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PROFESSIONAL LOUDSPEAKERS
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15G40

LOW FREQUENCY TRANSDUCER
G40 Series

KEY FEATURES

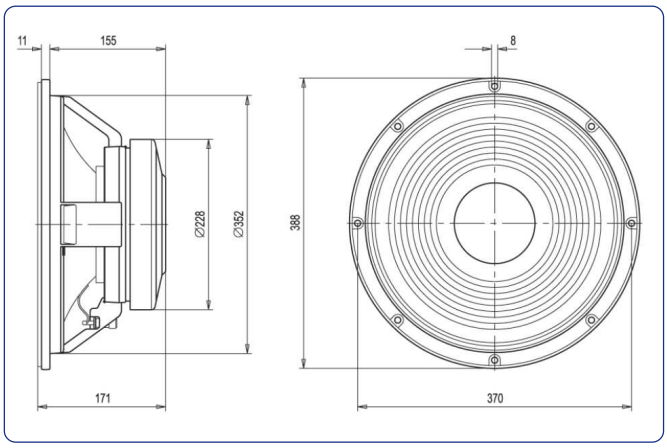
- High power handling: 700 W_{AES}
- High sensitivity: 97 dB
- 4” edgewound copper voice coil
- Optimum winding length for increased linear excursion
- Waterproof paper cone
- CONEX spider for higher resistance and consistency
- Extended controlled displacement: X_{max} ± 9,5 mm
- Designed for woofer applications



TECHNICAL SPECIFICATIONS

Nominal diameter	380 mm	15 in
Rated impedance		8 Ω
Minimum impedance		7 Ω
Power capacity*		700 W_{AES}
Program power		1400 W
Sensitivity	97 dB	1W @ 1m @ 2π
Frequency range		40 - 1.500 Hz
Recom. enclosure vol.	40 / 150 l	1,4 / 6 ft^3
Voice coil diameter	100 mm	4 in
Bl factor		23,3 N/A
Moving mass		0,126 kg
Voice coil length		23,5 mm
Air gap height		10 mm
X_{damage} (peak to peak)		33 mm

DIMENSION DRAWINGS



THIELE-SMALL PARAMETERS**

Resonant frequency, f_s	38 Hz
D.C. Voice coil resistance, R_e	5,9 Ω
Mechanical Quality Factor, Q_{ms}	8
Electrical Quality Factor, Q_{es}	0,33
Total Quality Factor, Q_{ts}	0,32
Equivalent Air Volume to C_{ms}, V_{as}	128 l
Mechanical Compliance, C_{ms}	133 μm / N
Mechanical Resistance, R_{ms}	3,8 kg / s
Efficiency, η_0	2,2 %
Effective Surface Area, S_d	0,083 m^2
Maximum Displacement, X_{max} * **	9,5 mm
Displacement Volume, V_d	790 cm^3
Voice Coil Inductance, L_e @ 1 kHz	2,7 mH

MOUNTING INFORMATION

Overall diameter	388 mm	15,28 in
Bolt circle diameter	370 mm	14,57 in
Baffle cutout diameter:		
- Front mount	352 mm	13,86 in
Depth	171 mm	6,70 in
Net weight	10,4 kg	22,9 lb
Shipping weight	11,5 kg	25,4 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.

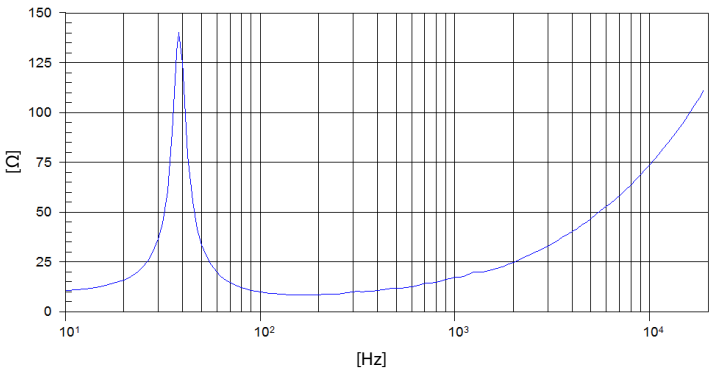
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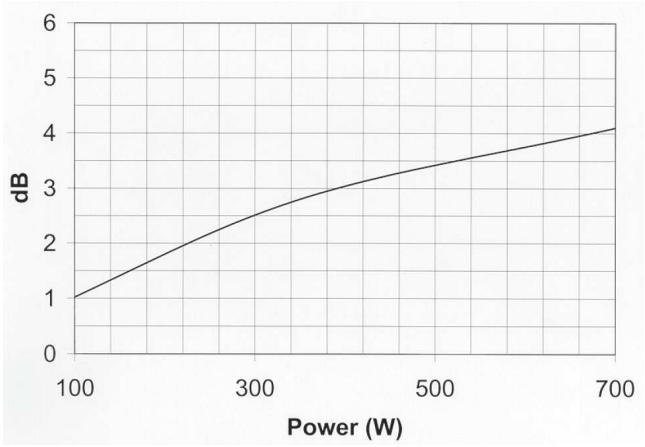
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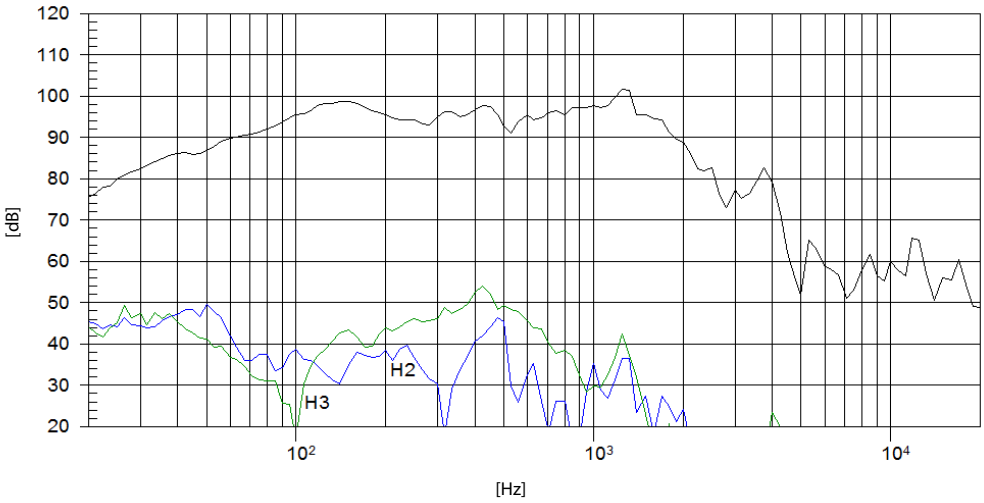
FREE AIR IMPEDANCE CURVE



POWER COMPRESSION LOSSES



FREQUENCY RESPONSE AND DISTORTION



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

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