

18G550/S

LOW FREQUENCY TRANSDUCER
G-Series

KEY FEATURES

- High power handling 18" subwoofer
- High sensitivity: 97 dB (1W / 1m)
- 4,5" edgewound copper voice coil with polymide fiber glass former
- Weatherproof cone with treatment for both sides
- CONEX spider for higher resistance and consistency
- Extended controlled displacement: X_{max} ± 10 mm
- 40 mm peak-to-peak excursion before damage
- Designed for high demanding subwoofer and woofer applications





TECHNICAL SPECIFICATIONS

Nominal diameter	460 mm	18 in
Rated impedance		8 Ω
Minimum impedance		6,8 Ω
Power capacity 1		900 W _{AES}
Program power ²		1.800 W
Sensitivity	97 dB 1W /	1m @ Z _N
Frequency range	35 -	- 1.500 Hz
Recom. enclosure		V _b = 200 I
(Bass-reflex design)	I	= _b = 50 Hz
Voice coil diameter	114,3 mm	4,5 in
BI factor		23,4 N/A
Moving mass		0,204 kg
Voice coil length		25 mm
Air gap height		12 mm
X _{damage} (peak to peak)		40 mm

THIELE-SMALL PARAMETERS³

Resonant frequency, f _s	33 Hz
D.C. Voice coil resistance, R _e	5,6 Ω
Mechanical Quality Factor, Q _{ms}	7
Electrical Quality Factor, Qes	0,42
Total Quality Factor, Qts	0,40
Equivalent Air Volume to C _{ms} , V _{as}	290 I
Mechanical Compliance, C _{ms}	117 μm / N
Mechanical Resistance, R _{ms}	6 kg / s
Efficiency, η ₀	2,25 %
Effective Surface Area, S _d	0,1320 m ²
Maximum Displacement, X _{max} ⁴	10 mm
Displacement Volume, V _d	1320 cm ³
Voice Coil Inductance, Le	1,8 mH

Notes:

 $^{^{\}rm 1}$ The power capaticty is determined according to AES2-1984 (r2003) standard.

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

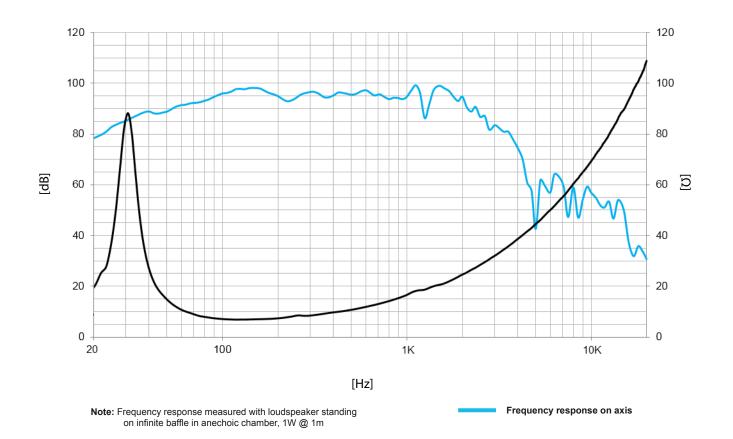
³ T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

 $^{^4}$ 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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MOUNTING INFORMATION

Overall diameter	461mm	18,19 in
Bolt circle diameter	438 mm	17,24 in
Baffle cutout diameter:		
- Front mount	415 mm	16,4 in
Depth	203 mm	8 in
Net weight	12 kg	26.45 lb
Shipping weight	13,3 kg	29,32 lb

DIMENSION DRAWING

