

## KEY FEATURES



- High power handling and low distortion 21" subwoofer
- Exclusive Malt Cross® Technology Cooling System
- Low power compression losses
- High sensitivity: 99,5 dB (1W / 1m)
- FEA optimized neodymium magnetic circuit
- Ultra low air noise
- Optimized non-linear behaviour
- Exclusive NCR membrane (Neck Coupling Reinforcement)

- Waterproof cone with treatment for both sides
- Double silicone spider
- 4" TRIO in/out copper voice coil
- Aluminium demodulating ring
- Extended controlled displacement:  $X_{max} \pm 13$  mm
- 65 mm peak-to-peak excursion before damage
- Optimized for direct radiation and band-pass subwoofer applications



## TECHNICAL SPECIFICATIONS

Nominal diameter	540 mm	21 in
Rated impedance		8 $\Omega$
Minimum impedance		7,2 $\Omega$
Power capacity <sup>1</sup>		1.600 W <sub>AES</sub>
Program power <sup>2</sup>		3.200 W
Sensitivity	99,5 dB	1W / 1m @ Z <sub>N</sub>
Frequency range		30 - 1.000 Hz
Recom. enclosure (Bass-reflex design)		V <sub>b</sub> = 150 l F <sub>b</sub> = 40 Hz
Voice coil diameter	101,6 mm	4 in
Bl factor		33 N/A
Moving mass		0,305 kg
Voice coil length		32 mm
Air gap height		14 mm
X <sub>damage</sub> (peak to peak)		65 mm

Notes:

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

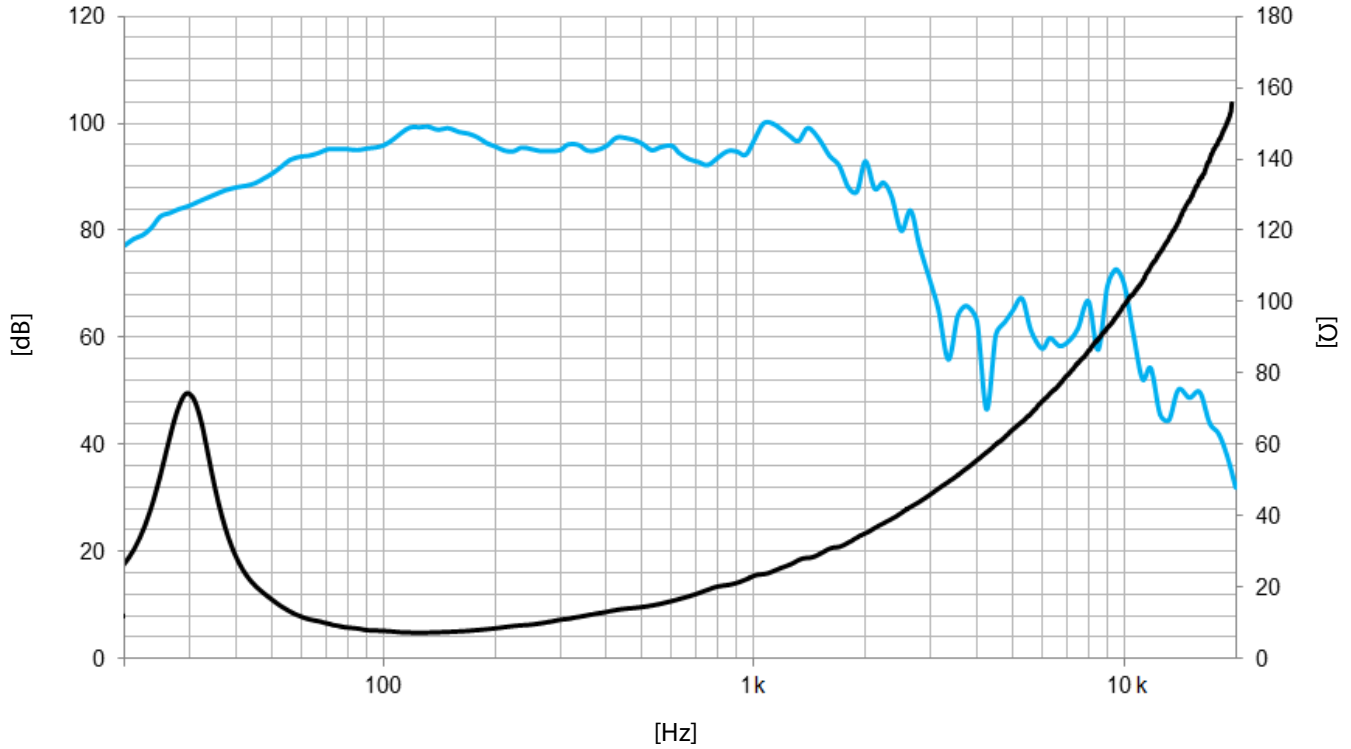
<sup>2</sup> Program power is defined as power capacity + 3 dB.

<sup>3</sup> 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).

<sup>4</sup> 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<sup>3</sup>

Resonant frequency, f <sub>s</sub>	30 Hz
D.C. Voice coil resistance, R <sub>e</sub>	5,4 $\Omega$
Mechanical Quality Factor, Q <sub>ms</sub>	4,4
Electrical Quality Factor, Q <sub>es</sub>	0,29
Total Quality Factor, Q <sub>ts</sub>	0,27
Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub>	394 l
Mechanical Compliance, C <sub>ms</sub>	92 $\mu$ m / N
Mechanical Resistance, R <sub>ms</sub>	13 kg / s
Efficiency, $\eta_0$	3,6 %
Effective Surface Area, S <sub>d</sub>	0,1734 m <sup>2</sup>
Maximum Displacement, X <sub>max</sub> <sup>4</sup>	13 mm
Displacement Volume, V <sub>d</sub>	2254 cm <sup>3</sup>
Voice Coil Inductance, L <sub>e</sub> @ 1 kHz	1,9 mH



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

### MOUNTING INFORMATION

Overall diameter	545 mm	21,5 in
Bolt circle diameter	522,5 mm	20,6 in
Baffle cutout diameter:		
- Front mount	492 mm	19,4 in
Depth	268 mm	10,6 in
Net weight	11,8 kg	26,0 lb
Shipping weight	14,3 kg	31,5 lb

### DIMENSION DRAWING

