

KEY FEATURES

- High power handling: 1400 W_{AES}
- Malt Cross® Cooling System
- Low power compression losses
- High sensitivity: 98,5 dB
- FEA optimized ferrite magnetic circuit
- Designed with MMSS technology for high control, linearity and low harmonic distortion
- Optimized nonlinear parameters
- Waterproof cone with treatment for both sides of the cone
- 4" DUO double layer inner/outer voice coil
- Aluminium demodulating ring
- Extended controlled displacement: $X_{\max} \pm 10$ mm
- Massive mechanical displacement capability: $X_{\text{damage}} \pm 55$ mm



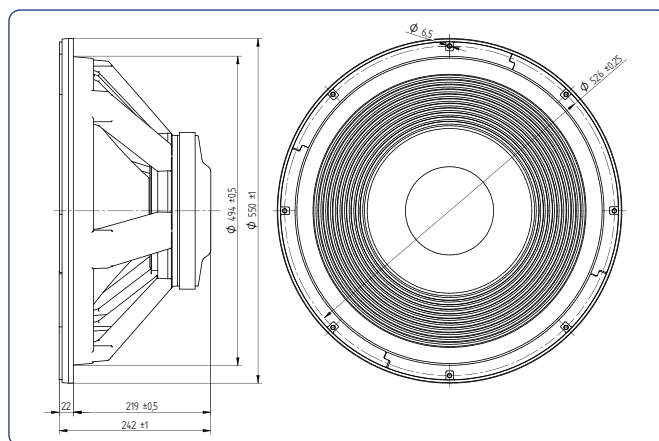
TECHNICAL SPECIFICATIONS

Nominal diameter	540 mm	21 in
Rated impedance		8 Ω
Minimum impedance		5,4 Ω
Power capacity*	1.400 W _{AES}	
Program power	2.800 W	
Sensitivity	98,5 dB @ 1W @ Z _N	
Frequency range	25 - 1.800 Hz	
Recom. enclosure vol.	100 / 250 l	3,5 / 8,75 ft ³
Voice coil diameter	100 mm	4 in
Magnetic assembly weight	14,4 kg	31,8 lb
BI factor		28,2 N/A
Moving mass	0,298 kg	
Voice coil length	25 mm	
Air gap height	12 mm	
X _{damage} (peak to peak)	55 mm	

THIELE-SMALL PARAMETERS**

Resonant frequency, f_s	30 Hz
D.C. Voice coil resistance, R_e	5,2 Ω
Mechanical Quality Factor, Q_{ms}	7,44
Electrical Quality Factor, Q_{es}	0,36
Total Quality Factor, Q_{ts}	0,34
Equivalent Air Volume to C_{ms} , V_{as}	401,5 l
Mechanical Compliance, C_{ms}	94 μm / N
Mechanical Resistance, R_{ms}	7,51 kg / s
Efficiency, η_0	2,83 %
Effective Surface Area, S_d	0,1734 m ²
Maximum Displacement, X_{\max} ***	10 mm
Displacement Volume, V_d	1.729 cm ³
Voice Coil Inductance, L_e	1,3 mH

DIMENSION DRAWINGS



MOUNTING INFORMATION

Overall diameter	550 mm	21,65 in
Bolt circle diameter	526 mm	20,71 in
Baffle cutout diameter:		
- Front mount	494 mm	19,45 in
- Rear mount	511 mm	20,12 in
Depth	242 mm	9,53 in
Volume displaced by driver	20 l	0,71 ft ³
Net weight	19,9 kg	43,87 lb
Shipping weight	22,6 kg	50,0 lb

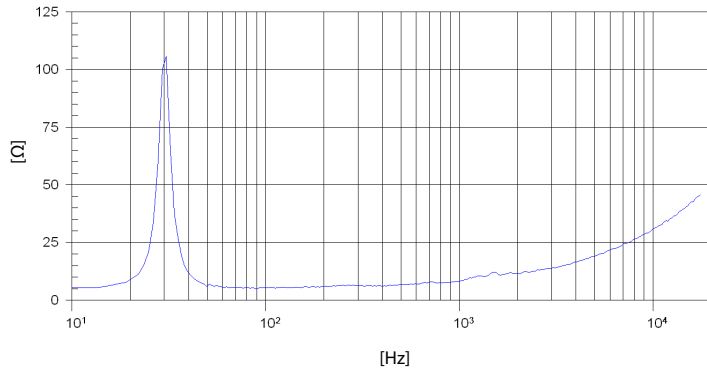
Notes:

* The power capacity is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.

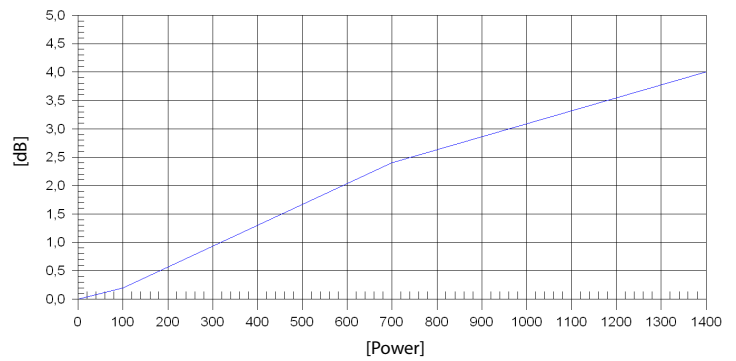
** T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

*** 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.

FREE AIR IMPEDANCE CURVE

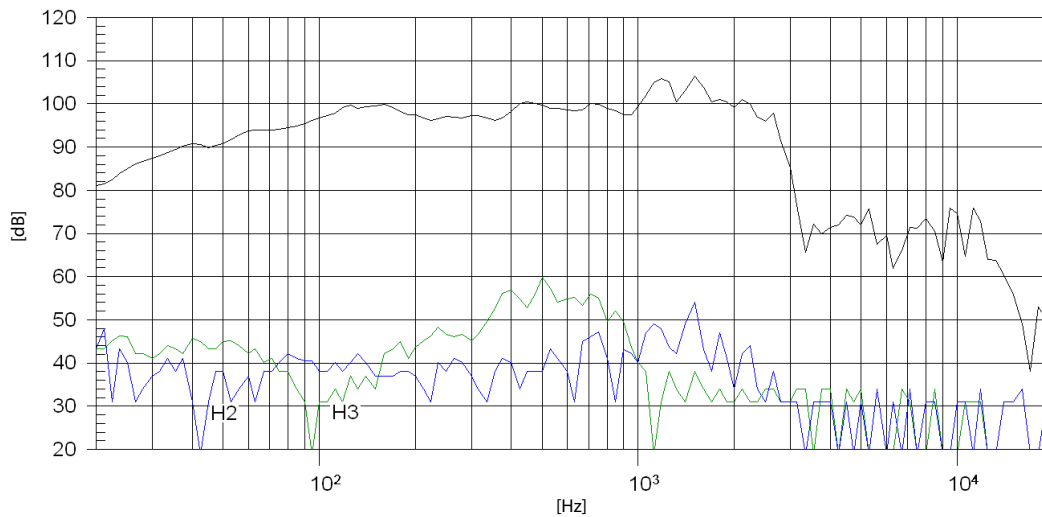


POWER COMPRESSION LOSSES



Note: Power compression losses were calculated after 5 minutes period applying a pink noise signal filtered between 25 and 200 Hz.

FREQUENCY RESPONSE AND DISTORTION



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