

COLOSSUS 12MBH

PRELIMINARY SPECIFICATIONS

BASS / MID RANGE DRIVER

12" / 304.8 mm

CHASSIS DIAMETER

1100 W

PROGRAM POWER

45 Hz - 4 kHz

FREQUENCY RESPONSE

3" / 76.2 mm

VOICE COIL DIAMETER

98 dB

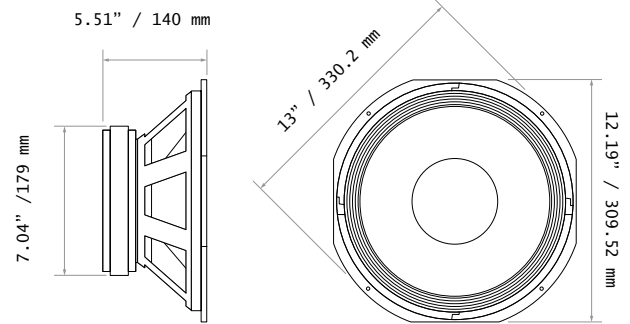
SENSITIVITY (1W/1m)

6 mm Xmax

MAX. LINEAR EXCURSION



- + Aluminum Heats sink directly attached to rear magnet plate for added heat dissipation.
- + 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 4 kHz.
- + Aluminium demodulation and Copper shorting rings.
- + Optimised cone pulp offering increased strength, durability and performance.
- + Performs best in ported enclosures of 30-50 Litres.
- + 3-Inch Inside / Outside windings aluminium voice coil.



GENERAL SPECIFICATIONS

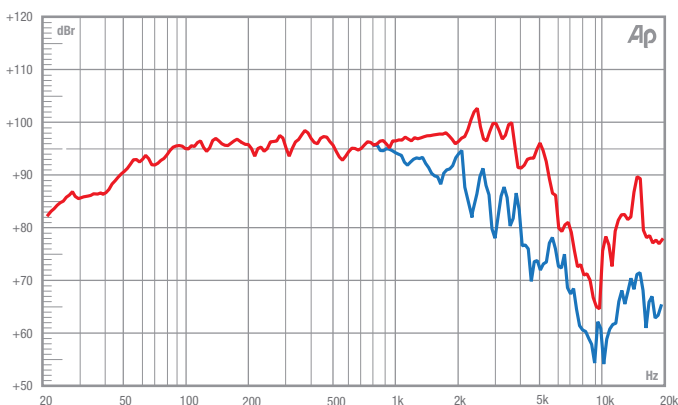
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|--------------------------------------|---|
| Nominal Chassis Diameter | 12" / 304.8 mm |
| Nominal Impedance ⁽¹⁾ | 8 Ohm |
| Minimum Impedance Zmin | 6.6 Ω |
| AES Power Handling ⁽²⁾ | 550 W (A.E.S.) |
| Program Power | 1100 W |
| Peak Power (6dB Crest Factor) | 2200 W |
| Frequency Range (-6dB) | 45 Hz - 4 kHz |
| Sensitivity (1W/1m) | 98 dB |
| Magnet Material | Ferrite |
| Magnet Weight | 93 oz |
| Magnetic Gap Depth | 0.35" / 9.00 mm |
| Flux Density | 1.16 Tesla |
| Former Material | Glass Fibre |
| Voice Coil Material | Aluminium - Inside/Outside |
| Coil Winding Height | 0.71" / 18.00 mm |
| Voice Coil Diameter | 3" / 76.27 mm |
| Cone/ Dust Dome Material | Straight Fibre Loaded Polycellulose / Paper |
| Surround / Edge Termination | Multi Roll Polyvinyl Damped Fabric |

TECHNICAL & THIELE SMALL PARAMETERS

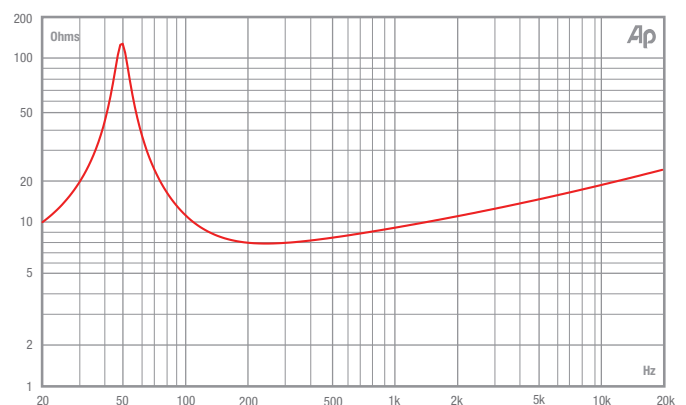
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|---------------------------|---------------------|
| Fs | 48 Hz |
| Re | 5.5 Ω |
| Qms | 7.200 |
| Qes | 0.351 |
| Qts | 0.335 |
| Vas | 75.00 Litres |
| Vd | 0.318 Litres |
| Cms | 0.19 mm/N |
| Bl | 17.5 T/m |
| Mms | 57 g |
| Xmax | 6 mm |
| Sd | 530 cm ² |
| Efficiency | 2.36 % |
| Le (1k Hz) | 1.54 mH |
| EBP | 136.75 Hz |
| Effective Piston Diameter | 10.24" / 260.10 mm |
| Rec. Enclosure Volume | 30 - 50 Litres |

MOUNTING / SHIPPING INFORMATION

| | |
|--------------------------------|------------------------------|
| Overall Diameter | 13" / 330.2 mm |
| Width Across Flats | 12.19" / 309.62 mm |
| Depth | 5.51" / 140.00 mm |
| Flange Height | 0.305" / 7.8 mm |
| Baffle Hole Diameter F/M | 11.03" / 280.16 mm |
| Baffle Hole Diameter R/M | 11.25" / 285.75 mm |
| Magnet Diameter | 179 mm |
| Chassis Material | Die-cast Aluminium |
| Gasket Supplied | Front & Rear |
| Outer Fixing Holes | 4x Ø 5.5 mm on 317.5 mm PCD |
| Inner Fixing Holes | N/A |
| Connectors ⁽⁴⁾ | Push-button Spring Terminals |
| Weight | 22.49 lb / 10.20 Kg |
| Shipping Weight | 24.25 lb / 11.00 Kg |
| Packing Carton Dimensions (mm) | (W) 340 (D) 340 (H) 222 |

FREQUENCY RESPONSE DATA⁽³⁾

IMPEDANCE



(1) Please enquire about alternative impedances.

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

(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.