

LOW FREQUENCY TRANSDUCER G40 Series

KEY FEATURES

- High power handling: 250 W_{AES}
- Sensitivity 95 dB (1W / 1m)
- 2,5" aluminum voice coil with polymide fiber glass former
- Extremely linear frequency response
- Low harmonic distortion

- Extended controlled displacement: X_{max} ± 6,5 mm
- 23 mm peak-to-peak excursion before damage
- Designed for woofer applications
- · Optimized for small bass-reflex cabinets





TECHNICAL SPECIFICATIONS

Nominal diameter	200 mm		8 in
Rated impedance			8 Ω
Minimum impedance			7,3 Ω
Power capacity ¹		2	250 W _{AES}
Program power ²			500 W
Sensitivity	95 dB	1W /	1m @ Z _N
Frequency range		70 -	6.000 Hz
Recom. enclosure vol.	10 / 30 I	0,3	5 / 1,06 ft ³
Voice coil diameter	63,5	mm	2,5 in
BI factor			12,2 N/A
Moving mass			0,021 kg
Voice coil length			16 mm
Air gap height			7 mm
X _{damage} (peak to peak)			23 mm

THIELE-SMALL PARAMETERS³

Resonant frequency, f _s	70 Hz
D.C. Voice coil resistance, R _e	6,1 Ω
Mechanical Quality Factor, Q _{ms}	6,8
Electrical Quality Factor, Q _{es}	0,38
Total Quality Factor, Q _{ts}	0,36
Equivalent Air Volume to C _{ms} , V _{as}	17 I
Mechanical Compliance, C _{ms}	$246~\mu m$ / N
Mechanical Resistance, R _{ms}	1,4 kg / s
Efficiency, η ₀	1,5 %
Effective Surface Area, S _d	0,022 m ²
Maximum Displacement, X _{max} ⁴	6,5 mm
Displacement Volume, V _d	143 cm ³
Voice Coil Inductance, L _e	1,3 mH

Notes:

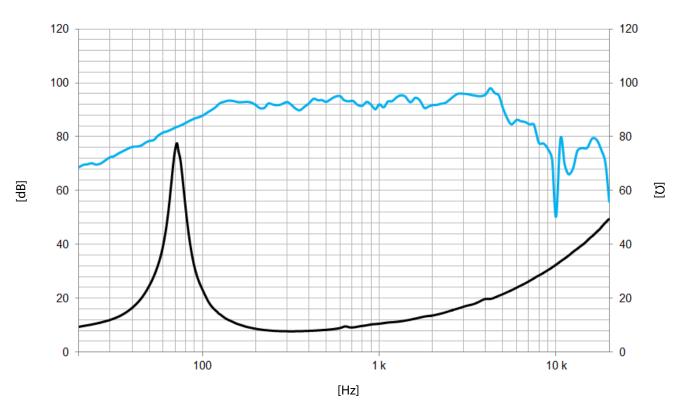
¹ The power capaticty is determined according to AES2-1984 (r2003) standard.

² Program power is defined as power capacity + 3 dB.

³ 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).

 $^{^4}$ 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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Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

MOUNTING INFORMATION

Overall diameter	212 mm	8,3 in
Bolt circle diameter	198 mm	7,8 in
Baffle cutout diameter:		
- Front mount	181 mm	7,1 in
Depth	96 mm	3,8 in
Net weight	3,3 kg	7,3 lb
Shipping weight	3,5 kg	7,6 lb

DIMENSION DRAWING

