

8NMB750

Midbass Neodymium Transducer

KeyFeatures

- 93,5 dB SPL 1W-1m average sensitivity
- 700 W program power handling
- 75 mm (3 in) Interleaved sandwich voice coil
- External Neodymium magnet assembly
- Single Demodulating Ring (SDR) for lower distortion and maximum sound clarity
- Copper ring for reduced distortion and increased output
- Weather protected cone and coated plates
- Suitable for high performance line array and compact two way systems

Description

18 Sound's 8NMB750 mid-bass neodymium transducer is a state-of-the-art 8-inch neodymium midbass driver that combines excellent linearity with high power handling capabilities (700 W), very low distortion and reduced power compression .

The external neodymium magnet assembly assures high flux concentration and excellent heat exchange.

The 75mm (3 in) inside outside aluminum voice coil employs Interleaved Sandwich Voice coil (ISV) technology.

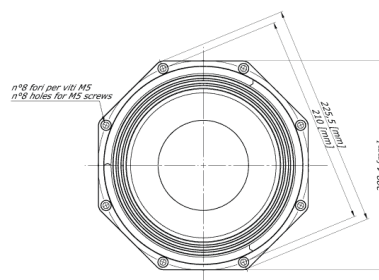
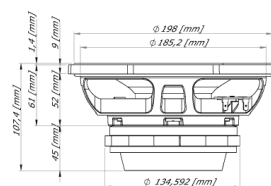
A sophisticated distortion reduction system has been implemented using a demodulating ring for flux modulation cancellation related to voice coil excursion, together with a copper ring for the reduction of intermodulation distortion. Both systems are linearizing the inductance in relation to the excursion as well as the current variation.

The cone is treated against extremely aggressive environment conditions.

The compact size makes the 8NMB750 an ideal choice for high performance line arrays and compact two-way systems.

Models

Model	Code	Info
8NMB750 16 OHM	022086N700	
8NMB750 8 OHM	022088N700	



General Specifications

Nominal Diameter	210 mm (8 in)
Rated Impedance	16 Ω
AES Power	350 W
Program Power	700 W
Peak Power	1400 W
Sensitivity	93,5 dB
Frequency Range	56 ÷ 7000 Hz
Power Compression @-10dB	1.2 dB
Power Compression @-3dB	1.7 dB
Power Compression @Full Power	2.3 dB
Max Recomm. Frequency	3000 Hz
Recomm. Enclosure Volume	8 ÷ 16 lt. (0.28÷ 0.57 cu.ft)
Minimum Impedance	14 Ω at 25°
Max Peak To Peak Excursion	35 mm (1.38 in)
Voice Coil Diameter	75 mm (2.95 in)
Voice Coil winding material	Aluminum
Suspension	Triple roll, Polycotton
Cone	Straight ribbed composite, Water, flame, UV repellent

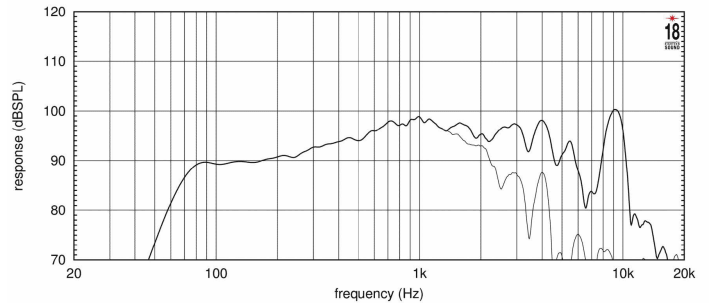
Thiele Small Parameters

Fs	91 Hz
Re	10,2 Ω
Sd	0,023 sq.m (35.65 sq.in)
Qms	5,90
Qes	0,39
Qts	0,37
Vas	7,3 lt. (0.23 cu.ft)
Mms	30 gr. (0.07 lb)
BL	21,5 Tm
Linear Mathematical Xmax	$\pm 6,3$ mm (± 0.25 in)
Le (1kHz)	0,30 mH
Half space efficiency	1,4%

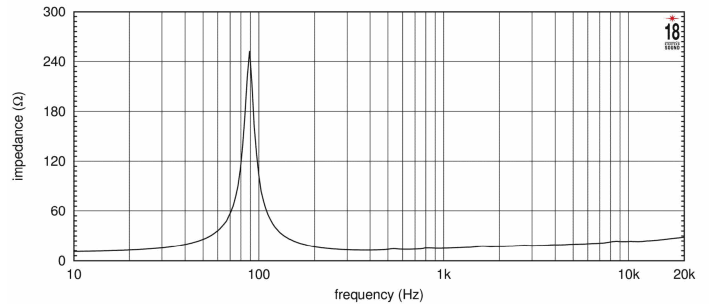
Mounting information

Overall diameter	225 mm (8.86 in)
N. of mounting holes and bolt	8
Mounting holes diameter	6.2 mm (0.24 in)
Bolt circle diameter	210 mm (8,27 in)
Front mount baffle cutout \varnothing	186 mm (7.32 in)
Rear mount baffle cutout \varnothing	184 mm (7.24 in)
Total depth	105 mm (4.13 in)
Flange and gasket thickness	11 mm (0,43 in)
Net weight	3.5 kg (7.72 lb)
Packaging Dimensions	235x235x150 mm (9.25x9.25x5.91 in)

FREQUENCY RESPONSE MADE IN 25 LT. ENCLOSURE TUNED AT 65 Hz IN FREE FIELD (4n) ENVIRONMENT. ENCLOSURE CLOSES THE REAR OF THE DRIVER. THE THIN LINE REPRESENTS 45 DEG. OFF AXIS FREQUENCY RESPONSE.



FREE AIR IMPEDANCE CURVE



Notes

- (1) AES standard.
- (2) Program power rating is measured in 12 lit. enclosure tuned at 75 Hz using a 80-800 band limited pink noise test signal applied for 2 hours and with 50% duty cycle.
- (3) The peak power rating represents the maximum permitted instantaneous peak power level over a maximum period of 10ms which will be withstood by the loudspeaker without damage.
- (4) 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 3V sine wave test signal swept between 100Hz and 1000Hz with the test specimen mounted in the same enclosure as given for 2 above.
- (5) 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.
- (6) Power compression represents the loss of sensitivity for the specified power, measured from 80 to 800Hz after a 5 min pink noise preconditioning test at the specified power.
- (7) Thiele - Small parameters are measured after short conditioning.
- (8) Linear Mat. Xmax is calculated as; $(Hvc-Hg)/2 + Hg/4$ where Hvc is the coil depth and Hg is gap depth.