

## KEY FEATURES

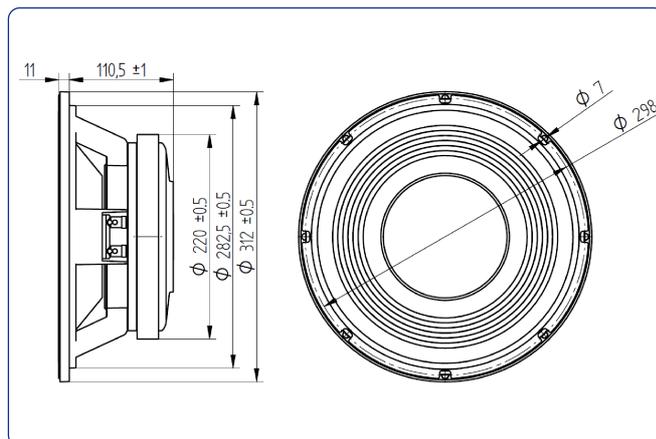
- High power handling: 700 w AES
- High sensitivity: 96 dB
- FEA optimized magnetic circuit
- Designed with MMSS technology for high control, linearity and low harmonic distortion
- CONEX spider for higher resistance and consistency
- Waterproof treatment for both sides of the cone
- 4" DUO double layer inner/outer voice coil
- Extended controlled displacement:  $X_{max} \pm 9$  mm
- Massive mechanical displacement capability:  $X_{damage} \pm 58$ mm



## TECHNICAL SPECIFICATIONS

Nominal diameter	300mm. 12 in.
Rated impedance	8 ohms
Minimum impedance	7.1 ohms
Power capacity*	700 w AES
Program power	1400 w
Sensitivity	96 dB 2.83v @ 1m @ 2π
Frequency range	35 - 2000 Hz
Recom. enclosure vol.	12 / 60 l 0.7 / 2.24 ft. <sup>3</sup>
Voice coil diameter	100 mm. 4 in.
Magnetic assembly weight	9 kg. 19.84 lb.
BL factor	20 N / A
Moving mass	0.102 kg.
Voice coil length	20 mm
Air gap height	10 mm
X damage (peak to peak)	58 mm

## DIMENSION DRAWINGS



## THIELE-SMALL PARAMETERS\*\*

Resonant frequency, $f_s$	49 Hz
D.C. Voice coil resistance, $R_e$	5.1 ohms
Mechanical Quality Factor, $Q_{ms}$	15.3
Electrical Quality Factor, $Q_{es}$	0.4
Total Quality Factor, $Q_{ts}$	0.38
Equivalent Air Volume to $C_{ms}$ , $V_{as}$	43l
Mechanical Compliance, $C_{ms}$	99 $\mu$ m / N
Mechanical Resistance, $R_{ms}$	2.1 kg / s
Efficiency, $\eta_o$ (%)	1.21
Effective Surface Area, $S_d$ (m <sup>2</sup> )	0.055 m <sup>2</sup>
Maximum Displacement, $X_{max}$ ***	9 mm
Displacement Volume, $V_d$	500 cm <sup>3</sup>
Voice Coil Inductance, $L_e$ @ $Z_{min}$	2.1 mH

## MOUNTING INFORMATION

Overall diameter	312 mm.	12.28 in.
Bolt circle diameter	298 mm.	11.73 in.
<b>Baffle cutout diameter:</b>		
- Front mount	283 mm.	11.14 in.
- Rear mount	280 mm.	11.02 in.
Depth	123 mm.	4.84 in.
Volume displaced by driver	5,5 l.	0.14 ft. <sup>3</sup>
Net weight	9.7kg.	21.39 lb.
Shipping weight	10.4 kg.	22.92 lb.

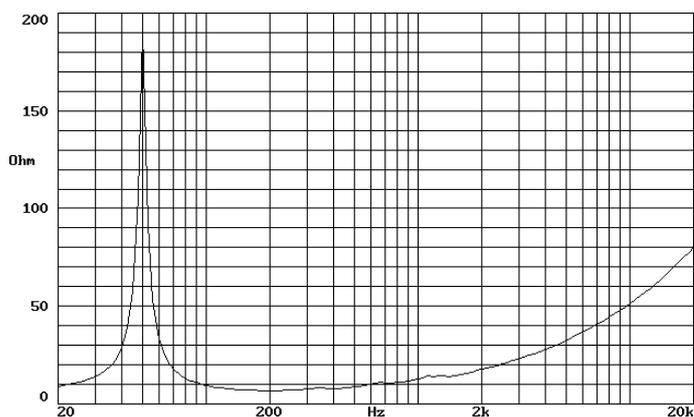
### Notes:

\*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.

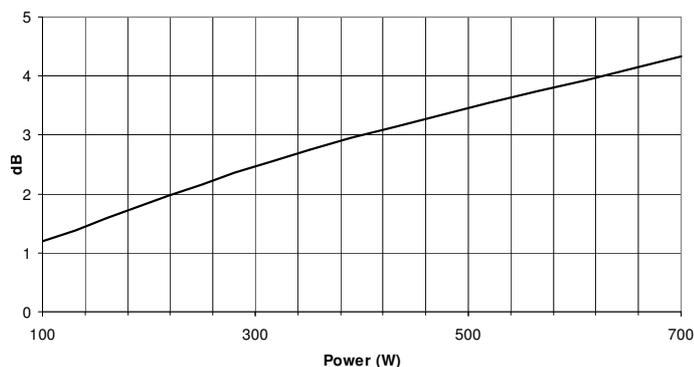
\*\*T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

\*\*\*The  $X_{max}$  is calculated as  $(L_{vc} - Hag)/2 + Hag/3.5$ , where  $L_{vc}$  is the voice coil length and  $Hag$  is the air gap height.

### FREE AIR IMPEDANCE CURVE

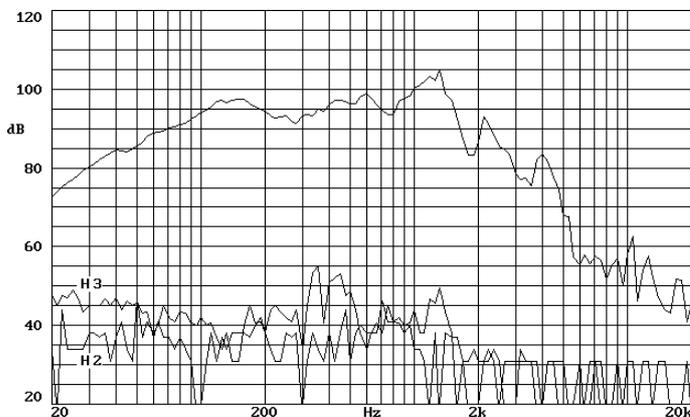


### POWER COMPRESSION LOSSES



Note: Power Compression Losses were calculated after 5 minutes period applying a pink noise signal filtered between 50 and 500 Hz.

### FREQUENCY RESPONSE AND DISTORTION



Note: on axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 2.83V @ 1m.