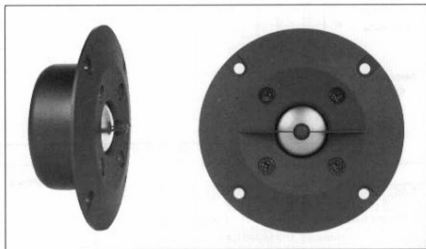


## 1" - SHIELDED ALUMINIUM ALLOY DOME - 25 mm

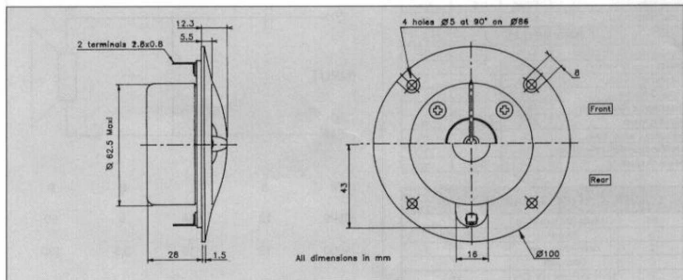
Aluminium alloy dome  
Soft polymer suspension  
Shielded magnet for audio/video  
Vented pole piece - Tuned cavity  
Replaceable voice coil assembly  
Injected polymer face plate  
Ferrofluid cooled voice coil

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



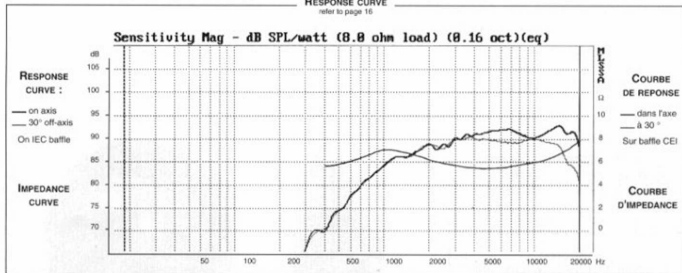
Aluminium alloy used for this dome offers a good ratio between stiffness, weight and damping. The moving assembly is critically coupled with the face plate geometry, integrating a high precision acoustic lens with an adjusted suspension for optimized diaphragm control. A tuned cavity designed together with a shielded magnet structure reduces the fundamental resonance of the dome. The sound reproduction is dynamic, smooth and detailed. Easily coupled with 2nd order crossover as shown Fig 1. Two crossover points are suggested for adequate power handling.

La matière de ce dôme, alliage d'aluminium, offre une très bon ratio poids/rigidité/amortissement. 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 reproduction sonore est à la fois dynamique, délicate et riche en micro-informations. 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 15


**SPECIFICATIONS**

Technical Characteristics	Symbol	Value	Units
---------------------------	--------	-------	-------

**PRIMARY APPLICATION**

Nominal Impedance	Z	8	$\Omega$
Resonance Frequency	Fs	1150	Hz
Nominal Power Handling	P	80	W
Sensitivity	E	92	dB

**VOICE COIL**

Voice coil diameter	$\varnothing$	25	mm
Minimum Impedance	Zmin	7	$\Omega$
DC Resistance	Re	5,8	$\Omega$
Voice Coil Inductance	Lbm	25	$\mu$ H
Voice coil Length	h	1,6	mm
Former	-	Aluminium	-
Number of layers	n	2	-

**MAGNET**

Magnet dimensions	$\varnothing$ x h	(50x10)-(45x9)	mm
Magnet weight	m	0,15	kg
Flux density	B	1,3	T
Force factor	BL	2,2	NA
Height of magnetic gap	He	3	mm
Stray flux	Fmag	8	Am <sup>2</sup>
Linear excursion	Xmax	$\pm$ 0,3	mm

**PARAMETERS**

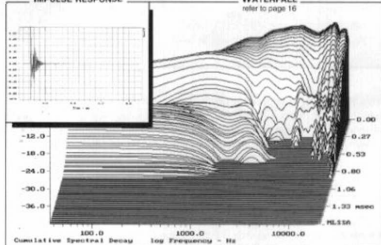
Suspension Compliance	Cms	-	mN <sup>-1</sup>
Mechanical Q Factor	Qms	-	-
Electrical Q Factor	Qes	-	-
Total Q Factor	Qts	-	-
Mechanical Resistance	Rms	-	kg s <sup>-1</sup>
Moving Mass	Mms	0,31.10 <sup>-1</sup>	kg
Effective Piston Area	S	6,2.10 <sup>-1</sup>	m <sup>2</sup>
Volume Equivalent of Air at Cas	Vas	-	m <sup>3</sup>
Mass of speaker	M	0,37	kg

**APPLICATION PARAMETERS**

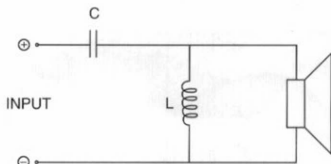
Fc	Crossover Frequency	Hz
S	Slope	dB / Oct.
L	Self-inductance	mH
C	Capacitor	$\mu$ F
P	Nominal Power Handling	W

**IMPULSE RESPONSE**
**WATERFALL**

refer to page 16


**SUGGESTED APPLICATIONS**

refer to page 8 to 13



Fc	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 on its products further to research and development requirements.