8MB500 8Ω

LF drivers - 8.0 Inches



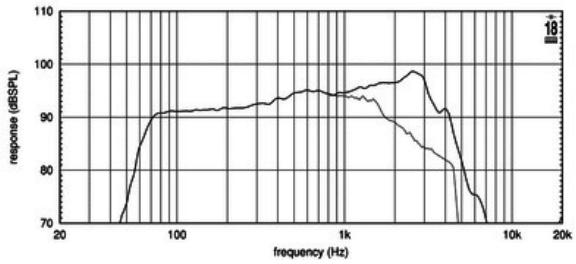
- 95 dB SPL 1W / 1m average sensitivity
- 51 mm (2 in) Interleaved Sandwich Voice coil (ISV)
- 400 Watt program power handling
- Triple roll suspension for increased motion control
- Weather protected treated cellulose cone
- Lightweight diecast aluminum basket design
- Suitable for compact two way and multiway systems

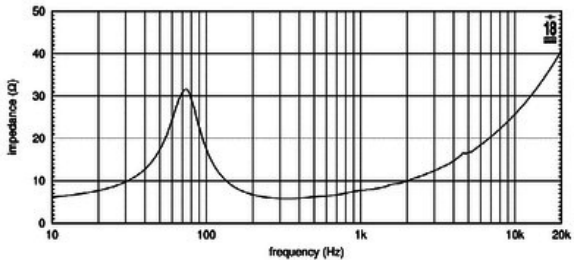
The 8MB500 mid-bass transducer has been developed in response to a specific market requirement for a 200 mm (8 in) midbass driver which combines excellent linearity with good efficiency and power handling capabilities. It is primarily intended for use as a midbass driver in compact 2-way reflex enclosures with a 1 inch compression driver or tweeter but as a result of its versatile characteristics, it can also be used in multiway systems. The curvilinear, treated paper cone is formed using a unique wood pulp composition designed to achieve the best possible rigidity and stiffness. This is carried by a polycotton multiroll surround to provide increased excursion whilst controlling break up modes. The 50 mm (2 inch) aluminum wire voice coil employs same Interleaved Sandwich Voice coil (ISV) technology. It is composed of a high strength fiberglas former carrying windings on both the outer and inner surfaces to achieve a mass balanced coil. This results in an extremely linear motor assembly which, in conjunction with the highly advanced design of the magnetic structure, provides a high force factor or BL. The voice coil is cooled by incorporating airways between the chassis back plate and the magnetic top plate to channel heated air away from the voice coil and gap and dissipate it. In-house FEA CAD facilities have been used to optimise flux density and BL factor within the air gap. Due to the increasing use of sound systems at outdoor events, the 8MB500 ability to perform in humid environments is a key feature. This has been achieved using an exclusive cone treatment which renders the cone resistant to humidity.

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SPECIFICATIONS

Nominal Diameter	200 mm (in)
Nominal Impedance	8 Ω
Minimum Impedance	5.8 Ω
Nominal Power Handling[1]	280 W
Continuous Power Handling[2]	400 W
Sensitivity[3]	95.0 dB
Frequency Range	60 - 4500 Hz
Voice Coil Diameter	51 mm (2.0 in)
Winding Material	aluminum

DESIGN

Surround Shape	Triple roll
Cone Shape	Curvilinear
Magnet Material	Ferrite
Woofer Cone Treatment	Weather protected
Recommended Enclosure	25.0 dm^3 (0.88 ft^3)
Recommended Tuning	80 Hz

PARAMETERS[4]

Resonance Frequency	74 Hz
Re	5.1 Ω
Qes	0.51
Qms	2.66
Qts	0.43
Vas	21.5 dm^3 (ft^3)
Sd	230.0 cm^2 (35.65 in^2)
Xmax	6.0 mm
Mms	17.0 g
Bl	9.0 Txm
Le	0.6 mH
EBP	145 Hz

MOUNTING AND SHIPPING INFO

Overall Diameter	210 mm (8.27 in)
Bolt Circle Diameter	195 mm (7.68 in)
Baffle Cutout Diameter	186.0 mm (7.32 in)
Depth	99 mm (3.9 in)
Flange and Gasket Thickness	14 mm (0.55 in)
Net Weight	3.4 kg (7.5 lb)
Shipping Weight	3.72 kg (lb)
Shipping Box	235 x 235 x 150 mm (9.25x9.25x5.91 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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