123NPM

APPLICATION:

 Ideal for high quality subwoofers, two way in multiway systems, where sizable amounts of low frequency acoustic power is desired, combined



with uncompromised mid frequencies output.

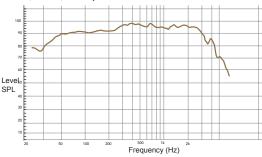
Neodym	ium V	Voofer				Ordering code:	123NPM-185
Cont. Power	Sens.	Fs	Freq. Range	VC Dia.	VC Wire	Cone/Surround/Dome	Magnet type
1,600 watts	97 dB	39 Hz	35 Hz - 3,000 Hz	4″ out	AL-R	Paper CF / Fabric	Neodymium

The 123NPM is a truely unique full range woofer. We have designed cutting edge product, using the best avail-able materials and highly optimized design for the best performance in its class. It delivers very high efficiency, (97 dB 1watt / 1 meter), incredibly linear frequency response characteristics with extended HF frequency response, extreme high power handling capability, while generating ultra low harmonic distortion artifacts. The 123NPM uses a lightweight carbon fiber loaded cone assembly along with a high excursion triple roll constant geometry surround. This combination provides remarkable strength, high efficiency and a peak to peak linear excursion of 22mm (0.9in).

Magnetic Circuit

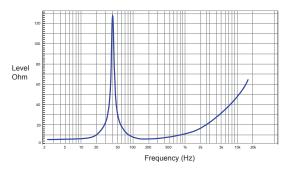
The magnetic circuit features two aluminum shorting rings, double air-gap front plate. The cooling system and the air flow has been designed using the modern FEM techniques and further optimized to provide the highest levels of cooling efficiency. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability.

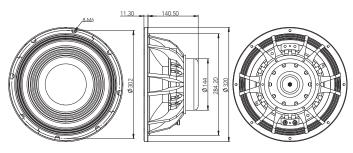
Frequency Response



Frequency response measurement with transducer mounted in a 40 liter vented enclosure tuned to 65Hz

Impedance Response







General Specifications	
Nominal Diameter:	320 mm (12 in.)
Rated Impedance:	8 ohm
Power Handling:	
AES Power:	800 Watts
Power Compression @-10dB	0.55dB
Power Compression @ 0dB	1.3dB
Power Compression @ Max Power	1.9dB
Maximum Recommended Xover Freq.:	2,800 Hz
Recommended Enclosure Volume:	15 - 90 Liters 0.53- 3.2cuft.
Cone Design:	Exp. Gmtry, Redcatt Cell.
Front Plate Thickness:	12mm
Winding Height:	23.5mm
Fs	39 Hz
Re	6.2 Ohm
Sd	551 cm ² (85.4 in. ²)
Qms	6.47
Qes	0.43
Qes Qts	0.43 0.4
Ots	0.4
Qts Vas	0.4 70 Liters
Qts Vas Mms	0.4 70 Liters 94 g
Ots Vas Mms BL product (force factor)	0.4 70 Liters 94 g 19 Tm
Ots Vas Mms BL product (force factor) Peak to peak displacement (mm)	0.4 70 Liters 94 g 19 Tm 22mm
Qts Vas Mms BL product (force factor) Peak to peak displacement (mm) Le (mH @1kHz)	0.4 70 Liters 94 g 19 Tm 22mm 0.6
Qts Vas Mms BL product (force factor) Peak to peak displacement (mm) Le (mH @1kHz) Overall diameter	0.4 70 Liters 94 g 19 Tm 22mm 0.6 302 mm (11.9 in.)
Qts Qts Vas Mms BL product (force factor) Peak to peak displacement (mm) Le (mH @1kHz) Overall diameter No. of mounting holes	0.4 70 Liters 94 g 19 Tm 22mm 0.6 302 mm (11.9 in.) 8
Qts Qts Vas Mms BL product (force factor) Peak to peak displacement (mm) Le (mH @1kHz) Overall diameter No. of mounting holes Bolt circle diameter	0.4 70 Liters 94 g 19 Tm 22mm 0.6 302 mm (11.9 in.) 8 302 mm (11.9 in.)
Qts Qts Vas Mms BL product (force factor) Peak to peak displacement (mm) Le (mH @1kHz) Overall diameter No. of mounting holes Bolt circle diameter Front mount baffle cutout dia.	0.4 70 Liters 94 g 19 Tm 22mm 0.6 302 mm (11.9 in.) 8 302 mm (11.9 in.) 284mm (11.18 in.)Nominal
Qts Vas Mms BL product (force factor) Peak to peak displacement (mm) Le (mH @1kHz) Overall diameter No. of mounting holes Bolt circle diameter Front mount baffle cutout dia. Rear mount baffle cutout diameter	0.4 70 Liters 94 g 19 Tm 22mm 0.6 302 mm (11.9 in.) 8 302 mm (11.9 in.) 284mm (11.18 in.)Nominal 295 mm (11.6 in.)Nominal
Qts Qts Vas Mms BL product (force factor) Peak to peak displacement (mm) Le (mH @1kHz) Overall diameter No. of mounting holes Bolt circle diameter Front mount baffle cutout dia. Rear mount baffle cutout diameter Total depth	0.4 70 Liters 94 g 19 Tm 22mm 0.6 302 mm (11.9 in.) 8 302 mm (11.9 in.) 284mm (11.18 in.)Nominal 295 mm (11.6 in.)Nominal 140.5 mm (5.33 in.)
Qts Qts Vas Mms BL product (force factor) Peak to peak displacement (mm) Le (mH @1kHz) Overall diameter No. of mounting holes Bolt circle diameter Front mount baffle cutout dia. Rear mount baffle cutout diameter Total depth Flange and gasket thickness	0.4 70 Liters 94 g 19 Tm 22mm 0.6 302 mm (11.9 in.) 8 302 mm (11.9 in.) 284mm (11.18 in.)Nominal 295 mm (11.6 in.)Nominal 140.5 mm (5.33 in.) 11.3 mm (0.44 in.)

