



## SOVEREIGN 12-500LF

High-power 12" bass driver ideally suited for use in two way ported enclosures.

### ELECTRO ACOUSTIC SPECIFICATIONS

Nominal Chassis Diameter	12"
Impedance	8 Ω
Power Handling	500 w (EIA 426A)
Peak Power (6dB Crest Factor)	2000 w (EIA 426A)
Usable Frequency Range -6dB	38 Hz - 5 kHz
Sensitivity (1 w - 1 m)	92 dB
Moving Mass inc. Air Load	75
Minimum Impedance Zmin	7.4 Ω
Effective Piston Diameter	10.67" / 270 mm
Peak Displacement Volume of Cone Vd	0.3 litres
Magnet Weight	56 oz
Magnetic Gap Depth	0.39" / 10 mm
Flux Density	0.97 Tesla
Coil Winding Height	0.74" / 19 mm
Voice Coil Diameter	2.5" / 63.5 mm

### THIELE SMALL PARAMETERS

FS Hz	50 Hz
RE Ohms	5.9 Ω
Qms	7.5
Qes	0.53
Qts	0.51
Vas Ltr	66
Vd litres	0.298
CMS (mm/N)	0.14
BL T/m	16.37
Mms (grms)	75
Xmax (mm)	5.17
Sd (cm <sup>2</sup> )	576.1
Efficiency %	1.5
Le (1kHz)	2.36 mH

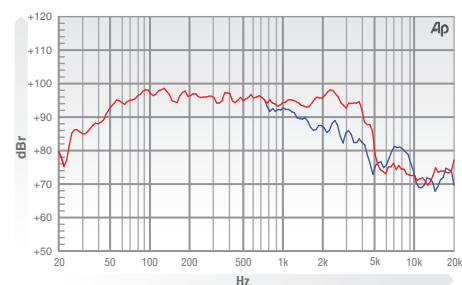
### MATERIALS OF CONSTRUCTION

Former Material	Glass Fibre
Voice Coil	Copper
Magnet Material	Ferrite
Chassis	Steel
Cone	Paper
Surround / Edge Termination	Polyvinyl Damped Dbl. Half Roll Linen
Dust Dome	Paper
Connectors	Solder Tag
Polarity	Positive Voltage at Red Terminal Causes Forward Motion of Cone

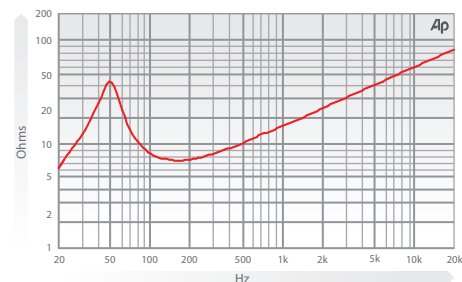
### MOUNTING / SHIPPING INFORMATION

Overall Diameter	12.00" / 310 mm
Flange Height	0.27" / 7 mm
Baffle Hole Diameter F/M	11.25" / 286 mm
Baffle Hole Diameter R/M	11.25" / 286 mm
Gasket Supplied	Front & Rear
Fixing Holes	8x 7.0 mm on 11.75" / 298 mm PCD
Depth	5.69" / 143 mm
Weight	11.02 lb / 5.0 kg
Recommended Enclosure Volume	1.05 - 2.64 cu ft / 30 - 75 litres
Shipping Weight	12.89 lb / 5.85 kg
Packing Carton Dimensions	165 x 330 x 330 mm

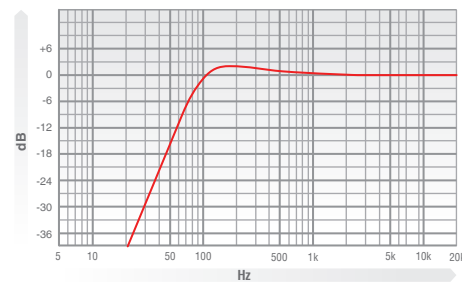
### FREQUENCY RESPONSE DATA\*



### IMPEDANCE



### PREDICTED BASS RESPONSE



\* Half space response measured in a 975 litre sealed box \*\* Normalised bass response in 75 litre vented enclosure tuned to 45Hz • Please enquire about alternative impedances. • EIA 426A, power handling test. Pink noise bandpass filtered at 12 dB per octave. Driver mounted in free air, test signal applied at rated power for 8 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.