

KEY FEATURES

- High power handling: 700 W_{AES}
- High sensitivity: 98 dB
- FEA optimized magnetic circuit
- Designed with MMSS technology for high control, linearity and low harmonic distortion.
- CONEX spider for higher resistance and consistency.
- Waterproof treatment for both sides of the cone.
- 4" DUO double layer inner/outer voice coil.
- Extended controlled displacement: $X_{\max} \pm 9$ mm
- Massive mechanical displacement capability: $X_{\text{damage}} \pm 47$ mm

TECHNICAL SPECIFICATIONS

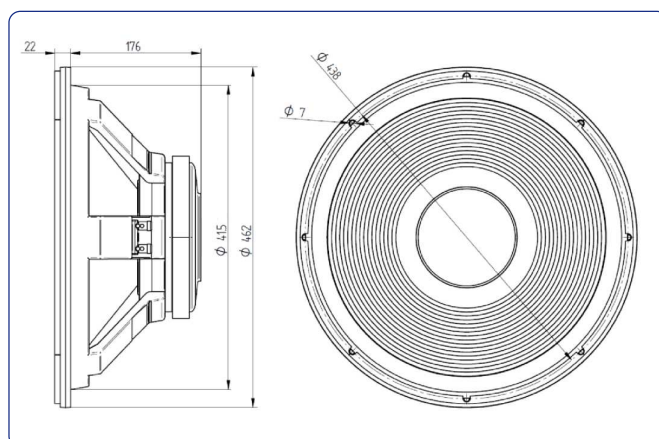
Nominal diameter	460 mm	18 in
Rated impedance		8 Ω
Minimum impedance		6,4 Ω
Power capacity*	700 W _{AES}	
Program power	1400 W	
Sensitivity	98 dB	1W @ 1m @ 2 π
Frequency range	25 - 1.000 Hz	
Recom. enclosure vol.	80 / 250 l	2,8 / 8 ft ³
Voice coil diameter	100 mm	4 in
Magnetic assembly weight	9 kg	19,84 lb
BI factor		21,8 N/A
Moving mass		0,215 kg
Voice coil length		20 mm
Air gap height		10 mm
X_{damage} (peak to peak)		47 mm

THIELE-SMALL PARAMETERS**

Resonant frequency, f_s	35 Hz
D.C. Voice coil resistance, R_e	5,1 Ω
Mechanical Quality Factor, Q_{ms}	15,7
Electrical Quality Factor, Q_{es}	0,5
Total Quality Factor, Q_{ts}	0,48
Equivalent Air Volume to C_{ms} , V_{as}	236 l
Mechanical Compliance, C_{ms}	94,5 $\mu\text{m} / \text{N}$
Mechanical Resistance, R_{ms}	3,1 kg / s
Efficiency, η_0	1,91 %
Effective Surface Area, S_d	0,132 m ²
Maximum Displacement, X_{\max} ***	9 mm
Displacement Volume, V_d	1178 cm ³
Voice Coil Inductance, L_e @ 1 kHz	2,1 mH



DIMENSION DRAWINGS



MOUNTING INFORMATION

Overall diameter	462 mm	18,19 in
Bolt circle diameter	438 mm	17,24 in
Baffle cutout diameter:		
- Front mount	415 mm	16,33 in
- Rear mount	418 mm	16,46 in
Depth	198 mm	7,79 in
Volume displaced by driver	13 l	0,46 ft ³
Net weight	11,7 kg	25,7 lb
Shipping weight	13,2 kg	29,0 lb

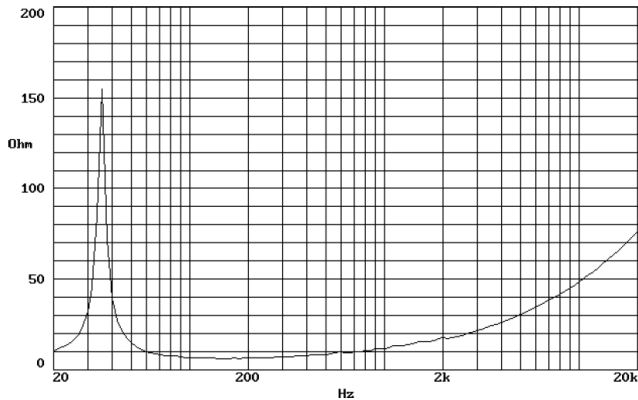
Notes:

* 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.

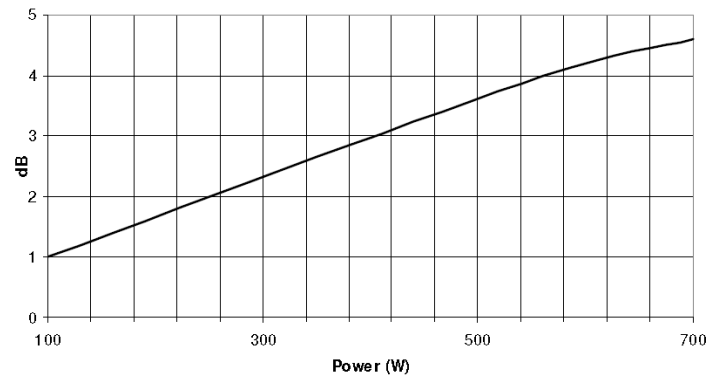
** T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

*** 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.

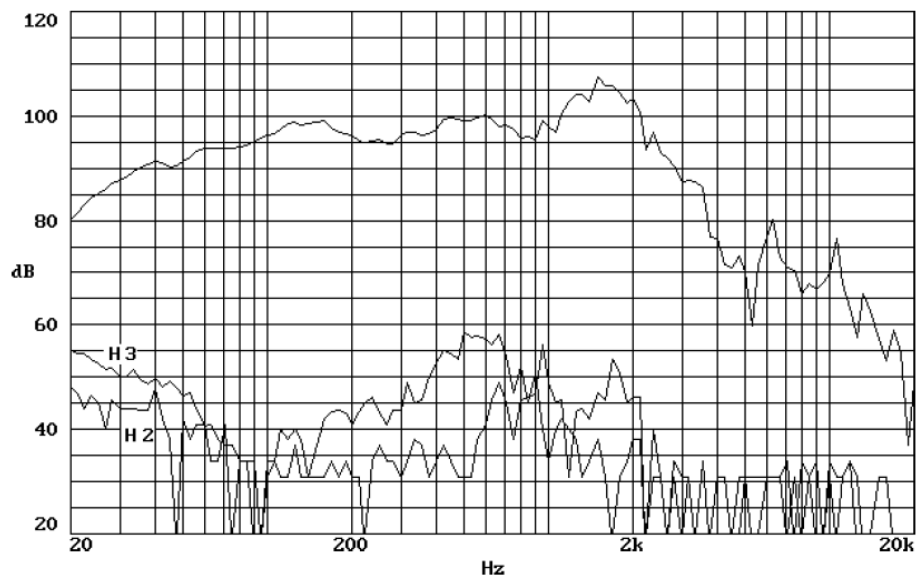
FREE AIR IMPEDANCE CURVE



POWER COMPRESSION LOSSES



FREQUENCY RESPONSE AND DISTORTION



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