8NMB420 4Ω

LF drivers - 8.0 Inches

- 95 dB SPL 1W / 1m average sensitivity
- 51mm (2 in) Interleaved Sandwich Voice coil (ISV)
- 280 W AES power handling
- External neodymium magnet assembly
- Single Demodulating Ring (SDR) for lower distortion
- Weather protected cone and plates for outdoor usage
- Suitable for line arrays and compact two way systems

The 8NMB420 neodymium transducer has been developed in response to a specific market requirement for a 8" midbass driver that combines excellent linearity with good efficiency and high power handling capabilities. 8NMB420 is primarily intended for use as a midbass driver in compact 2-way or multiway reflex enclosures comprising line arrays. The parameters had been chosen to offer significant low frequency output in vented enclosure with size starting from 20 lit. with a tuning frequency around 60Hz. The low pass filter might be positioned as high as 2000-2500Hz. Multiple 8NMB420 units might be used: the compact size reflects in the capability to have precise attack time. This characteristic makes it the ideal choice for stage monitoring and bass guitar amplification. The extremely powerful external neodymium magnet assembly assures high flux concentration, low power compression and excellent heat exchange. The levels of force factor and power handling are, as a consequence, at the upper professional level with best power to weight ratio. The exclusive dedicated double roll surround design offers enhanced linear travel and control, in order to reproduce precisely low frequency. The curvilinear paper cone is formed using a unique wood pulp composition designed to achieve the best possible rigidity and stiffness. The 50mm inside outside aluminum voice coil employs Interleaved Sandwich Voice coil (ISV) technology. It is composed by a high strength fiberglass former used to carry 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 incorporating airways between the chassis back plate and the magnet faceplate so that heated air is channeled away from the voice coil and gap and dissipated by the chassis basket. Thanks to the increasing use during outdoor audio events, the ability to perform in humid environments is a key feature of the 8NMB420. This is achieved trough a proprietary humidity repellent cone treatment without a moving speaker mass increase.

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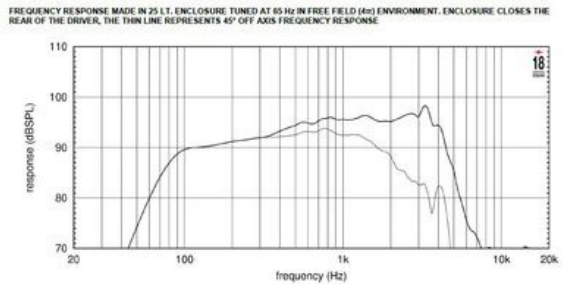

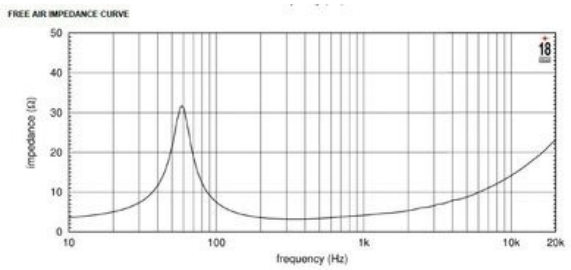

SPECIFICATIONS

Nominal Diameter	200 mm (in)
Nominal Impedance	4 Ω
Minimum Impedance	3.2 Ω
Nominal Power Handling[1]	280 W
Continuous Power Handling[2]	400 W
Sensitivity[3]	95.0 dB
Frequency Range	60 - 5500 Hz
Voice Coil Diameter	51 mm (2.0 in)

DESIGN

Surround Shape	M-roll
Cone Shape	Curvilinear
Magnet Material	Neo
Woofer Cone Treatment	Weather protected
Recommended Enclosure	20.0 dm^3 (0.71 ft^3)
Recommended Tuning	67 Hz

PARAMETERS[4]

Resonance Frequency	59 Hz
Re	2.6 Ω
Qes	0.34
Qms	3.81
Qts	0.31
Vas	31.0 dm^3 (1.09 ft^3)
Sd	227.0 cm^2 (35.19 in^2)
Xmax	5.8 mm
Mms	16.9 g
Bl	7.0 Txm
Le	0.27 mH
EBP	173 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	1.7 kg (3.75 lb)
Shipping Weight	2.0 kg (4.41 lb)
Shipping Box 235 x 235 x 150 mm (9,25 x 9,25 x 5,91 in) mm (9.25x9.25x5.91x0.35x0.20 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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