

### KEY FEATURES

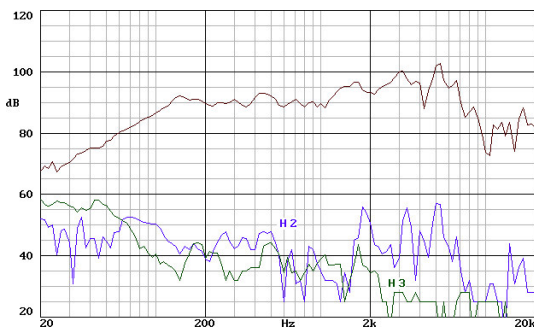
- Excellent sensitivity (95 dB)
- High power handling (170 w AES)
- 2" (51.7 mm.) aluminium voice coil
- Designed for compact bass-reflex applications
- Low weight due to the neodymium magnet system
- Optimized for the use in line array systems



### GENERAL DESCRIPTION

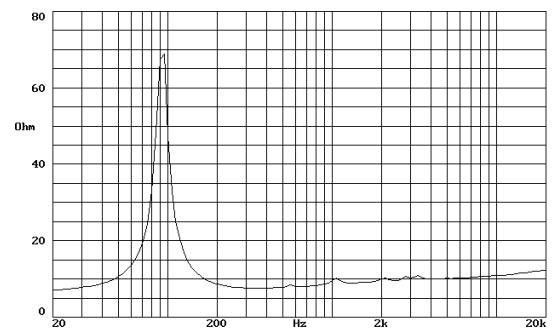
This low-mid frequency transducer is specially intended for line array applications. It is well known that it is very important to reduce the distance between transducers in this kind of systems. Taking into account this design factor, a new basket with a special shape has been developed. This new basket allows the loudspeakers to be placed closer. By the other hand, the 6G40 characteristics have been optimized in order to fit in the most demanding line array designs. This model features a high power handling (170 w AES), an excellent sensitivity (95 dB) and an extended frequency response with very low distortion (thanks to the use of a copper ring). Moreover, its T-S parameters make possible to obtain an excellent bass response when used in small bass-reflex cabinets.

### FREQUENCY RESPONSE AND DISTORTION CURVES

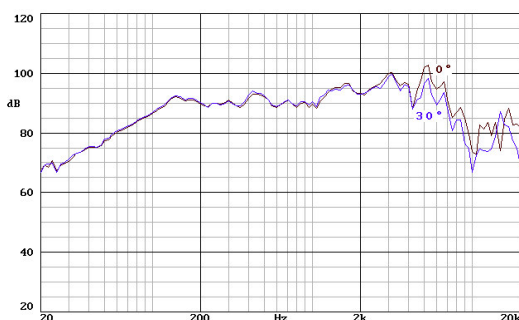


Note: on axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1w @ 1m.

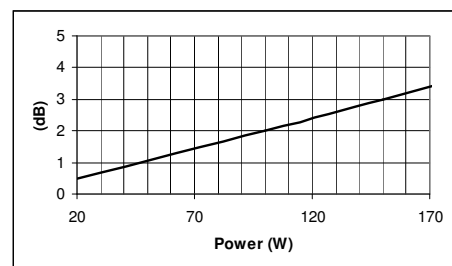
### FREE AIR IMPEDANCE CURVE



### FREQUENCY RESPONSE OUT OF AXIS



### POWER COMPRESSION LOSSES



Note: These losses are calculated from a five minutes AES power test applying band limited pink noise (80-3500 Hz). The loudspeaker is free-air standing.

### TECHNICAL SPECIFICATIONS

|                          |  |
|--------------------------|--|
| Nominal diameter         | 165 mm. 6.5 in.                        |
| Rated impedance          | 8 ohms.                                |
| Minimum impedance        | 7 ohms.                                |
| Power capacity *         | 170 w AES                              |
| Program power            | 340 w                                  |
| Sensitivity              | 95 dB 2.83v @ 1m @ 2 $\pi$             |
| Frequency range          | 70 - 9000 Hz                           |
| Recom. enclosure vol.    | 10 / 30 l 0.35 / 1.06 ft. <sup>3</sup> |
| Voice coil diameter      | 51.7 mm. 2 in.                         |
| Magnetic assembly weight | 1.5 kg. 3.3 lb.                        |
| BL factor                | 11 N / A                               |
| Moving mass              | 0.012 kg.                              |
| Voice coil length        | 9 mm.                                  |
| Air gap height           | 7 mm.                                  |
| X damage (peak to peak)  | 20 mm.                                 |

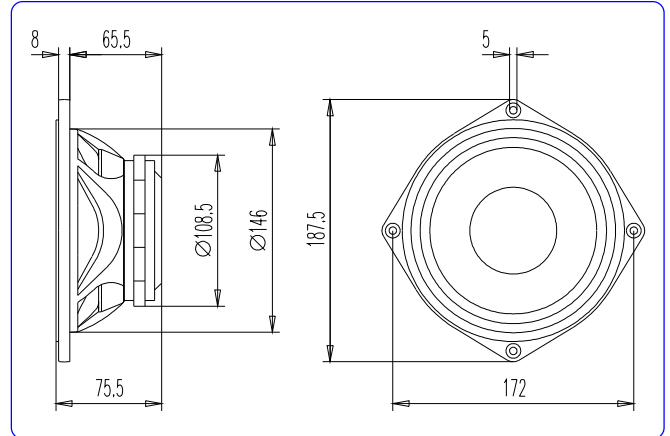
### MOUNTING INFORMATION

|                            |           |                        |
|----------------------------|-----------|------------------------|
| Overall diameter           | 187.5 mm. | 7.38 in.               |
| Bolt circle diameter       | 172 mm.   | 6.77 in.               |
| Baffle cutout diameter:    |           |                        |
| - Front mount              | 146 mm.   | 5.74 in.               |
| - Rear mount               | 146 mm.   | 5.74 in.               |
| Depth                      | 75.5 mm.  | 2.97 in.               |
| Volume displaced by driver | 0.5 l     | 0.019 ft. <sup>3</sup> |
| Net weight                 | 1.7 kg.   | 3.74 lb.               |
| Shipping weight            | 2.3 kg.   | 5.06 lb.               |

### THIELE-SMALL PARAMETERS \*\*

|  |                       |
|--|-----------------------|
| Resonant frequency, fs                       | 88 Hz                 |
| D.C. Voice coil resistance, Re               | 6.2 ohms.             |
| Mechanical Quality Factor, Qms               | 9.1                   |
| Electrical Quality Factor, Qes               | 0.34                  |
| Total Quality Factor, Qts                    | 0.33                  |
| Equivalent Air Volume to Cms, Vas            | 7.2 l                 |
| Mechanical Compliance, Cms                   | 260 $\mu$ m / N       |
| Mechanical Resistance, Rms                   | 0.76 kg / s           |
| Efficiency, $\eta_0$ (%)                     | 1.4                   |
| Effective Surface Area, Sd (m <sup>2</sup> ) | 0.0140 m <sup>2</sup> |
| Maximum Displacement, Xmax                   | 1 mm.                 |
| Displacement Volume, Vd                      | 14 cm <sup>3</sup>    |
| Voice Coil Inductance, Le @ 1 kHz            | 0.6 mH                |

### DIMENSION DRAWINGS



### MATERIALS

- **Voice coil:** aluminium wire with high temperature bonding strength. Polyimide fiber glass former able to withstand high temperatures.
- **Cone:** light and stiff paper cone.
- **Surround:** treated cloth to assure good retaining of elasticity in despite of continuing use.
- **Spider:** treated cotton fibres.
- **Metal parts:** anti-corrosion coating to resist aggressive environmental conditions.
- **Basket:** specially designed die cast aluminium basket to reduce the distance between transducers.
- **Magnet:** high energy neodymium magnet.

#### Notes:

\*The power capacity is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.

\*\*T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).