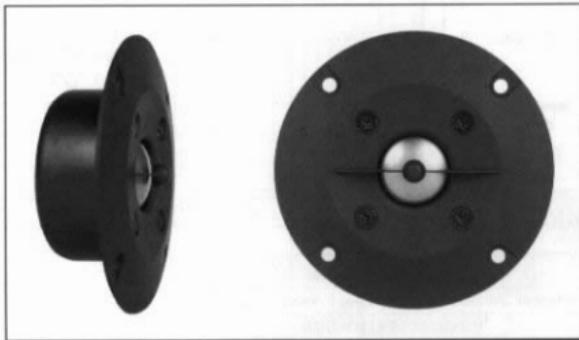


## 1" - SHIELDED PURE TITANIUM DOME - 25 mm

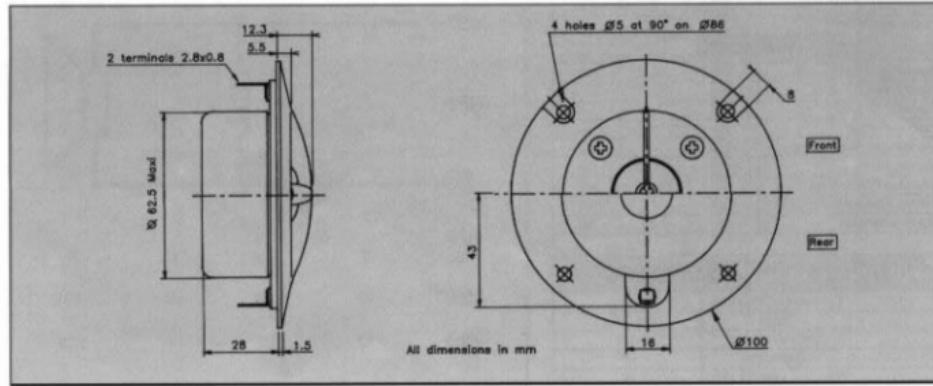
Pure Titanium dome  
 Soft polymer suspension  
 Shielded magnet for audio/video  
 Vented pole piece - Tuned cavity  
 Replaceable voice coil assembly  
 Injected polymer face plate  
 Ferrofluid cooled voice coil

Dôme Titane pur  
 Suspension polymère souple  
 Anti-magnétique pour audio/vidéo  
 Noyau ventilé - Cavité accordée  
 Equipage mobile amovible  
 Face polymère injectée renforcée  
 Bobine refroidie par ferrofluide



Pure Titanium, as used in this dome, has the highest strength-to-weight ratio known to science. The moving assembly is critically coupled with the face plate geometry, integrating a high precision acoustic lens with an adjusted suspension for optimized diaphragm control. A tuned cavity designed together with a shielded magnet structure reduces the fundamental resonance of the dome. This results in a superb transient response, dynamic sound reproduction and detailed imaging. Easily coupled with 2nd order crossover as shown Fig 1. Two crossover points are suggested for adequate power handling.

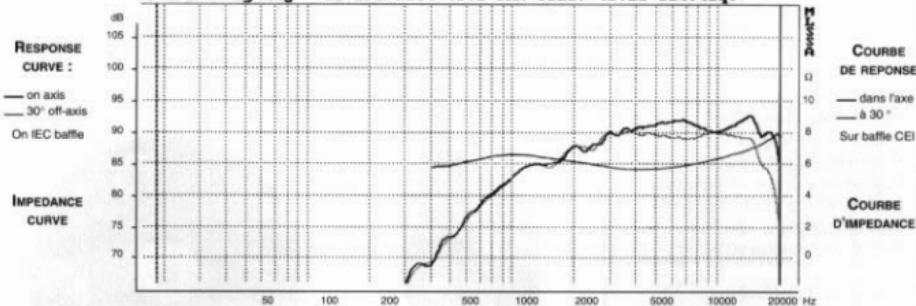
La matière de ce dôme, Titane pur, a le meilleur ratio poids/rigidité connu à ce jour. La géométrie de la face avant qui intègre une lentille acoustique très précise et une charge optimisée de la suspension contrôle parfaitement la performance de l'équipage mobile. La structure du moteur, antimagnétique, intègre cavité accordée et bouclier antimagnétique, ce qui a pour effet de réduire la fréquence de résonance. La réponse transitoire est exceptionnelle, la reproduction sonore est dynamique, les micro-informations sont reproduites au-delà du seuil audible. Il peut être filtré au second ordre (12 dB/Oct) selon le schéma Fig 1. Deux fréquences de coupure sont proposées afin d'obtenir la tenue en puissance adéquate.



## RESPONSE CURVE

refer to page 16

Sensitivity Mag - dB SPL/mwatt (8.0 ohm load) (8.16 oct)(eq)



## SPECIFICATIONS

Technical Characteristics	Symbol	Value	Units
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## PRIMARY APPLICATION

Nominal Impedance	Z	8	Ω
Resonance Frequency	F <sub>s</sub>	1050	Hz
Nominal Power Handling	P	80	W
Sensitivity	E	92	dB

## VOICE COIL

Voice coil diameter	Ø	25	mm
Minimum Impedance	Z <sub>min</sub>	7	Ω
DC Resistance	R <sub>e</sub>	5,8	Ω
Voice Coil Inductance	L <sub>bm</sub>	25	µH
Voice coil Length	h	1,6	mm
Former	-	Aluminium	-
Number of layers	n	2	-

## MAGNET

Magnet dimensions	Ø x h	60x10 (H45x8)	mm
Magnet weight	m	0,15	kg
Flux density	B	1,3	T
Force factor	BL	2,2	NA <sup>1</sup>
Height of magnetic gap	H <sub>e</sub>	3	mm
Stray flux	F <sub>mag</sub>	8	Am <sup>2</sup>
Linear excursion	X <sub>max</sub>	±0,3	mm

## PARAMETERS

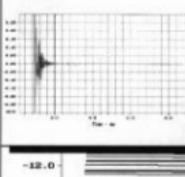
Suspension Compliance	C <sub>ms</sub>	-	mN <sup>-1</sup>
Mechanical Q Factor	Q <sub>ms</sub>	-	-
Electrical Q Factor	Q <sub>es</sub>	-	-
Total Q Factor	Q <sub>ts</sub>	-	-
Mechanical Resistance	R <sub>ms</sub>	-	kg s <sup>-1</sup>
Moving Mass	M <sub>ms</sub>	0,31.10 <sup>-3</sup>	kg
Effective Piston Area	S	6,2.10 <sup>-4</sup>	m <sup>2</sup>
Volume Equivalent of Air at Cas	V <sub>as</sub>	-	m <sup>3</sup>
Mass of speaker	M	0,37	kg

## APPLICATION PARAMETERS

F <sub>c</sub>	Crossover Frequency	Hz
S	Slope	dB / Oct.
L	Self-inductance	mH
C	Capacitor	µF
P	Nominal Power Handling	W

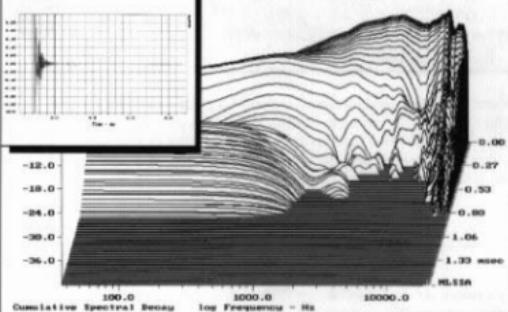
## IMPULSE RESPONSE

refer to page 16



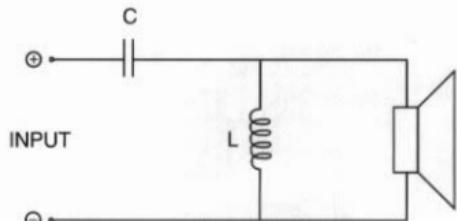
## WATERFALL

refer to page 16



## SUGGESTED APPLICATIONS

refer to page 8 to 13



F <sub>c</sub>	S	L	C	P
2500	12	0,36	8	80
4000	12	0,15	5,5	130

Please refer to method of measurement and measurement conditions pages 15 to 19.  
Audax may, without prior notification modify the specifications further to research and development requirements.