beyma

PROFESSIONAL LOUDSPEAKERS
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6G40/Fe

LOW FREQUENCY TRANSDUCER
G40 Series

KEY FEATURES

- Good power handling: 170 W_{AES}
- High sensitivity: 94,3 dB
- FEA optimized magnetic circuit
- Designed with MMSS technology for high control, linearity and low harmonic distortion
- Waterproof treatment for both sides of the cone
- 2” aluminium voice coil
- Demodulating ring for low harmonic distortion
- Excellent for line array applications (weight 3 kg)



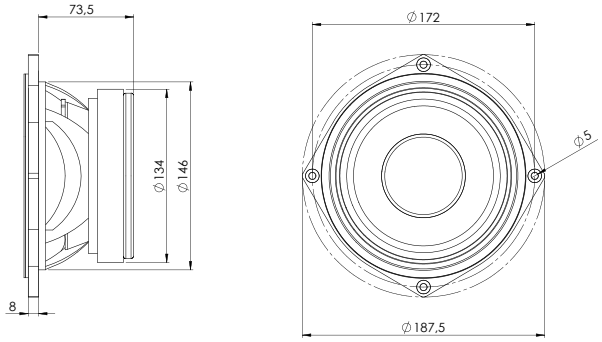
TECHNICAL SPECIFICATIONS

Nominal diameter	165 mm	6,5 in
Rated impedance		8 Ω
Minimum impedance		7,9 Ω
Power capacity*		170 W_{AES}
Program power		340 W
Sensitivity	94,3 dB	2,83V @ 1m
Frequency range		70 - 9.000 Hz
Recom. enclosure vol.	10 / 30 l	0,35 / 1,06 ft^3
Voice coil diameter	51,7 mm	2 in
Magnetic assembly weight	2,83 kg	6,24 lb
Bl factor		11 N/A
Moving mass		0,013 kg
Voice coil length		9,2 mm
Air gap height		7 mm
X_{damage} (peak to peak)		37,8 mm

THIELE-SMALL PARAMETERS**

Resonant frequency, f_s	102 Hz
D.C. Voice coil resistance, R_e	6,0 Ω
Mechanical Quality Factor, Q_{ms}	9,25
Electrical Quality Factor, Q_{es}	0,42
Total Quality Factor, Q_{ts}	0,40
Equivalent Air Volume to C_{ms}, V_{as}	5,04 l
Mechanical Compliance, C_{ms}	184 μm / N
Mechanical Resistance, R_{ms}	0,91 kg / s
Efficiency, η_0	1,24 %
Effective Surface Area, S_d	0,014 m^2
Maximum Displacement, X_{max} * **	3,1 mm
Displacement Volume, V_d	14 cm^3
Voice Coil Inductance, L_e @ f_{min}	0,5 mH

DIMENSION DRAWINGS



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	5,75 in
- Rear mount	146 mm	5,75 in
Depth	81,5 mm	3,21 in
Volume displaced by driver	0,5 l	0,02 ft^3
Net weight	3,02 kg	6,66 lb
Shipping weight	3,12 kg	6,88 lb

Notes:

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

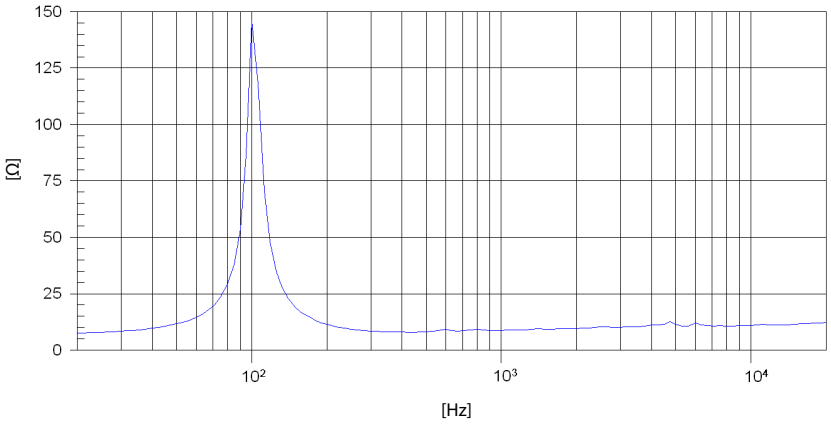
** T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

*** The X_{max} is calculated as $(L_{vc} - H_{ag})/2 + (H_{ag}/3,5)$, where L_{vc} is the voice coil length and H_{ag} is the air gap height.

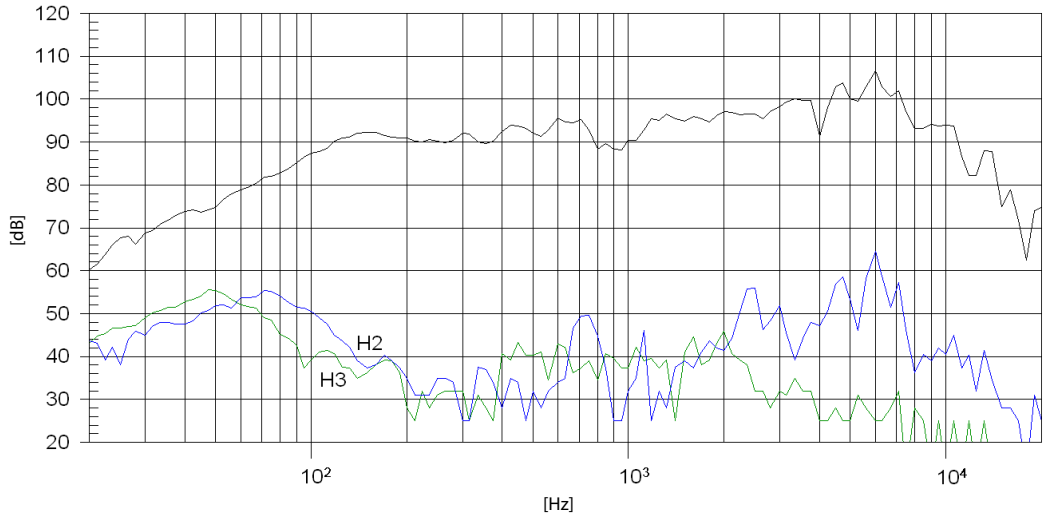
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FREE AIR IMPEDANCE CURVE



FREQUENCY RESPONSE AND DISTORTION



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

beyma
Polígono Industrial Moncada II ▪ C/. Pont Sec, 1c ▪ 46113 MONCADA - Valencia (Spain)
▪ Tel.: (34) 96 130 13 75 ▪ Fax: (34) 96 130 15 07 ▪ http://www.beyma.com ▪ E-mail: beyma@beyma.com ▪