

PD.103NR1

MID RANGE DRIVER



10" / 254 mm
NOMINAL DIAMETER

450 W (A.E.S.)
POWER HANDLING

100 dB
SENSITIVITY (1W/ 1m)

100 Hz - 5 kHz
FREQUENCY RESPONSE

3.0" / 76.2 mm
VOICE COIL DIAMETER

7.50 mm Xmax
MAXIMUM LINEAR EXCURSION

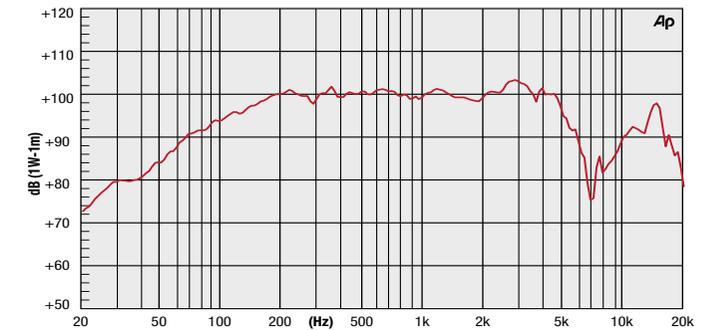


FEATURES:

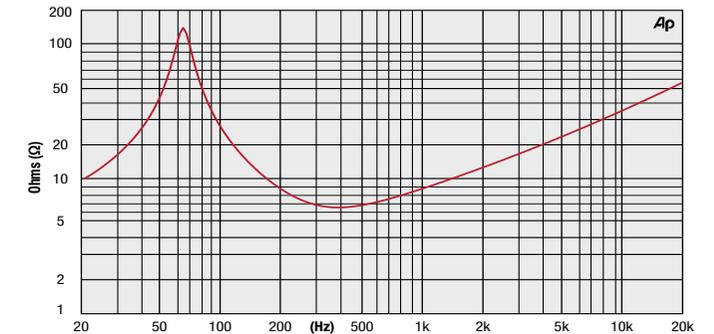
- Radial neodymium motor structure.
- Vented cast aluminium chassis for improved thermal control of voice coil.
- Forced air cooling vented voice coil gap.
- Aluminium demodulation ring.
- 3" High temperature CCAW voice coil
- Rear aluminium heat sink.

The PD.103NR1 is intended for use as a high power mid range driver in multiway systems. The optimised radial neodymium motor system allows more efficient management of the magnetic flux. Forced air venting and rear aluminium base plate keeps the motor temperature under control and reduces power compression to a minimum. The unit features a 3-inch, high temperature, CCAW voice coil capable of handling 450W (AES). The PD.103NR1 exhibits an average sensitivity of 100dB across its working band and will produce an SPL of 126 dB in a 15Ltr sealed enclosure.

FREQUENCY RESPONSE AND IMPEDANCE CHARTS



Half space response measured in a 950 Litre sealed enclosure.



GENERAL SPECIFICATIONS

Nominal Diameter	10" / 254 mm	Magnet Gap Depth	10.0 mm / 0.39"
Voice Coil Diameter	3.0" / 76.2 mm	Flux Density	1.25 Tesla
Available Impedances	8 Ohm	Magnet Material	Neodymium
Power Rating ^{1,2} *	450 W (A.E.S.)	Voice Coil Material	Copper Clad Aluminium
Peak Power (6dB Crest Factor)*	1800 W (A.E.S.)	Former Material	Glass Fibre
Sensitivity (1W - 1m)*	100 dB	Dust Dome Material	Solid Paper
Frequency Range	100 Hz - 5 kHz	Suspension Material	Fabric
Recommended Enclosure Volume	15 - 25 Litres	Cone / Surround Material	Paper / M Roll Poly Cotton
Resonance	65 Hz		
Voice Coil Winding Depth	15.00 mm / 0.59"		

THIELE SMALL Parameters (8 Ω MODEL)³

Fs	65 Hz	Mms	31.00 g
Re	5.5 Ω	Sd	362 cm ²
Qms	5.95	Cms	193.00 μm/N
Qes	0.220	BL	18.00 T/m
Qts	0.212	Xmax	7.50 mm
Le (@ 1 kHz)	1.20 mH	Vd	0.180 Litres
Le (@ 10 kHz)	0.566 mH	Ref. Efficiency	4.33%
Vas	36 Litres	EBP	295.45 Hz

DIMENSIONS

Overall Diameter	270.5 mm
Width Across Flats	272.24 / 269 mm
Flange Height	7.0 mm
Depth (Excl. Flange)	131.70 mm
Magnet Diameter	120 mm

MOUNTING INFORMATION

Chassis Shoulder Diameter	228.0 mm
Outer Bolt Circle	x4 M6 on 271 mm PCD

WEIGHT

Nett Weight	5.25 Kg / 11.57 lb
Shipping Weight	5.65 Kg / 12.46 lb

¹ Power compression is the reduction of sensitivity at the specified power. Higher power ratings do not necessarily give a proportionate increase in SPL therefore the maximum SPL of the driver may significantly exceed that of other manufacturers with high power ratings.
^{**} Distortion is measured at 10% of the rated power (AES Standard).

1. AES Standard (70 to 700 Hz) Program 450 Watts.
2. AES Recommended Practice.
3. Thiele - Small Parameters follow a 400 Watt preconditioning period.

Please note that frequency response measurements are supplied for comparison purposes only and are not a measure of the low frequency performance which may be achievable in a fully optimised system.