

### KEY FEATURES

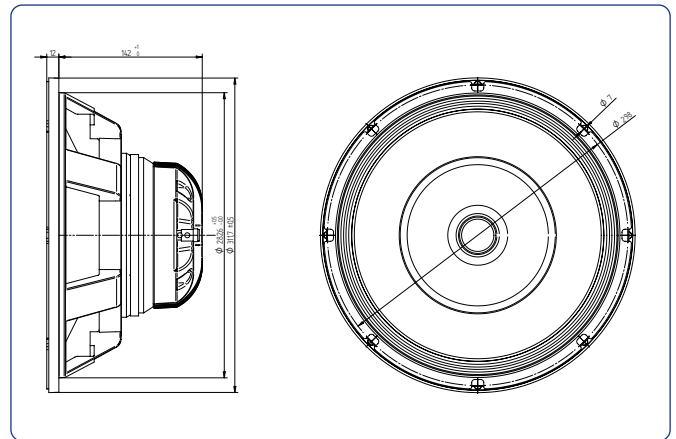
- 12" woofer with 4" voice coil and 2,8" voice coil compression driver
- Program power: 800 W LF / 180 W HF
- Sensitivity: 98 dB LF and 105 dB HF
- Low weight and compact common magnet system design
- Demodulating rings in LF and HF units
- Composite Titanium/Mylar diaphragm
- Waterproof LF cone
- 60° coverage horn for HF dispersion control



### TECHNICAL SPECIFICATIONS

Nominal diameter (LF)	300 mm	12 in
Rated impedance (LF/HF)	8 / 16 $\Omega$	
Minimum impedance (LF/HF)	6,8 $\Omega$	
Power capacity* (LF/HF)	400 / 90 W <sub>AES</sub>	
Program power (LF/HF)	800 / 180 W	
Sensitivity (LF/HF)	98 dB 2,83v @ 1m @ 2 $\pi$	
Frequency range	35 - 20.000 Hz	
Recom. HF crossover	1,5 kHz or higher (12 dB/oct min slope)	
Voice coil diameter	101,6 mm	4 in
Magnetic assembly weight	4,2 kg	9,26 lb
BL factor	18,1 N/A	
Moving mass	0,048 kg	
Voice coil length	16 mm	
Air gap height	9 mm	
X <sub>damage</sub> (peak to peak)	28 mm	

### DIMENSION DRAWINGS



### MOUNTING INFORMATION

Overall diameter	311,7 mm	12,27 in
Bolt circle diameter	298 mm	11,73 in
Baffle cutout diameter:		
- Front mount	282,6 mm	11,13 in
- Rear mount	286 mm	11,26 in
Depth	154 mm	6,06 in
Volume displaced by driver	6,5 l	0,23 ft <sup>3</sup>
Net weight	7,18 kg	15,83 lb
Shipping weight	8,05 kg	17,75 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).

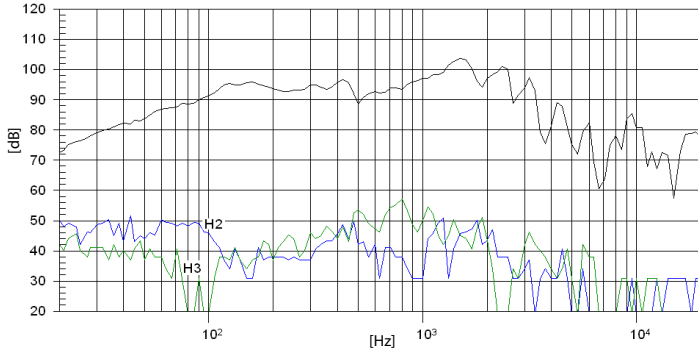
\*\*\* The X<sub>max</sub> is calculated as (L<sub>vc</sub> - H<sub>ag</sub>)/2 + (H<sub>ag</sub>/3,5), where L<sub>vc</sub> is the voice coil length and H<sub>ag</sub> is the air gap height.

### THIELE-SMALL PARAMETERS\*\*

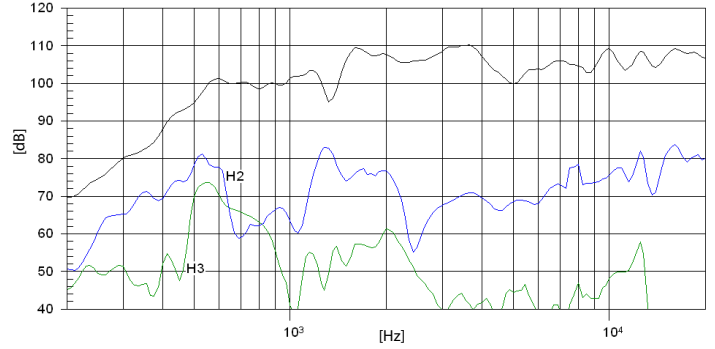
Resonant frequency, f <sub>s</sub>	45 Hz
D.C. Voice coil resistance, R <sub>e</sub>	6,6 $\Omega$
Mechanical Quality Factor, Q <sub>ms</sub>	6,24
Electrical Quality Factor, Q <sub>es</sub>	0,28
Total Quality Factor, Q <sub>ts</sub>	0,26
Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub>	102,2 l
Mechanical Compliance, C <sub>ms</sub>	260 $\mu$ m / N
Mechanical Resistance, R <sub>ms</sub>	2,19 kg / s
Efficiency, $\eta_0$	3,25 %
Effective Surface Area, S <sub>d</sub>	0,055 m <sup>2</sup>
Maximum Displacement, X <sub>max</sub> ***	6 mm
Displacement Volume, V <sub>d</sub>	210 cm <sup>3</sup>
Voice Coil Inductance, L <sub>e</sub> @ 1 kHz	1 mH

### FREQUENCY RESPONSE AND DISTORTION

LOW FREQUENCY RESPONSE

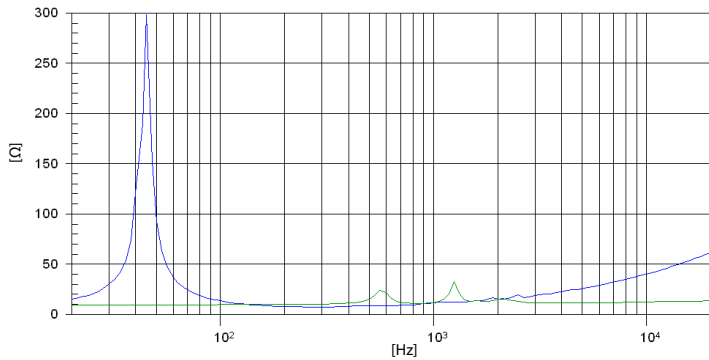


HIGH FREQUENCY RESPONSE

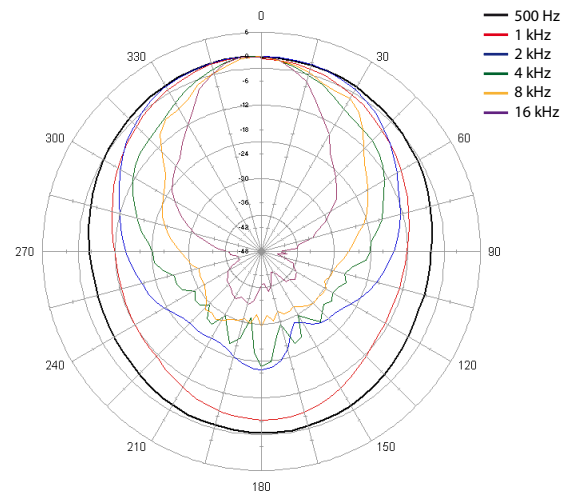


Note: On axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

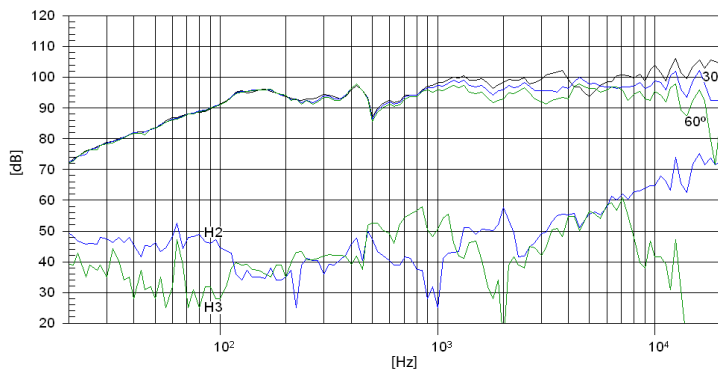
### FREE AIR IMPEDANCE CURVE



### POLAR PATTERN



### FILTERED FREQUENCY RESPONSE



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