12MB606

High Output Midbass Transducer

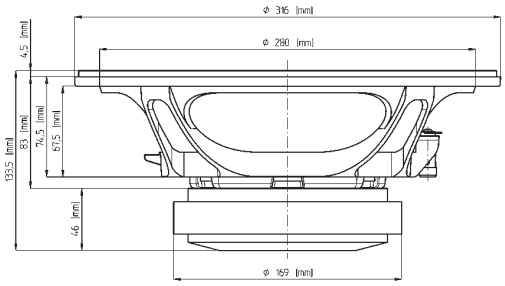
Key Features

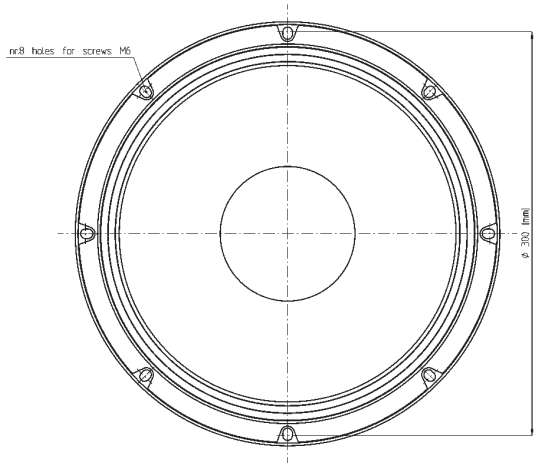
98 dB SPL 1W / 1m average sensitivity
75 mm (3 in) Interleaved Sandwich Voice coil (ISV)
450 W continuous pink noise power handling
Excellent transient response
Ideal for compact two way systems
Improved heat dissipation via unique basket design

0221285230

General Description

The 12MB606 ferrite mid bass transducer meets the specific market requirement for a loudspeaker combining good linearity and efficiency with high power handling capabilities.
The 12MB606 is an ideal low frequency ferrite driver choice for two-way systems where the balance between low frequency reproduction and midrange precision is required. Although primarily developed for midbass use, the 12MB606's versatile characteristics render it suitable for compact reflex subwoofers (around 50-55 lt).
The curvilinear paper cone has been made with a special high strength wood-pulp designed to achieve the best possible linearity within its intended frequency range and to control bell-mode resonance around the cone circumference.
The cone is carried by an unusually deep profile, double roll polycotton suspension.
The suspension geometry has been carefully designed for superior symmetry, resulting in DC offset free movement in the lowest frequency area.
The 75 mm state-of-the-art voice coil is similar 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. The result is an extremely linear motor assembly with a reduced tendency for eccentric behavior when driven hard.
The ferrite magnetic structure has been optimized using FEA CAD simulation software to maximize the flux density and symmetry in the voice coil gap region and to minimize weight. A lightweight aluminum basket contributes to an excellent weight to performance ratio for a ferrite driver.
Due to the increasing use of audio systems at outdoor events, the 12MB606's ability to perform in adverse, high humidity weather conditions is another excellent feature. This has been achieved by means of a proprietary water-repellent cone treatment.





FERRITE LF-MB-MF TRANSDUCERS

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12MB606

High Output Midbass Transducer

GENERAL SPECIFICATIONS

NOMINAL DIAMETER	300 mm (12 in)
RATED IMPEDANCE	8 Ohm
AES POWER	450 W
PROGRAM POWER	350 W
PEAK POWER (1)	1200 W
SENSITIVITY (2)	98 dB
FREQUENCY RANGE (3)	50 ÷ 5200 Hz
POWER COMPRESSION @-10DB (4)	(35 W) 0,7 dB
POWER COMPRESSION @-3DB	(175 W) 2,2 dB
POWER COMPRESSION @0DB	(350 W) 3,2 dB
MAX RECOMM. FREQUENCY	2000 Hz
RECOMM. ENCLOSURE VOLUME	40 ÷ 100 lt. (1,41 ÷ 2,83 cuft)
MINIMUM IMPEDANCE	6,9 Ohm at 25°C
MAX PEAK TO PEAK EXCURSION	40 mm (1,57 in)
VOICE COIL DIAMETER	75 mm (2,95 in)
VOICE COIL WINDING MATERIAL	aluminum
SUSPENSION	
CONE	

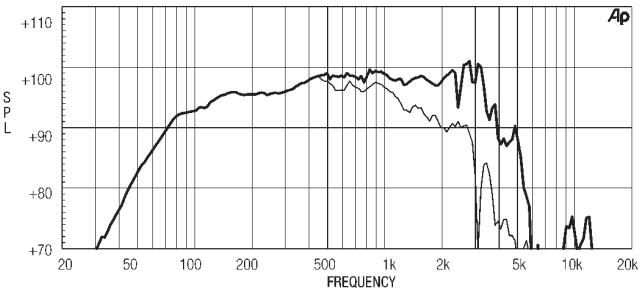
THIELE SMALL PARAMETERS (5)

Fs	50 Hz
Re	5,7 Ohm
Sd	0,0531 sq.mt. (82,31 sq.in.)
Qms	6,3
Qes	0,34
Qts	0,32
Vas	84 lt. (2,98 cuft)
Mms	47 gr. (0,10 lb)
BL	16 Tm
Linear Mathematical Xmax (6)	± 6,5 mm (± 0,26 in)
Le (1kHz)	1,5 mH
Ref. Efficiency 1W@1m (half space)	97 dB

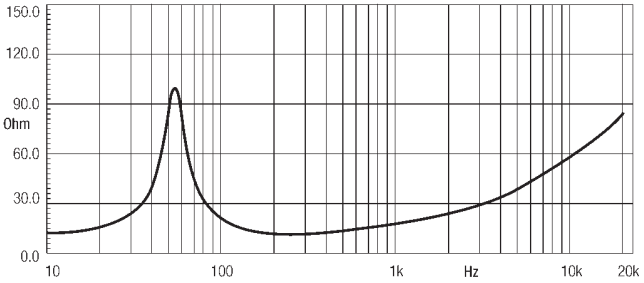
MOUNTING INFORMATIONS

Overall diameter	315 mm (12,4 in)
N. of mounting holes	8
Mounting holes diameter	7,15 mm (0,28 in)
Bolt circle diameter	296 - 300 mm (11,65 - 11,8 in)
Front mount baffle cutout ø	282 mm (11,1 in)
Rear mount baffle cutout ø	282 mm (11,1 in)
Total depth	133,5 mm (5,25 in)
Flange and gasket thickness	11,5 mm (0,45 in)
Net weight	5,7 kg (12,58 lb)
Shipping weight	6,4 kg (14,1 lb)
CardBoard Packaging dimensions	332 x 332 x 184 mm (13,07 x 13,07 x 7,24 in)

FREQUENCY RESPONSE CURVE OF 12MB606 MADE IN 50 LIT. ENCLOSURE TUNED 60HZ IN FREE FIELD (4PI) ENVIRONMENT. THE ENCLOSURE CLOSES THE REAR OF THE DRIVER. THIN LINE REPRESENTS 45 DEG. OFF AXIS FREQUENCY RESPONSE



FREE AIR IMPEDANCE MAGNITUDE CURVE



NOTES

(1) The peak power rating is based on a 6dB crest factor above the continuous power rating and represents the maximum permitted instantaneous peak power level over a maximum period of 10ms which will be withstood by the loudspeaker without damage.

(2) Sensitivity represents the averaged value of acoustic output as measured on the forward central axis of cone, at distance 1m from the baffle panel, when connected to 2,83V sine wave test signal swept between 500Hz and 2500Hz with the test specimen mounted in the same enclosure as given for 2 above.

(3) Frequency range is given as the band of frequencies delineated by the lower and upper limits where the output level drops by 10 dB below the rated sensitivity in half space environment.

(4) Power compression represents the loss of sensitivity for the specified power, measured from 50-500 Hz, after a 5 min pink noise preconditioning test at the specified power.

(5) Thiele - Small parameters are measured after the test specimen has been conditioned by 450 W AES power and represent the expected long term parameters after a short period of use.

(6) Linear Mat. Xmax is calculated as; (Hvc-Hg)/2+Hg/4 where Hvc is the coil depth and Hg is the gap depth.