

15G40 LOW FREQUENCY TRANSDUCER G40 Series

KEY FEATURES

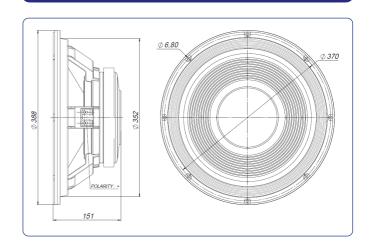
- High power handling: 700 WAES
- High sensitivity: 97 dB
- 4" edgewound copper voice coil
- Optimum winding length for increased linear excursion
- Waterproof paper cone
- CONEX spider for higher resistance and consistency
- Extended controlled displacement: X_{max} ± 9,5 mm
- Designed for woofer applications



TECHNICAL SPECIFICATIONS

Nominal diameter Rated impedance	380 mm 15 in 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 I 1,4 / 6 ft ³
Voice coil diameter	100 mm 4 in
BI 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, Qts	0,32
Equivalent Air Volume to C _{ms} , V _{as}	128 I
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	15,3 in
Bolt circle diameter	370 mm	14,6 in
Baffle cutout diameter:		
- Front mount	352 mm	13,9 in
Depth	151 mm	5,9 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).

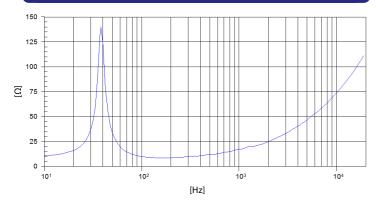
*** The X_{max} is calculated as $(L_{VC}$ - $H_{ag})/2$ + $(H_{ag}/3,5)$, where L_{VC} is the voice coil length and H_{ag} is the air gap height.



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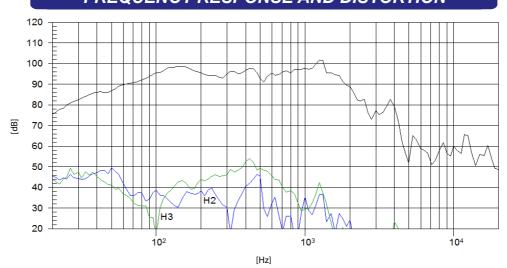
FREE AIR IMPEDANCE CURVE



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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