

# 8NMB420

## High Output MB Neodymium Transducer

95 dB SPL 1W / 1m average sensitivity  
 51 mm (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



### GENERAL SPECIFICATIONS

Nominal Diameter	200mm (8 in)
Rated Impedance	8 Ohm
AES Power (1)	280 W
Program Power (2)	400 W
Peak Power	800 W
Sensitivity (3)	95 dB
Frequency Range (4)	60 - 5500 Hz
Power Compression @-10dB	0,8 dB
Power Compression @-3dB	1,7 dB
Power Compression @Full Power	2,2 dB
Max Recomm. Frequency	2500 Hz
Recomm. Enclosure Volume	10 - 40 lt. (0,35 - 1,41 cuft)
Minimum Impedance	5,9 Ohm at 25°C
Max Peak To Peak Excursion	19 mm (0,7 in)

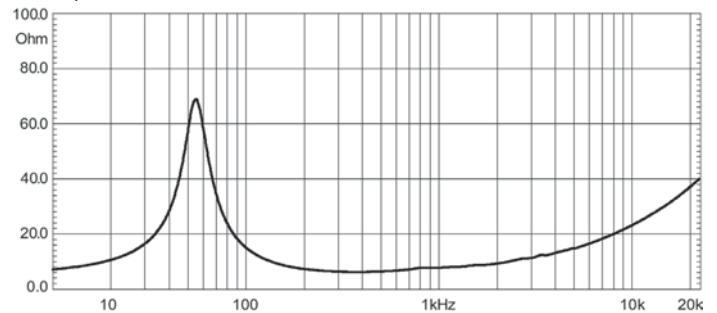
### THIELE SMALL PARAMETERS (5)

Fs	61 Hz
Re	5 Ohm
Sd	0,022 sq.mt. (34,1 sq.in.)
Qms	4
Qes	0,31
Qts	0,28
Vas	33 lt. (1,2cuft)
Mms	14,9 gr. (0.033 lb)
BL	10 Tm
Linear Mathematical Xmax (6)	± 5,75 mm (±0,23 in)
le (1kHz)	0,35 mH
Ref. Efficiency 1W@1m (half space)	95,6dB

### MOUNTING INFORMATION

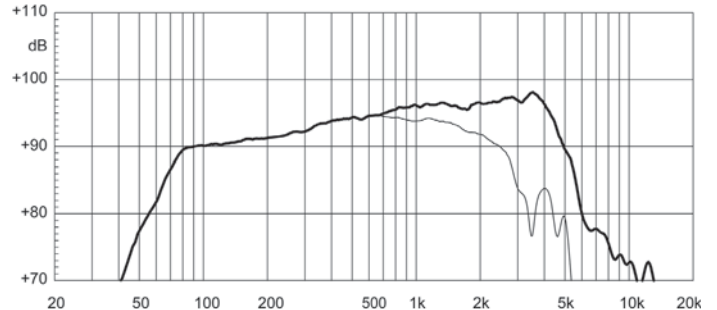
Overall diameter	210 mm (8,3 in)
N. of mounting holes and bolt	6
Mounting holes diameter	6 mm (0,23 in)
Bolt circle diameter	195-198 mm (7,68-7,8 in)
Front mount baffle cutout Ø	186 mm (7,3 in)
Rear mount baffle cutout Ø	184 mm (7,2 in)
Total depth	99 mm (3,9 in)
Flange and gasket thickness	14,5 mm (0,6 in)
Net weight	1,7 kg (3,7 lb)
Shipping weight	2,0 kg (4,4 lb)
CardBoard Packaging dimensions	235 x 235 x 150 mm (9,25 x 9,25 x 5,91 in)

### FREQUENCY RESPONSE CURVE



FREQUENCY RESPONSE CURVE OF 8NMB420 MADE ON 25LIT. ENCLOSURE TUNED 65HZ 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



FREE AIR IMPEDANCE MAGNITUDE CURVE

### NOTES

- (1) AES power is determined according to AES2-1984 (r2003) standard
- (2) Program power rating is measured in 25 lit enclosure tuned 65Hz using a 60 - 2000 Hz 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 2,83V sine wave test signal swept between 500Hz and 2500Hz 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 280 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.