



- 100 dB SPL 1W / 1m average sensitivity
- 44 mm (1 3/4 in) voice coil
- 200 WAES power handling
- External neodymium magnet assembly
- Single Demodulating Ring (SDR) for lower distortion
- Weather protected cone and plates for outdoor usage
- Improved heat dissipation via Active Cooling System
- Specially designed for line arrays and compact two way systems

The 6NMB420 is a 44mm voice coil 6.5 inch neodymium midbass transducer designed for mid low frequency reproduction in system designs where high intelligibility is required.

When compared to our 6ND410 state-of-the-art midrange transducer, 6NMB420 offers a lower frequency resonance and a longer linear Xmax value. As a result the speaker shows an increased output around 250Hz, with a consequent slightly reduced output above 700Hz.

It is suitable as mid-bass in line array systems or multiple way systems with high-pass crossover above 200 Hz and low-pass up to 3kHz; enclosure might be closed or vented with volume size starting from 2 lit.

The speaker offers a superb linearity: distortion values are furtherly minimized by new enhanced design criterias, developed by Eighteen Sound engineers, taking the 6NMB420 to very high level of performance.

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.

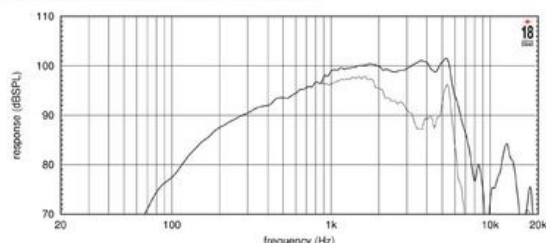
A consistent heat transfer is guaranteed by the encapsulation of the magnetic structure in the interior of the basket, offering a large contact space between the back plate and the dissipating structure.

Particular efforts were dedicated to the surround shape and material design in order to minimize the resonances on mid range frequencies. The triple roll design offers a consistent damping to typical bell modes.

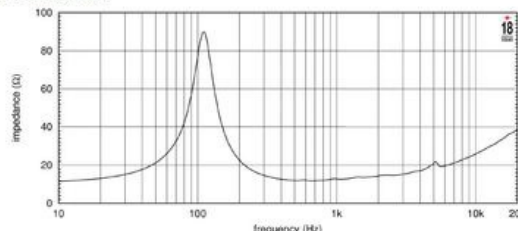
The 44 mm voice coil is made of light-weight aluminum wire and assures linearity and high power handling.

The ability to perform in humid environments is a key feature of the 6NMB420: this is achieved through a proprietary humidity repellent cone treatment

FREQUENCY RESPONSE MADE IN 2 L.T. CLOSED ENCLOSURE IN FREE FIELD (H0) ENVIRONMENT. ENCLOSURE CLOSES THE REAR OF THE DRIVER, THE THIN LINE REPRESENTS 45° OFF AXIS FREQUENCY RESPONSE



FREE AIR IMPEDANCE CURVE





# 6NMB420 16Ω

LF drivers - 6.5 Inches

## SPECIFICATIONS

|                                        |                 |
|----------------------------------------|-----------------|
| Nominal Diameter                       | 152 mm ( in)    |
| Nominal Impedance                      | 16 Ω            |
| Minimum Impedance                      | 11.5 Ω          |
| Nominal Power Handling <sup>1</sup>    | 200 W           |
| Continuous Power Handling <sup>2</sup> | 260 W           |
| Sensitivity <sup>3</sup>               | 100.0 dB        |
| Frequency Range                        | 200 - 6300 Hz   |
| Voice Coil Diameter                    | 44 mm (1.73 in) |
| Winding Material                       | aluminum        |

## PARAMETERS<sup>4</sup>

|                     |                                                |
|---------------------|------------------------------------------------|
| Resonance Frequency | 112 Hz                                         |
| Re                  | 10.6 Ω                                         |
| Qes                 | 0.46                                           |
| Qms                 | 3.42                                           |
| Qts                 | 0.4                                            |
| Vas                 | 5.9 dm <sup>3</sup> (0.21 ft <sup>3</sup> )    |
| Sd                  | 130.0 cm <sup>2</sup> (20.15 in <sup>2</sup> ) |
| Xmax                | 3.0 mm                                         |
| Mms                 | 8.5 g                                          |
| Bl                  | 9.0 Txm                                        |
| Le                  | 0.15 mH                                        |
| EBP                 | 243 Hz                                         |

## DESIGN

|                       |                                             |
|-----------------------|---------------------------------------------|
| Surround Shape        | Triple roll                                 |
| Cone Shape            | Curvilinear                                 |
| Magnet Material       | Neo                                         |
| Woofer Cone Treatment | Weather protected                           |
| Recommended Enclosure | 4.0 dm <sup>3</sup> (0.14 ft <sup>3</sup> ) |
| Recommended Tuning    | 120 Hz                                      |

## MOUNTING AND SHIPPING INFO

|                             |                                   |
|-----------------------------|-----------------------------------|
| Overall Diameter            | 162 mm (6.38 in)                  |
| Bolt Circle Diameter        | 170 mm (6.69 in)                  |
| Baffle Cutout Diameter      | 148.0 mm (5.83 in)                |
| Depth                       | 73 mm (2.87 in)                   |
| Flange and Gasket Thickness | 11 mm (0.43 in)                   |
| Net Weight                  | 1.25 kg (2.76 lb)                 |
| Shipping Weight             | 1.45 kg (3.2 lb)                  |
| Shipping Box                | 185x170x85 mm (7.28x6.69x3.35 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.