

KEY FEATURES

- High power handling: 1.000 W program power
- 2,5" copper wire voice coil
- Beyma's Malt Cross® ultimate Cooling System
- Low power compression losses
- High sensitivity: 98 dB
- FEA optimized magnetic circuit
- Designed with MMSS technology for high control, linearity and low harmonic distortion. LSI optimized parameters
- Aluminum demodulating ring
- Waterproof cone treatment on both sides of the cone
- Extended controlled displacement: $X_{max} \pm 8$ mm
- $X_{damage} \pm 40$ mm
- Weight 5,8 kg
- Optimized for 2 or 3 way PA systems and line array for ultimate professional applications

TECHNICAL SPECIFICATIONS

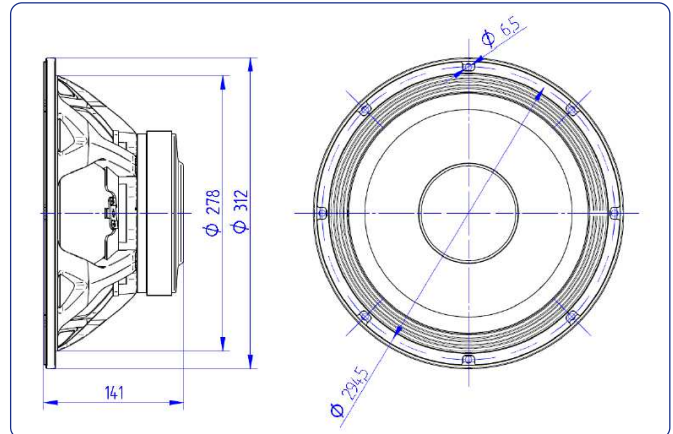
Nominal diameter	300 mm	12 in
Rated impedance		8 Ω
Minimum impedance		5,8 Ω
Power capacity*	500 W _{AES}	
Program power	1.000 W	
Sensitivity	98 dB @ 1W @ Z _N	
Frequency range	50 - 5.500 Hz	
Recom. enclosure vol.	30 / 100 l	1,06 / 3,53 ft ³
Voice coil diameter	63,5 mm	2,5 in
BI factor		17,3 N/A
Moving mass		0,059 kg
Voice coil length		19,5 mm
Air gap height		10 mm
X _{damage} (peak to peak)		40 mm

THIELE-SMALL PARAMETERS**

Resonant frequency, f_s	57 Hz
D.C. Voice coil resistance, R_e	5,5 Ω
Mechanical Quality Factor, Q_{ms}	8,58
Electrical Quality Factor, Q_{es}	0,39
Total Quality Factor, Q_{ts}	0,38
Equivalent Air Volume to C_{ms} , V_{as}	54,9 l
Mechanical Compliance, C_{ms}	128 μ m / N
Mechanical Resistance, R_{ms}	2,50 kg / s
Efficiency, η_0	2,55 %
Effective Surface Area, S_d	0,055 m ²
Maximum Displacement, X_{max} ***	8 mm
Voice Coil Inductance, L_e	0,7 mH



DIMENSION DRAWINGS



MOUNTING INFORMATION

Overall diameter	312 mm	12,28 in
Bolt circle diameter	294,5 mm	11,59 in
Baffle cutout diameter:		
- Front mount	278 mm	10,94 in
Depth	141 mm	5,55 in
Net weight	5,8 kg	12,9 lb

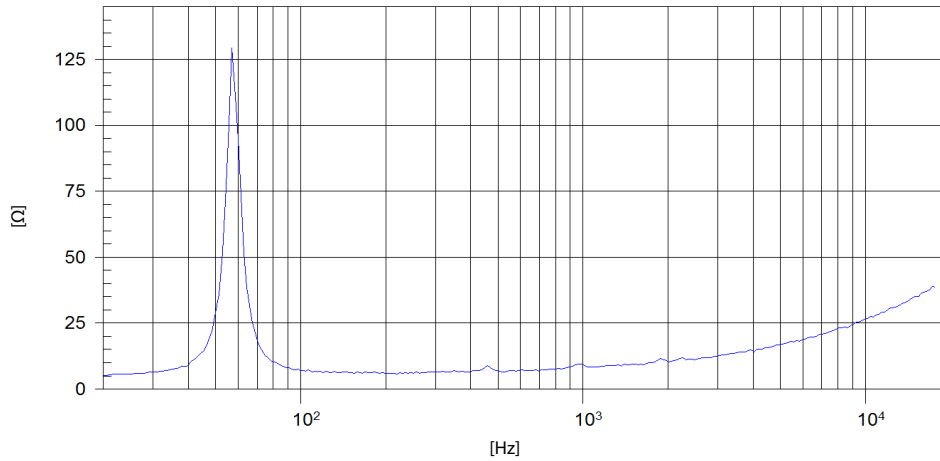
Notes:

* 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.

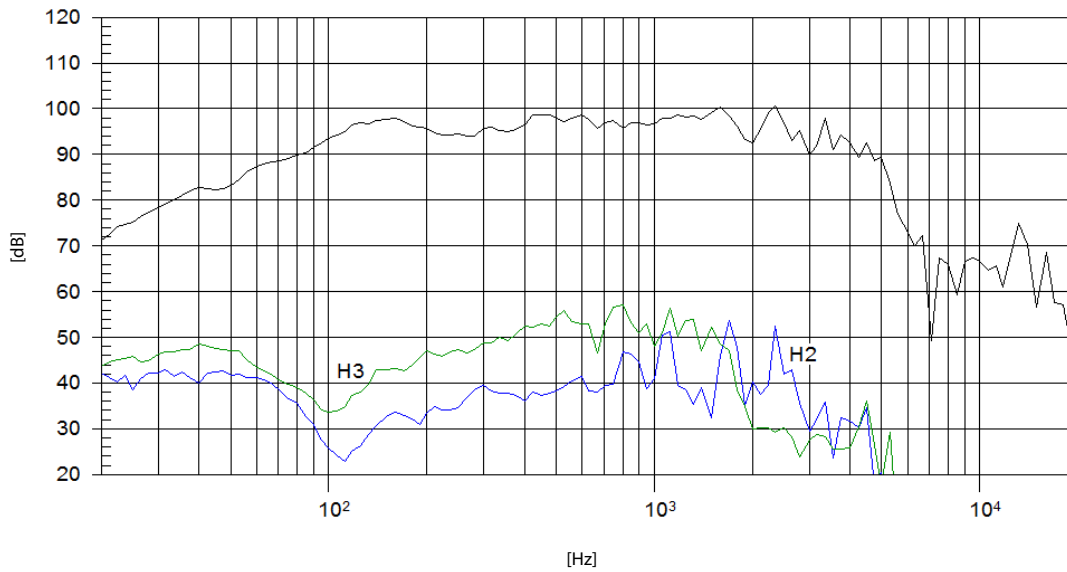
** T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

*** 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



FREQUENCY RESPONSE AND DISTORTION



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