Oberton 10 NMB 300

KEY FEATURES:

- **99.5 db 1W / 1m average sensitivity**
- **77 mm high temperature voice coil**
- **800 W AES program power**
- **Vented neodymium magnet assembly with massive heatsink**
- **Double aluminium demodulating ring for lower distortion and improved heat dissipation**
- **Water protected cone (front)**

Application : Power midbass speaker

The **10NMB300** neodymium loudspeaker is primary designed to be used in medium and long throw horn loaded systems. The special Kevlar paper cone with water protection guarantees reliable using in horns with compression chamber with ratio up to 3.5:1. It features aluminium die cast frame with vented neodymium magnet structure. The massive heatsink improves the cooling of the magnet structure, which reduce power compression.

SPECIFICATIONS

Nominal Diameter	10"/262 inch/mm
Impedance	8 Ohm
Minimum Impedance	7.05 Ohm
Power Capacity AES [1]	400 W
Program Power [2]	800 W
Sensitivity	(200-2000 Hz) 99.5 dB/W/m
Frequency Range	80 - 2500 Hz
Voice Coil Diameter	77 mm
Voice Coil Material	Aluminium
Voice Coil Former	Kapton™
Voice Coil Winding Depth	15 mm
Magnet Gap Depth	9 mm
Cone Material	Kevlar Paper
Basket	Die cast aluminium
Magnet	Neodymium
Flux Density	1.45 T

1. AES standard. Power is calculated on rated minimum impedance. Measurement is in 30 L box enclosure tuned 60 Hz using a 50-1000 Hz band limited pink noise test signal applied continuously for 2 hours.
2. Program power is defined as 3db greater than AES Power Capacity.

* Linear Mathematical Xmax is calculated as: (Hvc - Hg)/2 + Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.

THIELE-SMALL PARAMETERS

Resonance Frequency	62.08 Hz
Mechanical Efficiency Factor (Qms)	10.61
Electrical Efficiency Factor (Qes)	0.216
Total Q (Qts)	0.212
Equivalent Air Volume (Vas)	22.06 Litres
Diaphragm mass ind. airload (Mms)	42.72 grams
Voice Coil Resistance Re	5.60 Ohms
Effective Diagram Area (Sd)	317.3 cm2
Peak Linear Displacement of Diaphragm (Xmax)*	±5.25 mm
Mechanical Compliance of Suspension (Cms)	0.154 mm/N
BL Product (BL)	20.76 T.m
V.C. Inductance at 1 kHz (Le)	0.66 mH

MOUNTING INFORMATION

Overall Diameter	262 mm
Baffle Hole Diameter	228 mm
Number of Mounting Holes	8 with dia. 7 mm
Bolt Circle Diameter	244 mm
Overall Depth	148.3 mm
Net Weight	4.75 kg

Frequency Responce

Brüel & Kjœr	Potentiometer Range: _____ dB Rectifier: _____ Lower Lim. Freq.: _____ Hz Wr. Speed: _____ mm/sec. Paper Speed: _____ mm/sec.

Measuring Obj.:
10NMB300
Box 30 L
Fb=60Hz
SPL

2,83V/1m

Rec. No.: _____
Date: 11.03.09
Sign. P.K.

QP 0124

100 dB

90 dB

Multiply Freq. Scale by _____
Zero Level: _____
(1612/2112)
D A B C Lin.
A B C Lin.

OBERTON

model: 10NMB300