# **COLOSSUS 12MB**

**MID-BASS DRIVER** 

12" / 304.8 mm

CHASSIS DIAMETER

1000 W

40 Hz - 3.5 kHz

FREQUENCY RESPONSE

3" / 76.2 mm

98 dB

SENSITIVITY (1W/ 1m)

**5.5 mm Xmax**MAX. LINEAR EXCURSION

- High SPL output, 98 dB (1W / 1m).
- Optimised non-inductive motor system efficiently controls magnetic flux and reduces third-harmonic and intermodulation distortion.
- Undistorted low frequencies at high output levels.
- Fast and dynamic driver producing punchy bass.
- Extended frequency range up to 3.5 kHz.
- + Aluminium demodulation and Copper shorting rings.
- UK manufactured cone with optimised pulp offering increased strength, durability and performance.
- Performs best in ported enclosures of 25-80 Litres.
- 3-Inch Inside/outside windings aluminium voice coil.

# 5.17" / 131.3 mm

### **GENERAL SPECIFICATIONS**

Nominal Chassis Diameter	12" / 304.8 mm
Nominal Impedance (1)	8 Ohm
Minimum Impedance Zmin	7.5 Ω
AES Power Handling (2)	500 W (A.E.S.)
Program Power	1000 W
Peak Power (6dB Crest Factor)	2000 W
Frequency Range (-6dB)	40 Hz - 3.5 kHz
Sensitivity (1W/ 1m)	98 dB
Magnet Material	Ferrite
Magnet Weight	93 oz
Magnetic Gap Depth	0.35" / 9 mm
Flux Density	1.16 Tesla
Former Material	Glass Fibre
Voice Coil Material	Aluminium - Inside/ Outside
Coil Winding Height	0.70" / 18 mm
Voice Coil Diameter	3" / 76.2 mm
Cone/ Dust Dome Material	Curvilinear Poly-cellulose / Solid Paper
Surround / Edge Termination	Polyvinyl Damped Multi Roll. Poly Cotton

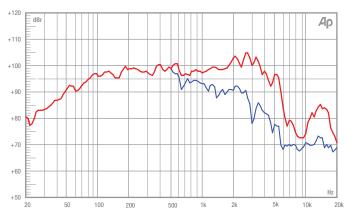
### **TECHNICAL & THIELE SMALL PARAMETERS**

Fs	55 Hz
Re	5.5 Ω
Qms	2.05
Qes	0.333
Qts	0.286
Vas	56 Litres
Vd	0.29 Litres
Cms	0.142 mm/N
BI	18.3 T/m
Mms	59 g
Xmax	5.5 mm
Sd	530 cm <sup>2</sup>
Efficiency	2.71 %
Le (1k Hz)	1.56 mH
EBP	165.17 Hz
Effective Piston Diameter	10.24" / 260.09 mm
Rec. Enclosure Volume	0.88 - 2.83 ft3 / 25 - 80 Litres

### **MOUNTING / SHIPPING INFORMATION**

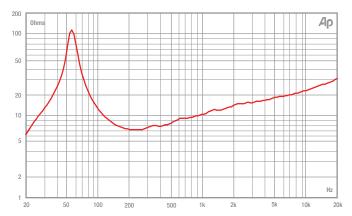
Overall Diameter	13" / 330.2 mm
Width Across Flats	12.19" / 309.52 mm
Depth	5.17" / 131.3 mm
Flange Height	0.305" / 7.8 mm
Baffle Hole Diameter F/M	11.03" / 280.16 mm
Baffle Hole Diameter R/M	10.13" / 257.30 mm
Chassis Material	Die-cast Aluminium
Gasket Supplied	Front & Rear
Outer Fixing Holes	4x Ø 0.218" on 12.5" PCD / 4x Ø 5.5 mm on 317.5 mm PCD
Inner Fixing Holes	N/A
Inner Fixing Holes Connectors (4)	N/A Push-button Spring Terminals
	Push-button Spring
Connectors (4)	Push-button Spring Terminals

# FREQUENCY RESPONSE DATA (3)



### (1) Please enquire about alternative impedances.

# **IMPEDANCE**



- 3) Half space response measured in a 975 Litre sealed box. Blue line = fundamental 45° off-axis. Please note that the frequency response measurements are supplied for comparison only and are not a measure of the low frequency performance which may be achieved in a fully optimised system.
- (4) Positive voltage at red terminal causes forward motion of cone

<sup>(2)</sup> A.E.S. power handling test. Pink noise bandpass filtered at 12 dB per octave with cutoff frequencies of 50 Hz and 500 Hz. Driver mounted in free air, test signal applied at rated power for two hours.