional materials, providing the correct damping and excursion control.



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SPECIFICATIONS

| Nominal Diameter | 260 mm (in) |
|--|----------------|
| Nominal Impedance | 8 Ω |
| Minimum Impedance | 5.8 Ω |
| Nominal Power Handling ¹ | 250 W |
| Continuous Power Handling ² | 500 W |
| Sensitivity ³ | 96.0 dB |
| Frequency Range | 55 - 5700 Hz |
| Voice Coil Diameter | 65 mm (2.5 in) |
| Winding Material | aluminum |
| | |

DESIGN

| Surround Shape | M-roll |
|-----------------------|--|
| Cone Shape | Curvilinear |
| Magnet Material | Ferrite |
| Recommended Enclosure | 25.0 dm ³ (0.88 ft ³) |
| Recommended Tuning | 70 Hz |

PARAMETERS⁴

| Re 5.1 g Qes 0.5 Qms 9. Qts 0.4 Vas 26.0 dm³ (ft³ Sd 350.0 cm² (54.25 in² |
|--|
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| |
| Sd 350.0 cm ² (54.25 in ² |
| |
| Xmax 5.7 mr |
| Mms 36.6 |
| BI 12.4 Txr |
| Le 0.59 ml |
| EBP 131 H |

MOUNTING AND SHIPPING INFO

| Overall Diameter | 260 mm (10.24 in) |
|------------------------------------|-----------------------|
| Bolt Circle Diameter | 244 mm (9.61 in) |
| Baffle Cutout Diameter | 230.0 mm (9.06 in) |
| Depth | 121 mm (4.76 in) |
| Flange and Gasket Thickness | 9 mm (0.35 in) |
| Net Weight | 4.3 kg (9.48 lb) |
| Shipping Weight | 5.5 kg (12.13 lb) |
| Shipping Box 275 x 275 x 170 mm | (10.83x10.83x6.69 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.