

G40 Series

KEY FEATURES

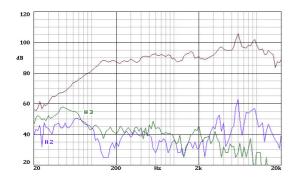
- Excellent sensitivity (93 dB)
- Good power handling (100 w AES)
- 1.5" (38.5 mm.) aluminium voice coil
- Designed for compact bass-reflex applications
- Low weight due to the neodymium magnet system
- Optimized for the use in line array systems



GENERAL DESCRIPTION

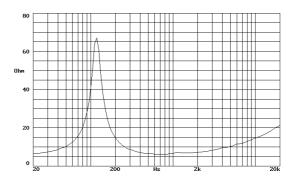
This low-mid frequency transducer is specially intended for line array applications. It is well known that is very important to reduce the distance between transducers in this kind of systems. Taking into account this design factor, a new basket with a special shape has been developed. This new basket allows the loudspeakers to be placed closer. By the other hand, the 5G40 characteristics have been optimized in order to fit in the most demanding line array designs. This model features a high power handling (100 w AES), an excellent sensitivity (93 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

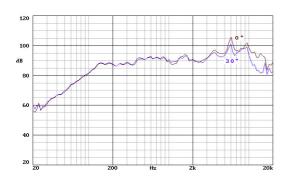


Note: on axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1w @ 1m.

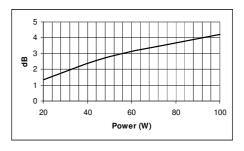
FREE AIR IMPEDANCE CURVE



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.





G40 Series

TECHNICAL SPECIFICATIONS

125 mm. 5 in.
8 ohms.
8 ohms.
100 w AES
200 w
93 dB 2.83v @ 1m @ 2π
90 - 17000 Hz
10 / 20 I 0.35 / 0.7 ft. ³
38.5 mm. 1.5 in.
1.2 kg. 2.64 lb.
10 N / A
0.007 kg.
9 mm.
7 mm.
20 mm.

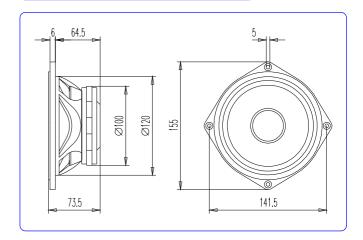
MOUNTING INFORMATION

Overall diameter	155 mm.	6.10 in.
Bolt circle diameter	141.5 mm.	5.57 in.
Baffle cutout diameter:		
- Front mount	120 mm.	4.72 in.
- Rear mount	120 mm.	4.72 in.
Depth	73.5 mm.	2.89 in.
Volume displaced by driver	0.5 l	$0.019\ ft.^{3}$
Net weight	1.3 kg.	2.86 lb.
Shipping weight	1.8 kg.	3.96 lb.

THIELE-SMALL PARAMETERS **

Resonant frequency, fs	110 Hz
D.C. Voice coil resistance, Re	6.9 ohms.
Mechanical Quality Factor, Qms	4.9
Electrical Quality Factor, Qes	0.33
Total Quality Factor, Qts	0.31
Equivalent Air Volume to Cms, Vas	3.1 l
Mechanical Compliance, Cms	300 μm / N
Mechanical Resistance, Rms	1 kg / s
Efficiency, ηο (%)	1.2
Effective Surface Area, Sd (m²)	0.0085 m ²
Maximum Displacement, Xmax	1 mm.
Displacement Volume, Vd	9 cm ³
Voice Coil Inductance, Le @ 1 kHz	0.4 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:

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^{*}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).