

## 6 1/2" - PAPER CONE DRIVER - 170 mm

DOUBLE BOBBIN

CLASSIC SERIES

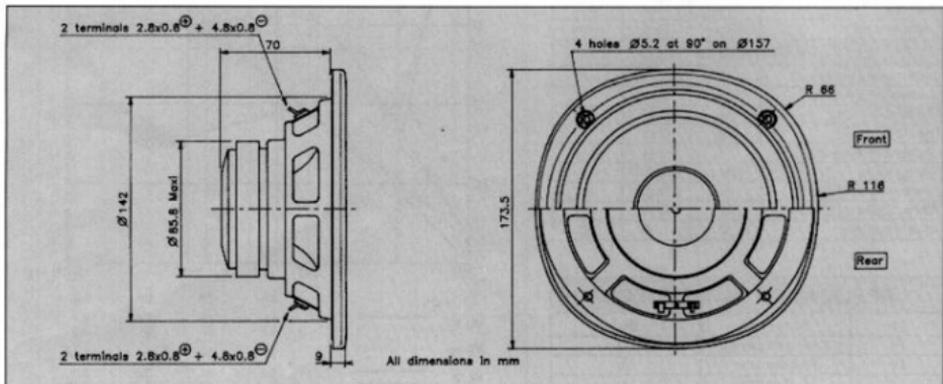
High loss-High compliance rubber surround  
 Critically damped paper cone  
 Double bobbin 2 x 8 Ω  
 Stamped steel chassis  
 High temperature voice coil (30 mm)  
 Aluminium voice coil former  
 Extended bass response (Fs : 45 Hz)

Suspension caoutchouc amortissant h<sup>e</sup> compliance  
 Cône papier traité amortissant  
 Double bobine 2 x 8 Ω  
 Chassis acier embouti  
 Bobine haute température (30 mm)  
 Support bobine aluminium  
 Réponse étendue dans le grave (Fs : 45Hz)



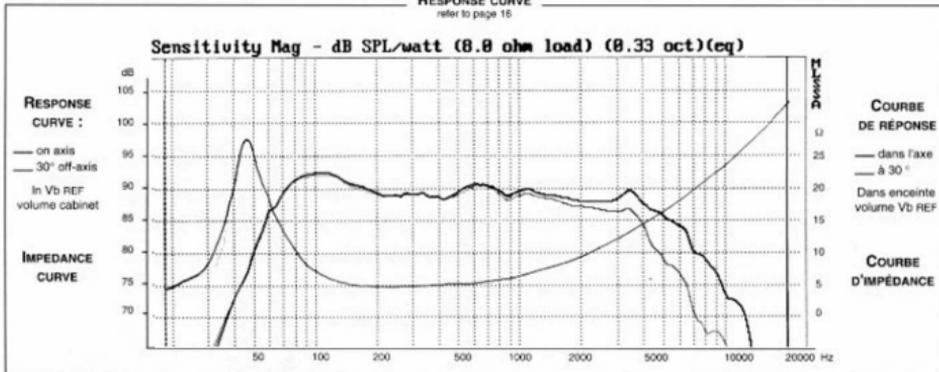
This 6 1/2" woofer has been specifically designed to deliver excellent bass or sub-bass performance when used in a compact enclosure. The double bobbin voice coil (see "suggested applications") offers flexibility to tailor the bass response according to the user's requirements. Designed for high-end compact 2 way systems, this driver features a state of the art curvilinear paper cone, which is critically damped and coupled to a high loss rubber surround. Special consideration has been taken to ensure a smooth response, natural roll-off. A newly designed cosmetic ring helps to reduce edge diffraction. The high temperature, 1" voice coil, wound onto aluminium former, ensures excellent power handling. The "Suggested applications" charts indicate various driver loads, included the box alignment used to measure the response curve (Vb REF). The response curves shown on the diagram indicate the predicted low end response of the driver in the suggested box volume (Vb) with suggested port (Dp-Lp).

Ce haut-parleur de grave de 170 mm a été conçu pour une utilisation en grave ou sous-grave pour des enceintes compactes. La double bobine (voir "suggested applications") offre la possibilité d'adapter la réponse dans le grave en fonction des besoins. Il est destiné à des systèmes compacts haut de gamme 2 voies. Il est doté d'un cône en papier traité à profil curviligne associé à une suspension caoutchouc amortissant haute compliance. Un soin particulier a été apporté à cet ensemble afin d'assurer une réponse en fréquence linéaire ainsi qu'une coupure haute naturelle. Une nouvelle esthétique est également proposée par la présence d'une couronne décorative. La bobine haute température sur support aluminium autorise une puissance admissible importante. Le tableau "Suggested applications" indique différents types de charge dont celui utilisé pour la mesure de la courbe de réponse (Vb REF). Les courbes publiées correspondent à la réponse dans le grave pour un volume (Vb) et une dimension d'évent donnée (Vp-Lp).



**RESPONSE CURVE**

refer to page 16


**SPECIFICATIONS**

Technical Characteristics	Symbol	Value	Units
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**PRIMARY APPLICATION**

Nominal Impedance	Z	2 x 8	Ω
Resonance Frequency	Fs	45	Hz
Nominal Power Handling	P	50	W
Sensitivity	E	90	dB

**VOICE COIL**

Voice coil diameter	Ø	30	mm
Minimum Impedance	Zmin	3,6	Ω
DC Resistance	Re	3,5	Ω
Voice Coil Inductance	Lbm	0,49	mH
Voice coil Length	h	12	mm
Former	-	Aluminium	-
Number of layers	n	2 x 2	-

**MAGNET**

Magnet dimensions	Ø x h	84 x 15	mm
Magnet weight	m	0,31	kg
Flux density	B	1	T
Force factor	BL	5,5	NA <sup>1</sup>
Height of magnetic gap	He	5	mm
Stray flux	Fmag	-	Am <sup>1</sup>
Linear excursion	Xmax	±3,5	mm

**PARAMETERS**

Suspension Compliance	Cms	0,76.10 <sup>-3</sup>	mN <sup>-1</sup>
Mechanical Q Factor	Qms	4,93	-
Electrical Q Factor	Qes	0,55	-
Total Q Factor	Qts	0,49	-
Mechanical Resistance	Rms	1,1	kg s <sup>-1</sup>
Moving Mass	Mms	17,4.10 <sup>-3</sup>	kg
Effective Piston Area	S	1,36.10 <sup>2</sup>	m <sup>2</sup>
Volume Equivalent of Air at Cas	Vas	19,9.10 <sup>3</sup>	m <sup>3</sup>
Mass of speaker	M	1,05	kg

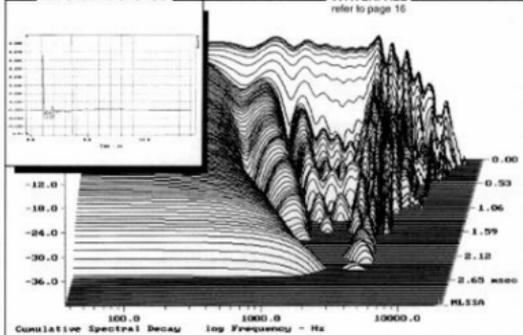
The specifications are given with voice coils connected in parallel.

**APPLICATION PARAMETERS**

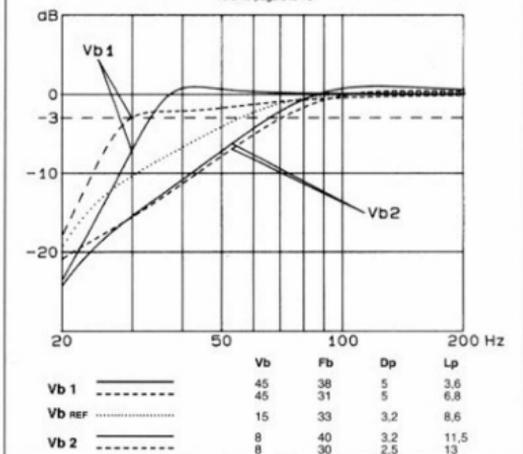
Vb	Box volume	dm <sup>3</sup>
Fb	Tuning frequency	Hz
Dp	Port diameter	cm
Lp	Port length	cm

**IMPULSE RESPONSE**
**WATERFALL**

refer to page 16


**SUGGESTED APPLICATIONS**

refer to page 8 to 13



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.