

4^{1/2"} - PAPER CONE DRIVER - 100 mm

CLASSIC SERIES

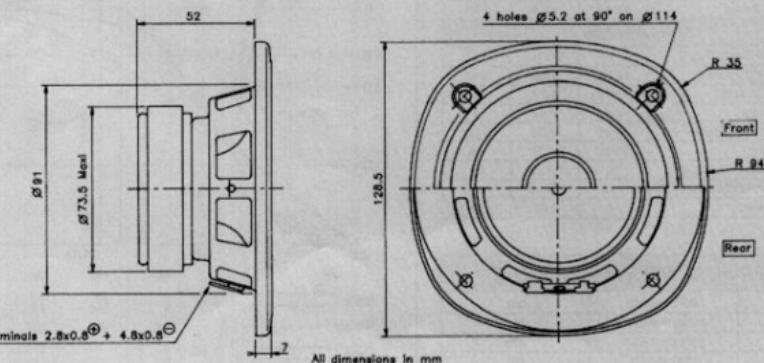
High loss-High compliance rubber surround
 Coated paper cone
 Stamped steel chassis
 High temperature voice coil
 Aluminium voice coil former
 Extended bass response (Fs : 75 Hz)

Suspension caoutchouc amortissant h^e compliance
 Cone papier traité
 Chassis acier embouti
 Bobine haute température
 Support bobine aluminium
 Réponse étendue dans le grave (Fs : 75 Hz)



The compact size, low resonance and long throw capabilities of this driver makes it ideal for use in mini-enclosures, satellites systems or as full range driver of high quality. It can also be used as a compact midrange. Featuring a state of the art curvilinear cone, which is critically damped and coupled to a high-loss rubber surround. Special consideration has been taken to ensure a smooth response and roll-off frequency. A newly designed cosmetic ring helps to reduce edge diffraction. The high temperature, 1st voice coil ensures good power handling. The "Suggested applications" charts indicate various driver loads. 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).

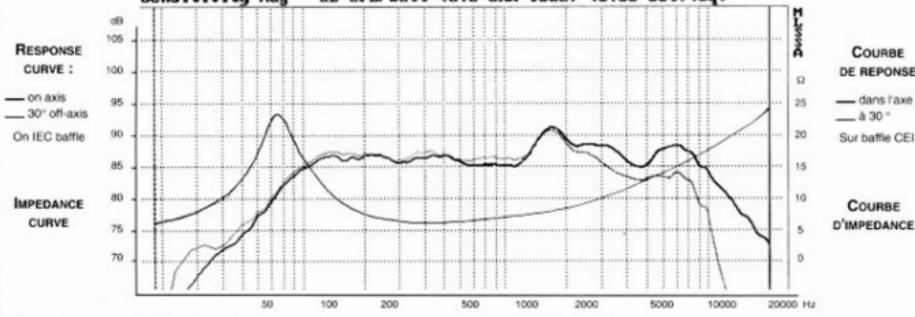
Ce Haut-Parleur très compact combine une bande passante étendue à de réelles possibilités de longues excursions. La résonance extrêmement basse pour sa taille le destine plus particulièrement à de petites enceintes, satellites pour triphonique ou comme médium compact. Il est doté d'un cône en papier traité à profil curviligne associé à une suspension en 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. 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

Sensitivity Mag - dB SPL/watt (8.0 ohm load) (0.33 oct)(eq)



SPECIFICATIONS

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

PRIMARY APPLICATION

| | | | |
|------------------------|----------------|----|----|
| Nominal Impedance | Z | 8 | Ω |
| Resonance Frequency | F _s | 75 | Hz |
| Nominal Power Handling | P | 30 | W |
| Sensitivity | E | 86 | dB |

VOICE COIL

| | | | |
|-----------------------|------------------|-----------|----|
| Voice coil diameter | Ø | 25 | mm |
| Minimum impedance | Z _{min} | 7 | Ω |
| DC Resistance | R _e | 5.7 | Ω |
| Voice Coil Inductance | L _{bm} | 0.34 | mH |
| Voice coil Length | h | 10 | mm |
| Former | - | Aluminium | - |
| Number of layers | n | 2 | - |

MAGNET

| | | | |
|------------------------|------------------|-------|-----------------|
| Magnet dimensions | Ø x h | 72x15 | mm |
| Magnet weight | m | 0.24 | kg |
| Flux density | B | 1 | T |
| Force factor | BL | 4.8 | NA ¹ |
| Height of magnetic gap | H _e | 4 | mm |
| Stray flux | F _{mag} | - | Am ¹ |
| Linear excursion | X _{max} | ±3 | mm |

PARAMETERS

| | | | |
|---------------------------------|------------------|-----------------------|--------------------|
| Suspension Compliance | C _{rms} | 0.83.10 ⁻³ | mN ⁻¹ |
| Mechanical Q Factor | Q _{rms} | 2.09 | - |
| Electrical Q Factor | Q _{es} | 0.61 | - |
| Total Q Factor | Q _{ts} | 0.47 | - |
| Mechanical Resistance | R _{rms} | 1.2 | kg s ⁻¹ |
| Moving Mass | M _{rms} | 5.3.10 ⁻³ | kg |
| Effective Piston Area | S | 0.57.10 ⁻³ | m ² |
| Volume Equivalent of Air at Cas | V _{as} | 3.8.10 ⁻³ | m ³ |
| Mass of speaker | M | 0.6 | kg |

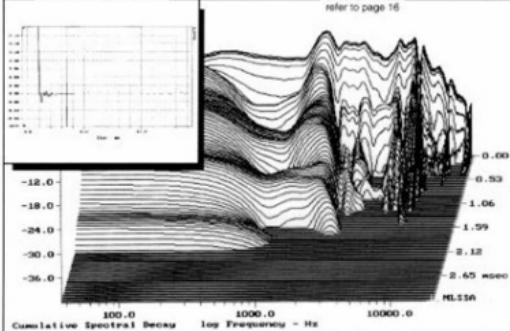
APPLICATION PARAMETERS

| | | |
|----------------|------------------|-----------------|
| V _b | Box volume | dm ³ |
| F _b | Tuning frequency | Hz |
| D _p | Port diameter | cm |
| L _p | Port length | cm |

IMPULSE RESPONSE

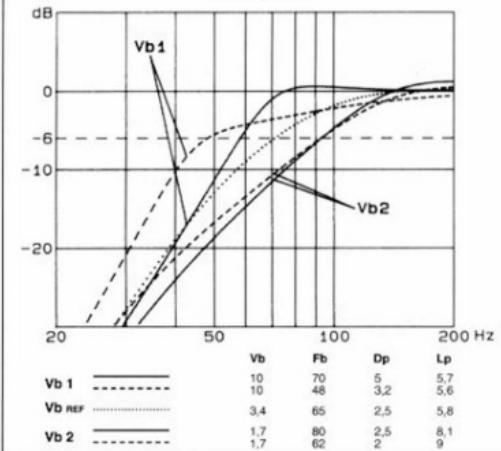
WATERFALL

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.

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