

GM15-88F

Low Frequency Ferrite Woofer

Features

- 1400 W continuous program power capacity
- 88.9 mm (3.5 inch) voice coil
- 45 2000 Hz response
- 97 dB sensitivity
- Ferrite magnet

The P. Audio 'Golden Master' GM15-88F is the intersection of advanced design and state of the art manufacturing. The GM15-88F is a 15 inch (381mm) low frequency transducer for high performance professional audio. The 3.5 inch (88.9mm) inside/outside wound voice coil is designed for superior reliability and excursion, featuring high temperature aluminum wire and extended winding length. The weightoptimized ferrite magnetics maximize the coil's strengths by providing strong magnetic flux across its whole range of movement. This keeps coil motion faithful to the audio signal without distorting. Aluminium 'demodulation' rings negate inductance effects in the motor, further improving the fidelity of coil movement.

The ferrite magnet structure cooperates with a carefully optimized venting system on the bottom of the sleek Golden Master chassis to control airflow around the voice coil. This cools the durable design to further levels of reliability without losing sensitivity - the GM15-88F is rated at 2800 W peak power handling/700 W AES continuous power handling with nominal sensitivity of 97 dB.

Linear and symmetrical stiffness behavior of the suspension compliments linear coil motion. The GM15-88F's large diameter spider is a durable silicone laminate design that provides symmetrical displacement and reliable voice coil positioning even after hours at high power levels. The cone features a proprietary doubleroll cloth surround. The perfect match of material and geometry mean ultra-low distortion of cone movement and ultra-low distortion of sound. Coating keeps the cone rigid and waterproof during operation.

The ideal application for the GM15-88F is in very high performance sound reinforcement and large format public address systems. It is ideal for use in a well-tuned vented enclosure - both two-way full range and double 15" sub-woofer designs. P erformance is optimized when using a high pass 4th order B utterworth filter tuned near the enclosure vent frequency. The GM15-88F offers a 45-2000Hz useable bandwidth, though the actual crossover frequency will be determined by the driver and horn combination in the user's system.



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Nominal Diameter	381 mm (15 in)
Nominal Impedance	8 Ω
Nominal Power Handling	700 W(AES)
Continuous Program Power Capacity	1400 W
Sensitivity	97 dB
Frequency Range	45-2000 Hz
Voice Coil Diameter	88.9 mm (3.5 in)
Voice Coil Material	AL-W
Former Material	Glass fiber
Effective Piston Diameter	331.6 mm (13.1 in)
Flux Density	1.1T

Physical Information

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Magnet Material	Ferrite
Basket Material	Aluminium
Surround Material	Cloth
Cone Material	Paper
Dust Cap Material	Paper
Spider Material	Cotton (Silicone Impregnated Spider)
Gasket	EVA
Pole Design	T-Pole
Woofer Cone Treatment	Waterproof Front Side

Parameters

Fs	46 Hz	Vas	120.49 lt
Re	5.5 Ω	Sd	855 cm2
Qms	8.07	Le	0.52 mH
Qes	0.52	Eff (η_0)	2.21%
Qts	0.49	Cms	1.2 e-04 m/N
BL	17.65 Tm	Xmax	4.0 mm
Mms	101.18 g	Hag	10.0 mm
Mmd	86.80 g	Hvc	18.0 mm

Mounting and Shipping Info

Diameter	386.0 mm (15.1 in)
Baffle Cutout Diameter	354.9 mm (14.0 in)
Mounting Hole Diameter	370.0 mm (14.6 in)
Bolt Circle Diameter	8 x Ø (9.0x6.0) mm
Depth	164.2 mm (6.5 in)
Flange and Gasket Thickness	16.6 mm (0.65 in)
Net Weight	12 kg
Shipping Units	1
Shipping Weight	13.3 kg
Shipping Box	415 x 415 x 230 mm
D	F0F004F47004DAA
Recone Kit	F05031517901PAA

Frequency response and Impedance curve



