

## KEY FEATURES



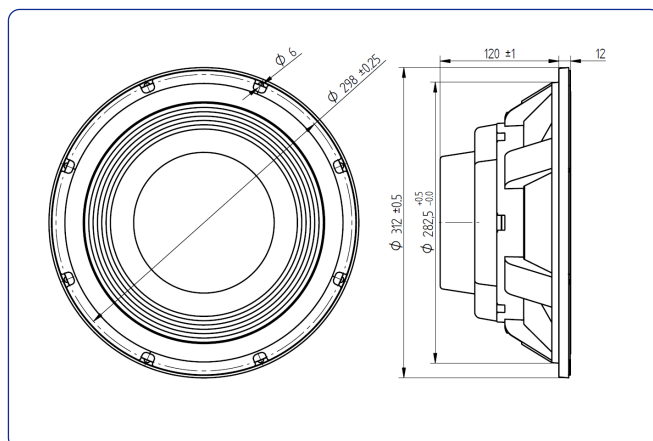
- HELICEX® cooling technology
- 1200W AES power handling capacity
- High sensitivity: 96dB @ 2.83v
- Low resonant frequency: 45Hz
- Extended controlled displacement:  $X_{max} \pm 10$  mm
- Massive mechanical displacement capability:  $X_{pp}$  60mm
- Designed with MMSS technology
- 4" DUO double inner/outer voice coil winding
- CONEX Spider



## TECHNICAL SPECIFICATIONS

Nominal diameter	300mm. 12 in.
Rated impedance	8 ohms
Minimum impedance	6.2 ohms
Power capacity*	1200 w AES
Program power	2400 w
Sensitivity	96 dB 2.83v @ 1m @ 2 $\pi$
Frequency range	25 - 1800 Hz
Maximum Recom. Frequency	200 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	4.62 kg. 10.16 lb.
BL factor	25.3 N / A
Moving mass	0.118 kg.
Voice coil length	25 mm
Air gap height	14 mm
X damage (peak to peak)	60 mm

## DIMENSION DRAWINGS



## THIELE-SMALL PARAMETERS\*\*

Resonant frequency, $f_s$	45 Hz
D.C. Voice coil resistance, $R_e$	4.9 ohms
Mechanical Quality Factor, $Q_{ms}$	12.07
Electrical Quality Factor, $Q_{es}$	0.27
Total Quality Factor, $Q_{ts}$	0.26
Equivalent Air Volume to $C_{ms}$ , $V_{as}$	45l
Mechanical Compliance, $C_{ms}$	105.5 $\mu$ m / N
Mechanical Resistance, $R_{ms}$	2.77 kg / s
Efficiency, $\eta_0$ (%)	1.47
Effective Surface Area, $S_d$ (m <sup>2</sup> )	0.055 m <sup>2</sup>
Maximum Displacement, $X_{max}$ ***	10 mm
Displacement Volume, $V_d$	550 cm <sup>3</sup>
Voice Coil Inductance, $L_e$ @ 1 kHz	3.25 mH

## MOUNTING INFORMATION

Overall diameter	312 mm. 12.28 in.
Bolt circle diameter	298 mm. 11.73 in.
Baffle cutout diameter:	
- Front mount	283 mm. 11.14 in.
- Rear mount	280 mm. 11.02 in.
Depth	132 mm. 5.20 in.
Volume displaced by driver	4 l. 0.14 ft. <sup>3</sup>
Net weight	7.2 kg. 15.84 lb.
Shipping weight	8 kg. 17.6 lb.

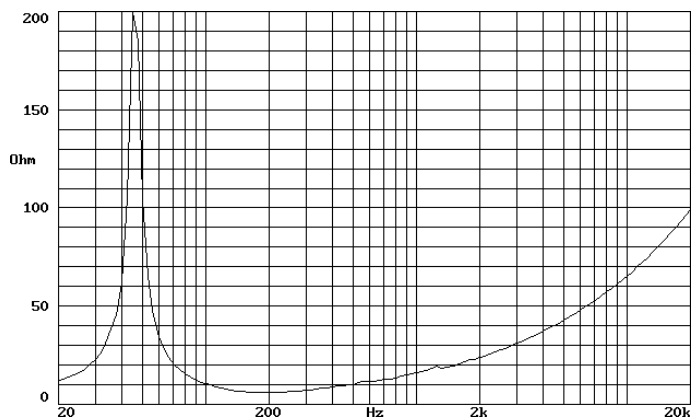
### Notes:

\*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.

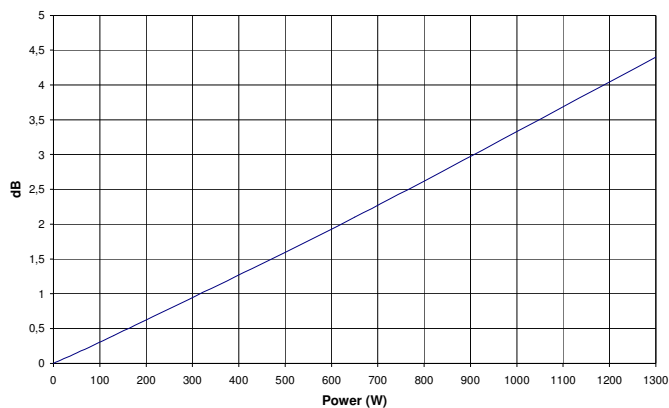
\*\*T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

\*\*\*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

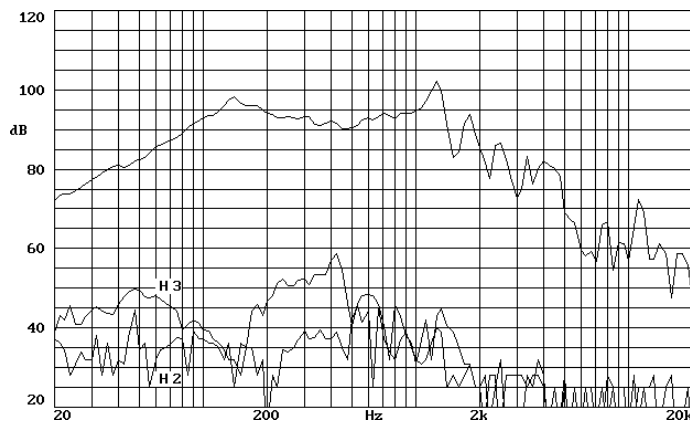


## POWER COMPRESSION LOSSES



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