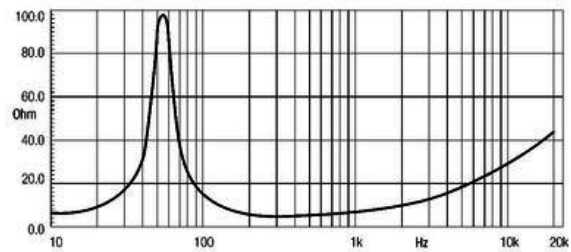
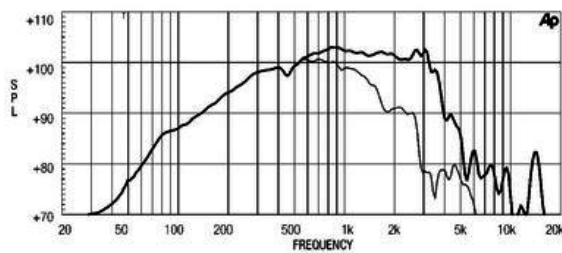


- 102 dB SPL 1W/ 1m average sensitivity
- 100 mm (4 in) Interleaved Sandwich ISV copper voice coil
- 600 WAES power handling
- Excellent transient response
- Very low power compression
- Improved heat dissipation via unique basket design
- Ideal for direct radiating or horn loaded midbass systems

The 12MB1000 is a very high performance 12" midbass driver. It offers high power handling capability with exceptional sensitivity over the midbass frequency range. It can be used with either direct radiating or horn loaded applications, as well as part of a 2 or 3-way system. It is ideally used in stage monitor, auditorium, touring and outdoor systems. The smooth curvilinear paper cone has a special high strength wood pulp composition designed to achieve the best possible linearity within the middle frequency range and to control bell-mode resonances around the cone. The cone is carried by a double half-roll suspension, which is more resistant to aging and fatigue than traditional materials, and provides the correct dampening and excursion control. The state-of-the-art voice coil employs our Interleaved Sandwich Voice coil (ISV) technology, in which a high strength fiberglass former carries windings on both the outer and inner surfaces. By mean of a balanced coil with uniform distribution of mass and motive energy, this technology assures an extremely linear motor assembly. The voice coil cooling has been achieved by incorporating airways between the chassis back plate and the top plate of the magnet which allow heated air from the voice coil and gap to be channeled away and dissipated by the chassis basket. This technology is the result of a meticulous design exercise using a sophisticated in-house 3D CAD facility. The magnetic structure has also been optimized using our in-house FEA CAD resource to maximize flux density in the voice coil gap. Eighteen Sound R&D has developed a special cone treatment specifically dedicated to improve the dampening properties of the moving assembly, thus considerably improving the transient response control. This treatment also gives water repellent properties to the cone, enabling the 12MB1000 to be used in humid environments without damage.



## SPECIFICATIONS

Nominal Diameter	300 mm ( in)
Nominal Impedance	8 Ω
Minimum Impedance	7.2 Ω
Nominal Power Handling <sup>1</sup>	600 W
Continuous Power Handling <sup>2</sup>	800 W
Sensitivity <sup>3</sup>	102.0 dB
Frequency Range	80 - 3500 Hz
Voice Coil Diameter	100 mm (4.0 in)
Winding Material	copper

## DESIGN

Surround Shape	M-roll
Cone Shape	Curvilinear
Magnet Material	Ferrite
Woofer Cone Treatment	Weather protected
Recommended Enclosure	25.0 dm <sup>3</sup> (0.88 ft <sup>3</sup> )
Recommended Tuning	65 Hz

## PARAMETERS<sup>4</sup>

Resonance Frequency	54 Hz
Re	5.8 Ω
Qes	0.2
Qms	6.0
Qts	0.18
Vas	60.0 dm <sup>3</sup> (2.12 ft <sup>3</sup> )
Sd	531.0 cm <sup>2</sup> (82.31 in <sup>2</sup> )
Xmax	2.5 mm
Mms	55.5 g
Bl	23.5 Txm
Le	1.46 mH
EBP	270 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	118 mm (4.65 in)
Flange and Gasket Thickness	16 mm (0.63 in)
Net Weight	9.6 kg (21.16 lb)
Shipping Weight	10.3 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 nominal 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.