

Ferrite Magnet Die-cast Chassis Driver



Specifications

General Specifications

Nominal diameter.....	305 mm/12 in
Power rating.....	500 W(AES)
Nominal impedance.....	8Ω
Sensitivity.....	95 dB
Frequency range.....	60-3000 Hz
Chassis type.....	Cast aluminum
Magnet type.....	Ferrite
Magnet weight.....	2.9 kg/100.6 oz
Voice coil diameter.....	99.3 mm/3.9 in
Coil material.....	CCA-R
Former material.....	Glass fiber
Cone material.....	Paper
Surround material.....	Cloth
Suspension.....	Single
X-max.....	4.5 mm/0.18 in
Gap depth.....	8.0 mm/0.30 in
Voice coil winding width.....	16.9 mm/0.67 in
Net Weight.....	9.7 kg/21.4 lb
Packing Dimension WxDxH.....	355 x 355 x 180 mm
Shipping Weight.....	10.5 kg/23.1 lb

Small Signal Parameters

Re.....	5.8Ω
Fs.....	62 Hz
Mms.....	75.80 g/2.67 oz
Mmd.....	68.35 g/2.41 oz
Qms.....	6.66
Qes.....	0.42
Qts.....	0.40
Vas.....	37.95 lt/1.34 ft³
Bl.....	20.03 Tm
Cms.....	8.9e-05 m/N
Rms.....	4.37 Ns/m
Le (at 1kHz).....	0.31 mH
Sd.....	552 cm²

Features

- 3.9" Large Format Voice Coil
- 2000 Watts Peak Power Handling
- Active Balanced Cooling
- Ferrite Magnetics
- Precision Rectangular Ribbon Wire Geometry
- Die Cast Aluminum Chassis

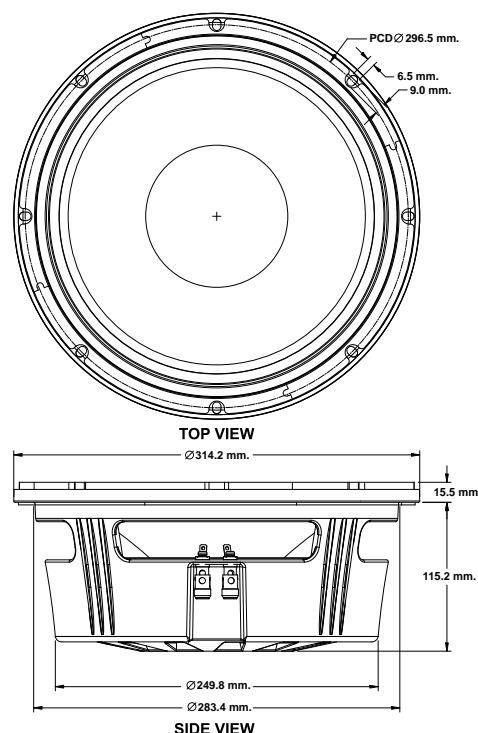
Applications

The P Audio C12-500MB is a high performance wide bandwidth transducer. The C12-500MB 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 in the mid band and upper mid frequencies and is ideal for high level response in both live sound and recorded music venues. The transducer uses high energy ferrite magnetics to achieve a very high acoustic output to weight ratio. The C12-500MB has been optimized for use in two way or three way sound reinforcement systems. The transducer is also ideal as a mid bass driver for ultra high performance system designs and has an operating bandwidth of 60Hz to 3000Hz.

The C12-500MB features a very large 3.9 inch (99.3mm) diameter voice coil that provides an AES rated 500 watts of continuous power handling and a full 2000 watts of peak rated power handling when sufficient amplifier headroom is available. The C12-500MB 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 ribbon rectangular wire technology to improve conversion efficiency and provide a large cross-sectional area for superior cooling.

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



Frequency Response and Impedance Curves

