

6G40Nd

LOW & MID FREQUENCY TRANSDUCER G40 Series

## **KEY FEATURES**

- Power handling: 170 W<sub>AES</sub>
- High sensitivity: 94 dB (1W / 1m)
- FEA optimized neodymium magnetic circuit
- Waterproof treatment for both sides of the cone

- 2" aluminium voice coil
- Shorting cap for extended response and low distortion
- Excellent for line array mid bass applications





## **TECHNICAL SPECIFICATIONS**

Nominal diameter	165 mm	6,5 in
Rated impedance		8 Ω
Minimum impedance		7,9 Ω
Power capacity <sup>1</sup>	1	70 W <sub>AES</sub>
Program power <sup>2</sup>		340 W
Sensitivity	94 dB 1W /	1m @ Z <sub>N</sub>
Frequency range	90 -	8.000 Hz
Recom. enclosure		V <sub>b</sub> = 4 I
(Bass-reflex design)	F <sub>b</sub>	= 110 Hz
Voice coil diameter	50,8 mm	2 in
BI factor		11,2 N/A
Moving mass		0,014 kg
Voice coil length		9 mm
Air gap height		7 mm
X <sub>damage</sub> (peak to peak)		20 mm

## THIELE-SMALL PARAMETERS<sup>3</sup>

Resonant frequency, f <sub>s</sub>	85 Hz
D.C. Voice coil resistance, R <sub>e</sub>	6 Ω
Mechanical Quality Factor, Q <sub>ms</sub>	3,7
Electrical Quality Factor, Q <sub>es</sub>	0,36
Total Quality Factor, Q <sub>ts</sub>	0,33
Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub>	71
Mechanical Compliance, C <sub>ms</sub>	250 μm / N
Mechanical Resistance, R <sub>ms</sub>	2 kg / s
Efficiency, η <sub>0</sub>	1,2 %
Effective Surface Area, S <sub>d</sub>	0,014 m <sup>2</sup>
Maximum Displacement, X <sub>max</sub> <sup>4</sup>	3 mm
Displacement Volume, V <sub>d</sub>	14 cm <sup>3</sup>
Voice Coil Inductance, L <sub>e</sub>	0,2 mH

Notes

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

<sup>2</sup> Program power is defined as power capacity + 3 dB.

<sup>3</sup> 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).

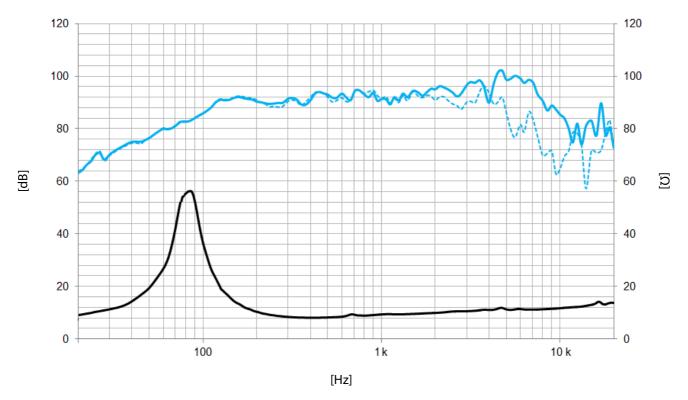
<sup>4</sup> The  $X_{max}$  is calculated as  $(L_{vc} - H_{ag})/2 + (H_{ag}/3,5)$ , where  $L_{vc}$  is the voice coil length and  $H_{ag}$  is the air gap height.



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

Frequency response on axis Frequency response 45° off axis

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Overall diameter	187,5 mm	7,4 in
Bolt circle diameter	172 mm	6,8 in
Baffle cutout diameter:		
- Front mount	146 mm	5,7 in
Depth	77,5 mm	3,1 in
Net weight	1,6 kg	3,5 lb
Shipping weight	1,8 kg	4,0 lb

## **DIMENSION DRAWING**

