15MB1000

High Output MidBass Ferrite Driver

Key Features

98 dB SPL 1W / 1m average sensitivity

100 mm (4 in) Interleaved Sandwich Voice coil (ISV)

850 W continuous pink noise power handling

Weather protected cone and plates for outdoor usage

Copper shorting ring ensures extremely linear impedance and reduced distortion figure

Improved heat dissipation via unique basket design

General Description

The 15MB1000 is a mid-low frequency transducer designed to meet requirements of low bass aplications where a significant extension in mid frequency is required. It is intended for use in compact reflex enclosures in 2 way systems with 1.4"-2" compression driver and stage monitoring applications. It is also suitable for horn loaded applications in multiway systems.

The low profile, carbon fibre reinforced, smooth curvilinear cone provides smooth response within its intended frequency range and exceptional strength with maximum reliability under high mechanical stress.

The copper shorting ring on the plates was adopted to reduce inductance and improve transient response. Intermodulation distortion was heavily improved.

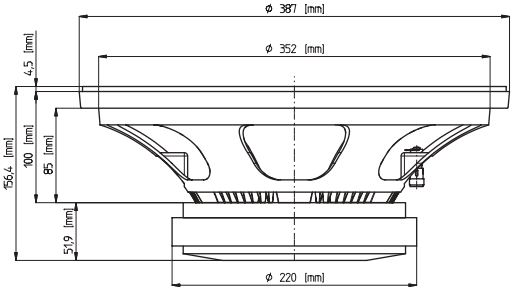
The state-of-the-art voice coil employs our own Interleaved Sandwich Voice coil (ISV) technology in which a high strength fiberglass former carries windings on both the outer and inner surfaces to achieve a balanced coil with uniform distribution of mass and motive energy, resulting in an extremely linear motor assembly.

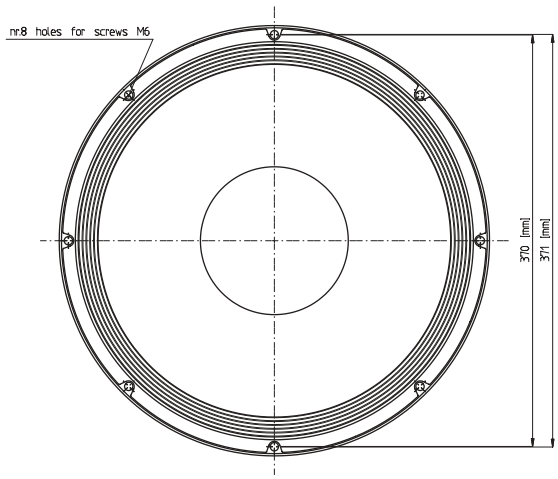
Excellent heat dissipation is achieved by the incorporation of air channels between basket and magnetic faceplate. Further ventilation is provided via air vents in the back plate to direct air also into the lower part of the voice coil gap.

Considerable attention has also been given to the design of the magnetic structure in order to maximise flux concentration and force factor in the gap.

With the increasing use of high power audio systems at outdoor events, the ability to perform in adverse weather conditions is another feature of the 15MB1000. This is achieved by means of exclusive cone and magnet plate treatment processes which resist against corrosion and at the same time render the cone water repellent.

0221585110 8 Ohm





FERRITE LF-MF DRIVERS

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15MB1000

High Output MidBass Ferrite Driver

GENERAL SPECIFICATIONS

NOMINAL DIAMETER	380 mm	(15 in)
RATED IMPEDANCE	8 Ohm	
CONTINUOUS PINK NOISE *(1)*	850 W	
CONTINUOUS POWER *(2)*	600 W	
PROGRAM POWER *(3)*	1200 W	
PEAK POWER *(4)*	3000 W	
SENSITIVITY *(5)*	98 dB	
FREQUENCY RANGE *(6)*	45 ÷ 5100 Hz	
POWER COMPRESSION *(7)*		
@-10 dB (60 W)	0,9 dB	
@-3 dB (300 W)	2,1 dB	
@FULL POWER (600 W)	3,8 dB	
MAX RECOMM. FREQUENCY	1000 Hz	
RECOMM. ENCLOSURE VOLUME	70 ÷ 150 lt.	(2,47 ÷ 5,3 cuft)
MINIMUM IMPEDANCE	6 Ohm at 25°C	
MAX EXCURSION PEAK TO PEAK	39 mm	(1,53 in)
VOICE COIL DIAMETER	100 mm	(4 in)
VOICE COIL WINDING MATERIAL	aluminum	

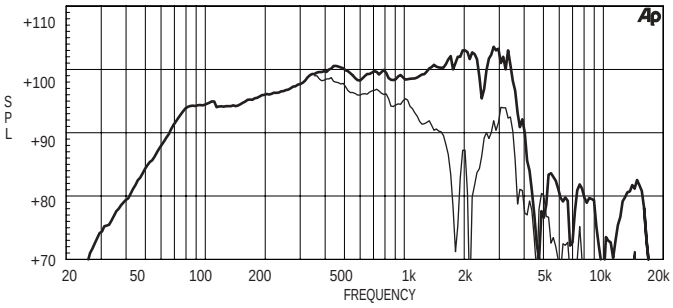
THIELE-SMALL PARAMETERS *(8)*

Fs	48 Hz	
Re	5,5 Ohm	
Sd	0,0855 sq.mt.	(132,5 sq.in.)
Qms	6	
Qes	0,32	
Qts	0,31	
Vas	132,5 lt.	(4,66 cuft)
Mms	85 gr.	(0,19 lb)
BL	21 Tm	
Mathematical Xmax *(9)*	±6 mm	(±0,24 in)
Le (1kHz)	1,5 mH	
Ref. Efficiency		
1W @ 1m (half space)	98,4 dB	

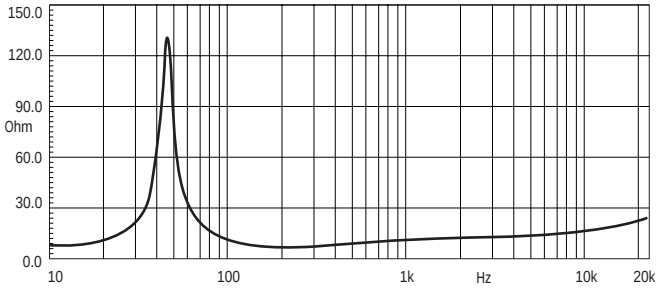
MOUNTING INFORMATIONS

Overall diameter	387 mm	(15,23 in)
N. of mounting holes	8	
Mounting holes diameter	7,15 mm	(0,28 in)
Bolt circle diameter	370 - 371 mm	(14,55 - 14,6 in)
Front mount baffle cutout diameter	353 mm	(13,90 in)
Rear mount baffle cutout diameter	357 mm	(14,06 in)
Total depth	156,4 mm	(6,16 in)
Flange and gasket thickness	19,5 mm	(0,76 in)
Net weight	12,4 kg	(27,37 lb)
Shipping weight	13,4 kg	(29,58 lb)
CardBoard packing dimensions	405 x 405 x 214 mm	(15,94 x 15,94 x 8,43 in)

FREQUENCY RESPONSE CURVE OF 15MB1000 MADE ON 125 LIT. ENCLOSURE TUNED 50HZ IN FREE FIELD (4PI) ENVIRONMENT. ENCLOSURE CLOSES THE REAR OF THE DRIVER. THE THIN LINE REPRESENTS 45 DEG. OFF AXIS FREQUENCY RESPONSE



FREE AIR IMPEDANCE MAGNITUDE CURVE



NOTES

1) *AES standard*
2) *Continuous power rating is measured in 125 lit enclosure tuned 50Hz using a 40 - 400Hz band limited pink noise test signal applied continuously for 2 hours.*
3) *Program power rating is measured as for 2 above but 50% duty cycle.*
4) *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 whituout damage.*
5) *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 2,83 V sine wave test signal swept between 100Hz and 500Hz with the test specimen mounted in the same enclosure as given for 2 above.*
6) *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.*
7) *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.*
8) *Thiele - Small parameters are measured after the test specimen has been conditioned by 850 W AES power and represent the expected long term parameters after a short period of use.*
9) *Linear Mat. Xmax is calculated as; (Hvc-Hg)/2 + Hg/4 where Hvc is the coil depth and Hg is gap depth.*