

# 10NMB420

## High Output MB Neodymium Transducer

99 dB SPL 1W / 1m average sensitivity  
 65 mm (2.5 in) Interleaved Sandwich Voice coil (ISV)  
 350 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



### GENERAL SPECIFICATIONS

Nominal Diameter	260mm (10 in)
Rated Impedance	16 Ohm
AES Power (1)	350 W
Program Power (2)	500 W
Peak Power	1000 W
Sensitivity (3)	99 dB
Frequency Range (4)	65 - 5000 Hz
Power Compression @-10dB	0,8 dB
Power Compression @-3dB	2,2 dB
Power Compression @Full Power	2,9 dB
Max Recomm. Frequency	2000 Hz
Recomm. Enclosure Volume	10 - 40 lt. (0,35 - 1,41 cuft)
Minimum Impedance	11,9Ohm at 25°C
Max Peak To Peak Excursion	25 mm (1 in)

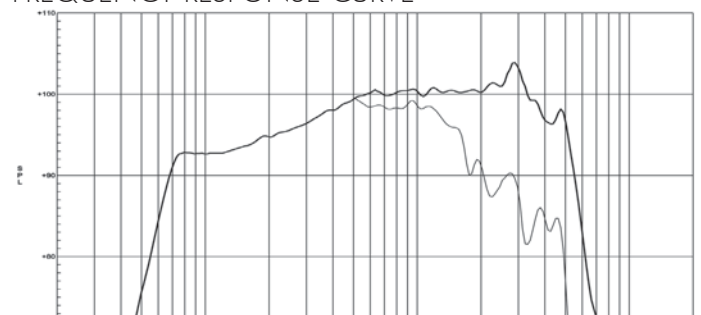
### THIELE SMALL PARAMETERS (5)

Fs	65 Hz
Re	10,5 Ohm
Sd	0,0346 sq.mt. (53,6 sq.in.)
Qms	4,6
Qes	0,36
Qts	0,33
Vas	30 lt. (1,06 cu.ft.)
Mms	31,5 gr. (0,07 lb)
BL	19,5 Tm
Linear Mathematical Xmax (6)	± 4 mm (±0,16 in)
le (1kHz)	0,4 mH
Ref. Efficiency 1W@1m (half space)	96 dB

### MOUNTING INFORMATION

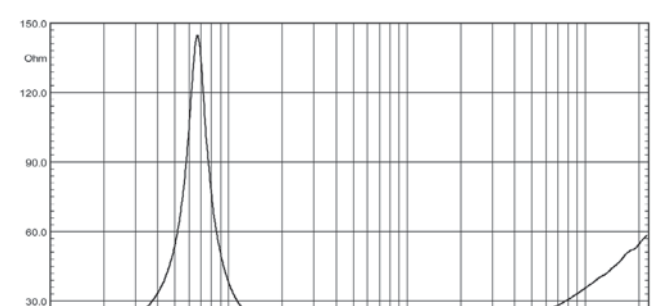
Overall diameter	260 mm (10,24 in)
N. of mounting holes and bolt	8
Mounting holes diameter	7 mm (0,27 in)
Bolt circle diameter	244 mm (9,6 in)
Front mount baffle cutout Ø	232 mm (9,1 in)
Rear mount baffle cutout Ø	232 mm (9,1 in)
Total depth	122 mm (4,8 in)
Flange and gasket thickness	11 mm (0,43 in)
Net weight	3 kg (6,6 lb)
Shipping weight	3,5 kg (7,7 lb)
CardBoard Packaging dimensions	275 x 275 x 164 mm (9,25 x 9,25 x 5,91 in)

### FREQUENCY RESPONSE CURVE



FREQUENCY RESPONSE CURVE OF 10NMB420 MADE ON 30LIT. ENCLOSURE TUNED @ 55HZ IN FREE FIELD (4PI) ENVIRONMENT. ENCLOSURE CLOSES THE REAR OF THE DRIVER. THE THIN LINE REPRESENTS 45 DEG. OFF AXIS FREQUENCY RESPONSE.

### FREE AIR IMPEDANCE MAGNITUDE CURVE



### NOTES

- (1) AES power is determined according to AES2-1984 (r2003) standard
- (2) Program power rating is measured in 30 lit enclosure tuned at 55 Hz using a 70-2000Hz band limited pink noise test signal with 50% duty cycle, applied for 2 hours.
- (3) 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 4V sine wave test signal swept between 100Hz and 500Hz with the test specimen mounted in the same enclosure as given for #2 above.
- (4) 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.
- (5) Thiele - Small parameters are measured after the test specimen has been conditioned by 350 W AES power and represent the expected long term parameters after a short period of use.
- (6) Linear Math. Xmax is calculated as  $(HvcHg)/2 + Hg/4$  where Hvc is the coil depth and Hg is the gap depth.