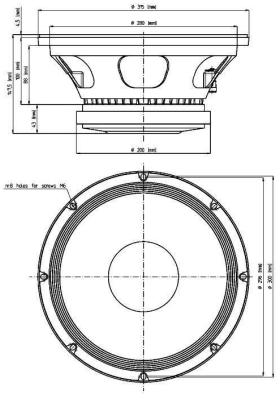
12MB700 8Ω

LF drivers - 12.0 Inches





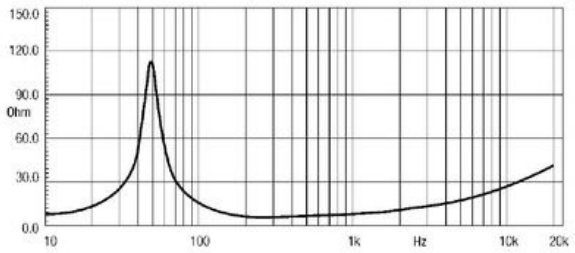
- 101,5 dB SPL 1W / 1m sensitivity
- 75 mm (3 in) Interleaved Sandwich Voice coil (ISV)
- 450 W AES power handling
- Double Demodulating Rings (DDR) for lower distortion
- Improved heat dissipation via unique basket design
- Weather protected cone and plates for outdoor usage
- Ideal for compact two way and multiway systems

The 12MB700 is a very high sensitivity (101.5 dB 1W/1m) midbass driver with high power handling capabilities. The 12MB700 can be used as either a bass/mid driver in compact 2-way reflex enclosures or as a direct radiating or horn loaded, dedicated midrange driver, in multi-way touring and fixed installation concert and arena systems. Its curvilinear paper cone made from a special high strength wood pulp, has been designed to achieve the best possible linearity within its intended frequency range and to control bell-mode resonances around the cone circumference. The cone is carried by a multiroll suspension formed of a linen-like material, which is more resistant to aging and fatigue than traditional materials. The 75 mm diameter state-of-the-art voice coil is similiar to those fitted to our top-of-the-range 18" and 15" models but it is wound with aluminum wire. It employs our Interleaved Sandwich Voice coil (ISV) technology in which a high strength fiberglas former carries windings on both the outer and inner surfaces to achieve a mass balanced coil. This results in an extremely linear motor assembly with a reduced tendency for eccentric behavior when driven hard. The excellent performance capabilities of this loudspeaker are further enhanced by the Double Demodulating Rings (DDR) designed to dramatically reduce the intermodulation and harmonic distortion and improve transient response. The magnetic structure has been optimized using FEA CAD resource, maximizing the flux density in the voice coil gap. Voice coil cooling has been achieved by incorporating airways between the chassis back plate and the top plate of the magnet, allowing heated air from the voice coil and gap to be channeled away and dissipated by the chassis basket. Due to the increasing use of high power audio systems at outdoor events or in marine environments, the ability to perform properly under inclement weather conditions is a key feature in Eighteen Sound philosophy. Hence, an exclusive treatment has been applied to the cone giving it water repellent properties. In addition, another special treatment has been applied to the top and back plates making the transducer far more resistant to the corrosive effects of salts and oxidization.

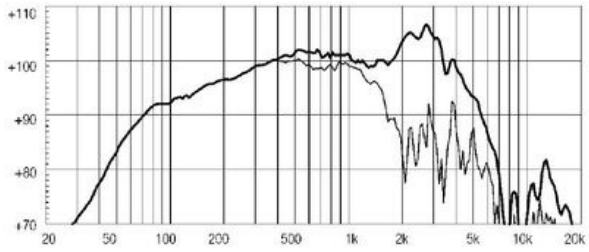
Eighteen Sound Srl
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12MB700 8Ω

LF drivers - 12.0 Inches



FREE AIR IMPEDANCE MAGNITUDE CURVE



FREQUENCY RESPONSE CURVE OF 12MB700 MADE ON 50 LIT. ENCLOSURE TUNED 60HZ IN FREE FIELD (4PI) ENVIRONMENT. ENCLOSURE CLOSES THE REAR OF THE DRIVER. THE THIN LINE REPRESENTS 45 DEG. OFF AXIS FREQUENCY RESPONSE

SPECIFICATIONS

Nominal Diameter	300 mm (in)
Nominal Impedance	8 Ω
Minimum Impedance	5.7 Ω
Nominal Power Handling[1]	450 W
Continuous Power Handling[2]	600 W
Sensitivity[3]	101.5 dB
Frequency Range	60 - 5000 Hz
Voice Coil Diameter	75 mm (3.0 in)
Winding Material	aluminum

DESIGN

Surround Shape	M-roll
Cone Shape	Curvilinear
Magnet Material	Ferrite
Woofer Cone Treatment	Weather protected
Recommended Enclosure	50.0 dm^3 (1.77 ft^3)
Recommended Tuning	55 Hz

PARAMETERS[4]

Resonance Frequency	49 Hz
Re	5.0 Ω
Qes	0.2
Qms	4.7
Qts	0.19
Vas	101.0 dm^3 (3.57 ft^3)
Sd	531.0 cm^2 (82.31 in^2)
Xmax	4.5 mm
Mms	41.0 g
Bl	17.8 Txm
Le	0.9 mH
EBP	245 Hz

MOUNTING AND SHIPPING INFO

Overall Diameter	315 mm (12.4 in)
Bolt Circle Diameter	296 mm (11.65 in)
Baffle Cutout Diameter	282.0 mm (11.1 in)
Depth	147 mm (5.79 in)
Flange and Gasket Thickness	16 mm (0.63 in)
Net Weight	8.3 kg (18.3 lb)
Shipping Weight	9.0 kg (lb)
Shipping Box	332 x 332 x 184 mm (13.07x13.07x7.24 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.

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