

12 PT 600 MB

SWETON®



12 PT 600 MB is a high-performance 12-inch mid-bass transducer designed for demanding professional audio applications. Built using advanced materials and tested with the Klippel Analyzer System, this driver combines precision, power, and musicality.

With a BL factor of 20.84 N/A, low Qts of 0.39, and high efficiency of 95 dB, it delivers tight, punchy mid-bass and excellent vocal projection. Ideal for high-output PA systems.

The voice coil displacement capacity of ± 9.2 mm and mechanical robustness make it suitable for both reflex and horn-loaded enclosures. Backed by robust construction and optimal damping, this is your go-to driver when performance matters.

Recommended Enclosure:

Type	Volume (litres)	Tuning Frequency	Port (Dia x Length)
Vented (Bass Reflex)	65–75 L	50–55 Hz	4-inch x 7.5 inch (dual ports recommended)

For vocal reinforcement, tighter enclosures (~55L) will give better punch; for wider bass coverage, go higher (~75L).

Recommended HF Driver:

Parameter	Recommendation
Power Rating	80–100W AES
Sensitivity	106–110 dB SPL
Diaphragm Type	Titanium preferred
Exit Size	1.4" Compression Driver

Recommended Crossover Points:

Section	Frequency	Filter Type	Slope
Low Pass (for 12 PT 600 MB)	3.0 – 3.5 kHz	LR or Butterworth	18–24 dB/oct
High Pass (for HF Driver)	1.5 – 1.7 kHz	LR or Butterworth	18–24 dB/oct

Slight overlap ensures smooth transition, but make sure to use proper delay alignment if using DSP.

Applications:

- Mid-bass for PA Cabinets, Floor Monitors
- Line Array Modules (Low-Mid Section)
- 3-Way Sound Reinforcement Systems
- Vocal and Instrumental Coverage in Live Events

Why Choose 12 PT 600 MB?

- Flat and extended frequency response (60 Hz–4.5 kHz)
- High efficiency (95 dB) with robust BL motor (20.84 N/A)
- Klippel-tested reliability with ± 9.2 mm excursion capability
- Clean low-distortion performance even at high SPL
- Ideal for high-output portable and install systems

SPECIFICATIONS & PARAMETERS

Specifications

Nominal Diameter	315 mm
Nominal Impedance	8 Ω
Nominal Power Handling (AES)	600 W
Program Power	1200 W
Sensitivity (1W/1m)	95 dB
Frequency Range	60-4500 Hz
Magnet Material	Ferrite
Voice Coil Diameter	99.3 mm (4 in)
Winding Material	CCAW
Former Material	GLASS FIBRE
Winding Type	OUTSIDE

Mounting Info

Overall Diameter	315 mm
Bolt Circle Diameter	295 mm
Baffle Cutout Diameter	287 mm
Depth	140 mm
Flange and Gasket Thickness	10 mm
Gross Weight	11.10 Kgs

Parameters

Resonant Frequency	Fs	64 Hz
DC Resistance	Re	5.8 Ω
Electrical Q	Qes	0.4
Mechanical Q	Qms	11.45
Total Q	Qts	0.39
Compliance Equivalent Volume	Vas	31.89 Ltrs
Peak Diaphragm Displacement Volume	Vd	0.15 Ltrs
Effective Surface Area of Cone	Sd	522.79 cm ²
Reference Efficiency	η_0	2.02%
Moving Mass including air load	Mms	74.10 gms
Motor Strength	Bl	20.84 T-m
Voice Coil Inductance	Le	0.52 mH
Efficiency Bandwidth Product	EBP	160 Hz
Voice Coil Overhang	Xmax	± 4.20 mm

Recone Kit

Recone Kit Number	REC12PT600MB
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$Z(f, x=0)$ Impedance

