

Ferrite Magnet Die-cast Chassis Driver



Specifications

General Specifications

Nominal diameter.....	305 mm/12 in
Power rating.....	400 W(AES)
Nominal impedance.....	8Ω
Sensitivity.....	95 dB
Frequency range.....	45-3000 Hz
Chassis type.....	Cast aluminum
Magnet type.....	Ferrite
Magnet weight.....	2.3 kg/81.4 oz
Voice coil diameter.....	76.2 mm/3.0 in
Coil material.....	CCA-W
Former material.....	Glass fiber
Cone material.....	Paper
Surround material.....	Cloth
Suspension.....	Single
X-max.....	3.4 mm/0.13 in
Gap depth.....	10 mm/0.39 in
Voice coil winding width.....	16.8 mm/0.66 in
Net Weight.....	7.4 kg/16.3 lb
Packing Dimension WxDxH (mm).....	355mm x355mm x195mm
Shipping Weight.....	8.2 kg/18.1 lb

Small Signal Parameters

Re.....	5.5 Ω
Fs.....	48 Hz
Mms.....	57.72 g/2.04 oz
Mmd.....	50.27 g/1.77 oz
Qms.....	4.41
Qes.....	0.33
Qts.....	0.31
Vas.....	81.13 lt/2.87 ft³
Bl.....	17.09 Tm
Cms.....	1.9e-04 m/N
Rms.....	3.98 Ns/m
Le (at 1kHz).....	0.49 mH
Sd.....	552 cm²

Features

- 3" Voice Coil
- 1200 Watts Peak Power Handling
- Ferrite Magnetics
- Precision Circular Wire Geometry
- Die Cast Aluminum Chassis

Applications

The P Audio 12BM-400B is a high output wide bandwidth transducer. The 12BM-300B is an upgraded design that features many of P Audio's new technologies and performance upgrades. The 12 inch (305mm) diameter piston will produce extremely high sound pressure levels at both low and mid band frequencies and is ideal for high level response in both live sound and recorded music venues. The transducer has a rated bandwidth of 45Hz to 3000Hz. The transducer uses high energy ferrite magnetics to achieve a very high acoustic output to weight ratio. The 12BM-400B has been optimized for use in two way or three way sound reinforcement systems.

The 12BM-400B employs a medium format 3 inch (76.2mm) diameter voice coil that provides an AES rated 400 watts of continuous power handling and a full 1200 watts of peak rated power handling when sufficient amplifier headroom is available. The 12BM-400B utilizes P Audio's Auto Balanced Cooling (ABC) technology to not only improve transducer power handling and reliability but to also increase power compression performance by carefully balancing and directing airflow to critical areas.

The voice coil design is a bobbin wound geometry with P Audio's precision circular wire technology to insure high conversion efficiency.

The system suspension has been designed specifically for high linear displacement and extended low frequency response. The 12BM-400B also features a single spider configuration that provides system reliability and mechanical control.

The transducer chassis is a die cast aluminum design that insures a very high degree of structural integrity.