ND2060

Neo High Frequency Driver

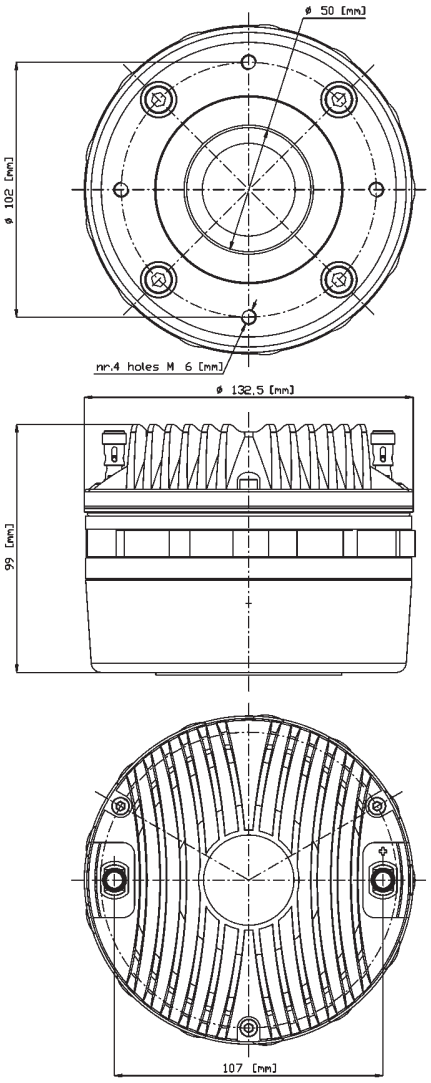
Key Features

109 dB SPL 1W / 1m average sensitivity
2 inch exit throat
3 inch aluminum edgewound voice coil
200 W program power handling
Neodymium magnetic structure
Pure Titanium diaphragm assembly
Excellent thermal exchange

042106N260 16 Ohm
042108N260 8 Ohm

General Description

The ND2060 2-inch exit neodymium high frequency compression driver has been designed for high level sound systems application.
Its titanium diaphragm is produced in house and has been developed to assure unmatched transient response. The diaphragm assembly is made by joining the former directly to the titanium dome on its upper bend edge. In comparison with a usual straight former joint, the driver's design assures extended frequency energy transfer for improved response linearity and unparallel reliability. This feature facilitates proper motion control of the dome in real working conditions. A proprietary treated Nomex former is used as shows a 30% higher value of tensile elongation at a working operative temperature (200°C) when compared to Kapton. Moreover, this proprietary former material is also suitable for use in higher moisture content environments.
The big innovation in ND2060 consists of its magnetic architecture. By careful use of elementary pieces of neodymium magnets, Eighteen Sound engineers have developed a powerful neodymium magnet assembly able to reach 19KGauss in the gap in compact and lightweight structures. The motor structure, throughout the precisely coherent phase plug with 3 circumferential slots and copper ring on the pole piece, reduces inductance effects and distortion. Four top plate air ducts have been designed to act as a loading chamber for the diaphragm, implementing mid band distortion and response figures.
The custom designed O-ring creates a tight seal between the plate and the cover assuring air chamber loading. Excellent heat dissipation and thermal exchange are guaranteed by the direct contact between the magnetic structure and the aluminum cover which leads to a lower power compression value.
Due to the increasing use of high power audio systems at outdoor events or in marine environments, the ability of equipment to perform properly under inclement weather conditions is a key feature of Eighteen Sound philosophy. Hence, a special treatment has been applied to the magnet and the top and back plates of the magnetic structure which make the driver more resistant to the corrosive effects of salts and oxidization. This treatment is more effective than any other treatment in use by other manufacturers.



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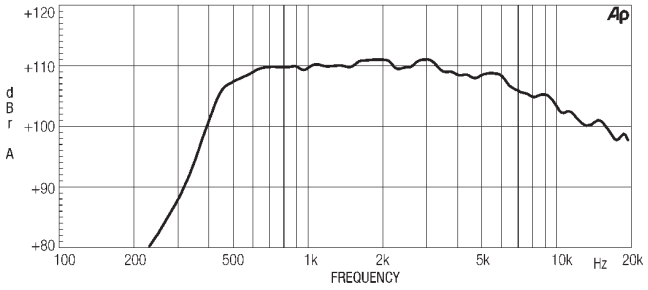
GENERAL SPECIFICATIONS

THROAT DIAMETER	50 mm (2 in)
RATED IMPEDANCE	8 ohm
DC RESISTANCE	6,2 ohm
MINIMUM IMPEDANCE	8 ohm at 3500 Hz
LE (AT 1KHZ)	124 µH
AES POWER (1)	100 W above 1,2 kHz
PROGRAM POWER (2)	200 W above 1,2 kHz
SENSITIVITY(1W@1M) (3)	109 dB
FREQUENCY RANGE	500 Hz ÷ 20 kHz
RECOMM. XOVER FREQUENCY	800Hz (12 dB/oct slope)
DIAPHRAGM MATERIAL	Titanium
VOICE COIL DIAMETER	75 mm (3 in)
VOICE COIL WINDING MATERIAL	Edge-wound aluminum
MAGNET MATERIAL	Neodymium
FLUX DENSITY	1,9 T
BL FACTOR	13,5 N/A
POLARITY	Positive voltage on red terminal gives positive pressure in the throat

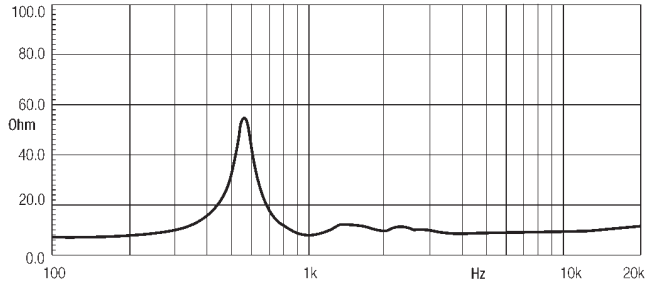
MOUNTING INFORMATIONS

Overall diameter	132,5 mm (5,22 in)
Mounting holes diameter	4 M6 holes 90° at Ø102 mm (4 in)
Bolt circle diameter	102mm (4 in)
Total depth	99 mm (3,9 in)
Net weight	3,6 kg (7,9 lb)
Shipping weight	4 kg (8,8 lb)
CardBoard Packaging dimensions	132x132x103 mm(5,2x5,2x4,1 in)

ND2060 MEASURED WITH 1W INPUT ON RATED IMPEDANCE AT 1 M DISTANCE FROM THE MOUTH OF XR2064 HORN



FREE AIR IMPEDANCE MAGNITUDE CURVE



NOTES

(1) AES power rating is tested with a pink noise input having a 6 dB crest factor for two hours duration within the specified range. Power calculated on minimum impedance.

(2) Program power rating is defined as 3 dB greater than AES rating, and is a conservative expression of the transducer ability to handle music program material.

(3) Sensitivity is measured on 1 W input on rated inpedance at 1 m on axis from the mouth of XR2064 horn, averaged between 1 kHz and 4 kHz.