

# THE PROFESSIONAL SERIES COLOSSUS 18XLS

SUB BASS DRIVER



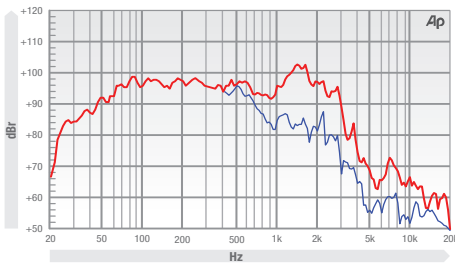
<b>18" / 457.2 mm</b> CHASSIS DIAMETER	<b>1200 w (A.E.S.)</b> POWER HANDLING	<b>97 dB</b> SENSITIVITY (1w / 1m)
<b>28 Hz - 500 Hz</b> FREQUENCY RESPONSE	<b>4.0" / 101.6 mm</b> COPPER INSIDE / OUTSIDE WINDINGS VOICE COIL	<b>12.5 mm Xmax</b>

**Product Features:**

- 250mm Diameter Magnet structure
- Low interference flux path
- Fibre loaded UK manufactured cone
- 64 mm peak to peak maximum linear excursion
- 24.5 Tm BL
- Fast, accurate and controlled bass at high levels of excursion.

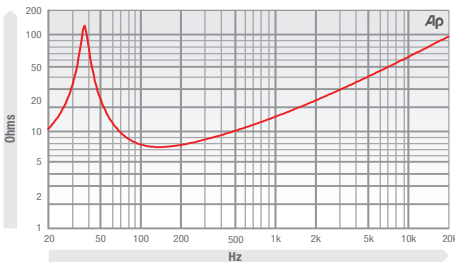
THE PROFESSIONAL SERIES

**FREQUENCY RESPONSE DATA\***

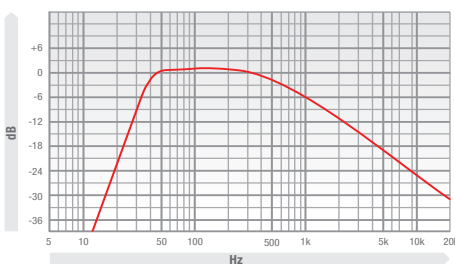


\* Measured with swept sine wave on open baffle of 2.5 x 3.7m. Blue Line = fundamental 45° off-axis

**IMPEDANCE**



**PREDICTED BASS RESPONSE**



\*\* Normalised bass reponse in 175 litre tuned to 40 Hz

**ELECTRO ACOUSTIC SPECIFICATIONS**

Nominal Chassis Diameter	18" / 457.2 mm
Impedance	8 Ω
Power Handling	1200 w (A.E.S.)
Peak Power (6dB Crest Factor)	4800 w (A.E.S.)
Usable Frequency Range -6dB	28 Hz - 500 Hz
Sensitivity (1 w - 1 m)	97 dB
Moving Mass inc. Air Load	209 grams
Minimum Impedance Zmin	7.44 Ω
Effective Piston Diameter	15.43" / 391.92 mm
Peak Displacement Volume of Cone Vd	1.56 litres
Magnet Weight	4.7 Kg
Magnetic Gap Depth	0.47" / 12.00 mm
Flux Density	1.1 Tesla
Coil Winding Height	1.18" / 30.00 mm
Voice Coil Diameter	4.0" / 101.6 mm

**THIELE SMALL PARAMETERS**

FS Hz	36 Hz
RE Ohms	5.2 Ω
Qms	13.610
Qes	0.420
Qts	0.400
Vas Ltr	187 litres
Vd litres	1.56 litres
CMS (mm/N)	0.09 mm/N
BL T/m	24.5 T/m
Mms (grams)	209 grams
Xmax (mm)	12.5 mm
Sd (cm²)	1210 cm²
Efficiency %	2.0 %
Le (1k Hz)	1.5 mH

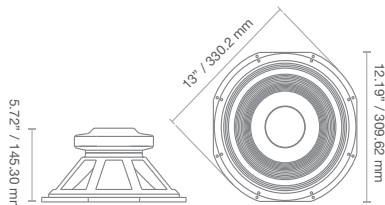
**MOUNTING / SHIPPING INFORMATION**

Overall Diameter	19.1" / 485.14 mm
Width Across Flats	18" / 457.2 mm
Flange Height	0.465" / 11.8 mm
Baffle Hole Diameter F/M	16.53" / 419.86 mm
Baffle Hole Diameter R/M	16.33" / 414.78 mm
Gasket Supplied	Front & Rear
Fixing Holes	8x 7 mm ∅ on 468 mm PCD 8x 7 mm ∅ on 438.15 mm PCD
Depth	8.66" / 220.00 mm
Weight	36.95 lb / 16.76 kg
Recommended Enclosure Volume	125 - 210 litres
Shipping Weight	39.80 lb / 18.05 kg
Packing Carton Dimensions	520 x 520 x 250 mm

**MATERIALS OF CONSTRUCTION**

Former Material	Resin Bonded Glass Fibre
Voice Coil	Copper - Inside / Outside Windings
Magnet Material	Ferrite
Chassis	Die-cast Aluminium
Cone	Straight Polycellulose Ribbed Cone
Surround / Edge Termination	Multi Roll Polyvinyl Damped Fabric
Dust Dome	Paper
Connectors	Push-button Spring Terminals
Polarity	Positive voltage at red terminal causes forward motion of cone

COLOSSUS-18XLS



- Please enquire about alternative impedances.
- A.E.S. power handling test. Pink noise bandpass filtered at 12 dB per octave with cutoff frequencies of 30 Hz and 300 Hz. Driver mounted in free air, test signal applied at rated power for two hours.
- 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.