

KEY FEATURES

- 12" bass loudspeaker and 2" exit compression driver
- Power handling: 350 / 90 W_{AES} (LF / HF)
- High sensitivity: 98 / 105 dB (1W / 1m) (LF / HF)
- Extended and linear frequency response
- Demodulating rings in both LF and HF units
- 4" aluminium voice coil for LF unit
- 2,85" aluminium voice coil for HF unit
- Composite titanium / polyester diaphragm
- Common neodymium magnet system design (low weight)
- Designed for compact bass-reflex cabinets



TECHNICAL SPECIFICATIONS

Nominal diameter	300 mm	12 in
Rated impedance (LF/HF)	8 / 16 Ω	
Minimum impedance (LF/HF)	7,6 / 13,5 Ω	
Power capacity ¹ (LF/HF)	350 / 90 W _{AES}	
Program power ² (LF/HF)	700 / 180 W	
Sensitivity (LF/HF) ³	98 dB	1W / 1m @ Z _N
	105 dB	1W / 1m @ Z _N
Frequency range	40 - 20.000 Hz	
Recom. HF crossover	1,8 kHz or higher	(12 dB/oct min slope)
Voice coil diameter (LF/HF)	101,6 mm	4 in
	72,4 mm	2,85 in
BI factor	18,2 N/A	
Moving mass	0,047 kg	
Voice coil length	16 mm	
Air gap height	9 mm	
X_{damage} (peak to peak)	28 mm	

Notes:

¹ The power capacity is determined according to AES2-1984 (r2003) standard.

² Program power is defined as power capacity + 3 dB.

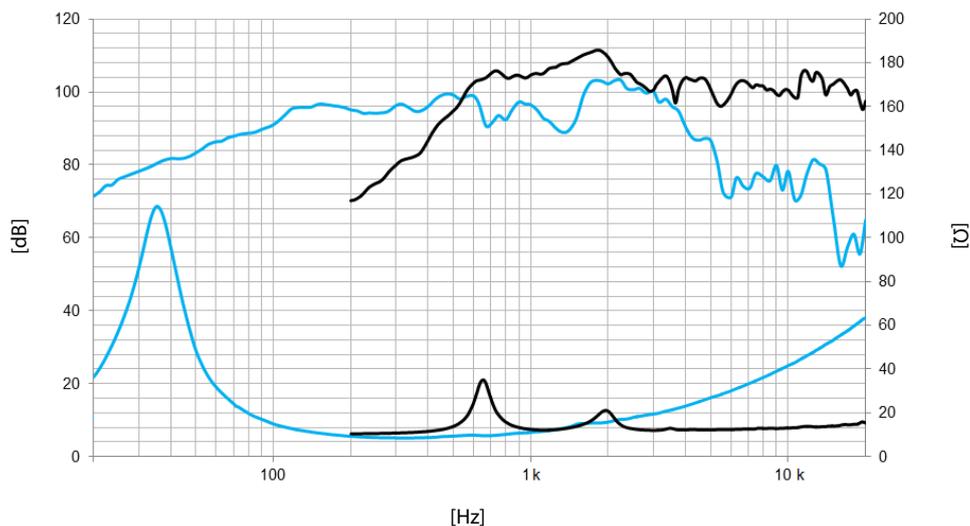
³ Sensitivity was measured at 1m distance, on axis, with 1W input, averaged in the range 1 - 7 kHz.

⁴ 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).

⁵ 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.

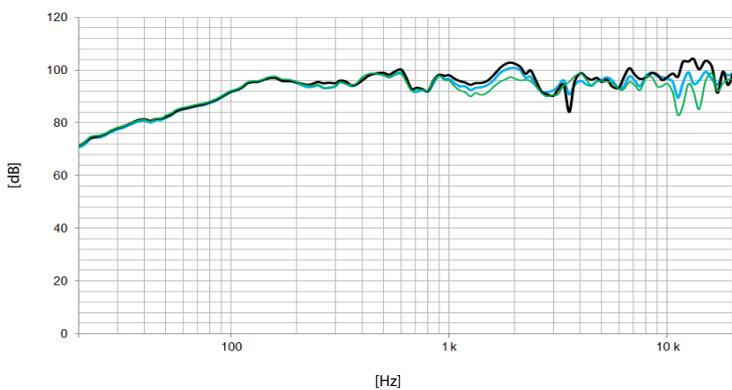
THIELE-SMALL PARAMETERS⁴

Resonant frequency, f_s	35 Hz
D.C. Voice coil resistance, R_e	6,8 Ω
Mechanical Quality Factor, Q_{ms}	8
Electrical Quality Factor, Q_{es}	0,22
Total Quality Factor, Q_{ts}	0,21
Equivalent Air Volume to C_{ms}, V_{as}	172 l
Mechanical Compliance, C_{ms}	430 μm / N
Mechanical Resistance, R_{ms}	1,4 kg / s
Efficiency, η₀	3,3 %
Effective Surface Area, S_d	0,053 m ²
Maximum Displacement, X_{max}⁵	6 mm
Displacement Volume, V_d	318 cm ³
Voice Coil Inductance, L_e	1,3 mH



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

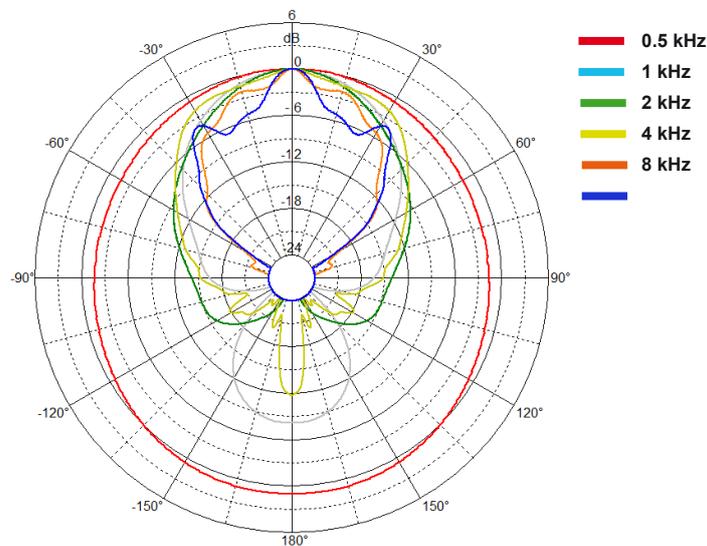
FILTERED FREQUENCY RESPONSE



— 0 degrees — 35 degrees — 70 degrees

Note: Filtered frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m using filter FD-2XA

POLAR PATTERN



MOUNTING INFORMATION

Overall diameter	312 mm	12,3 in
Bolt circle diameter	298 mm	11,7 in
Baffle cutout diameter:		
- Front mount	283 mm	11,1 in
Depth	152 mm	6,0 in
Net weight	6,3 kg	13,9 lb
Shipping weight	7 kg	15,4 lb

DIMENSION DRAWING

