

## KEY FEATURES



- High power handling and low distortion 12" subwoofer
- Exclusive Malt Cross® Technology Cooling System
- Low power compression losses
- High sensitivity: 95 dB (1W / 1m)
- FEA optimized ferrite magnetic circuit
- Ultra low air noise
- Optimized linear behaviour

- Weatherproof cone with treatment for both sides
- 3,5" DUO in/out copper voice coil
- Extended controlled displacement:  $X_{max} \pm 11$  mm
- 51 mm peak-to-peak excursion before damage
- Optimized for direct radiation and band-pass subwoofer applications



## TECHNICAL SPECIFICATIONS

|                                    |         |                          |
|------------------------------------|---------|--------------------------|
| Nominal diameter                   | 300 mm  | 12 in                    |
| Rated impedance                    |         | 8 $\Omega$               |
| Minimum impedance                  |         | 7,6 $\Omega$             |
| Power capacity <sup>1</sup>        |         | 1.000 W <sub>AES</sub>   |
| Program power <sup>2</sup>         |         | 2.000 W                  |
| Sensitivity                        | 95 dB   | 1W / 1m @ Z <sub>N</sub> |
| Frequency range                    |         | 50 - 1.500 Hz            |
| Recom. enclosure                   |         | V <sub>b</sub> = 50 l    |
| (Bass-reflex design)               |         | F <sub>b</sub> = 49 Hz   |
| Voice coil diameter                | 88,9 mm | 3,5 in                   |
| BI factor                          |         | 24,6 N/A                 |
| Moving mass                        |         | 0,118 kg                 |
| Voice coil length                  |         | 27 mm                    |
| Air gap height                     |         | 12 mm                    |
| X <sub>damage</sub> (peak to peak) |         | 51 mm                    |

Notes:

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

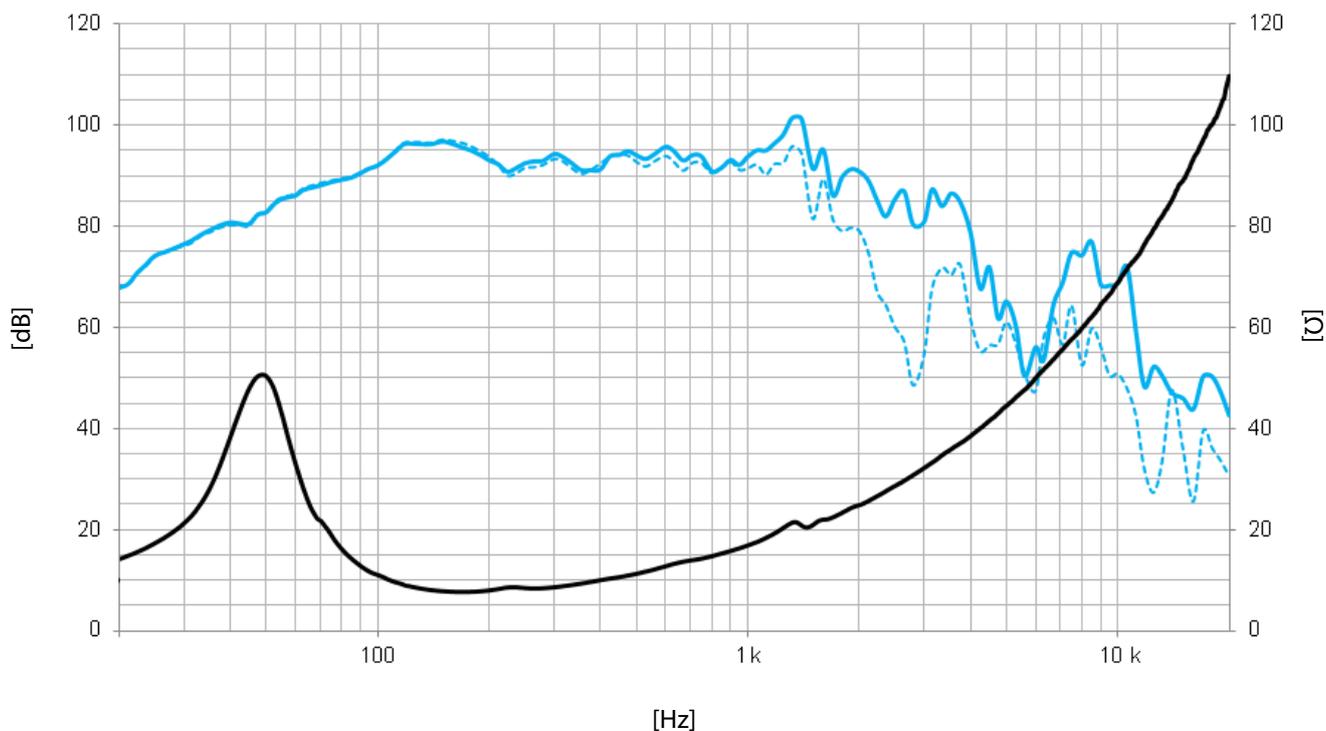
<sup>2</sup> Program power is defined as power capacity + 3 dB.

<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>                         | 49 Hz                |
| D.C. Voice coil resistance, R <sub>e</sub>                 | 5,4 $\Omega$         |
| Mechanical Quality Factor, Q <sub>ms</sub>                 | 3,6                  |
| Electrical Quality Factor, Q <sub>es</sub>                 | 0,32                 |
| Total Quality Factor, Q <sub>ts</sub>                      | 0,30                 |
| Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub> | 38,4 l               |
| Mechanical Compliance, C <sub>ms</sub>                     | 89 $\mu$ m / N       |
| Mechanical Resistance, R <sub>ms</sub>                     | 10,1 kg / s          |
| Efficiency, $\eta_0$                                       | 1,3 %                |
| Effective Surface Area, S <sub>d</sub>                     | 0,055 m <sup>2</sup> |
| Maximum Displacement, X <sub>max</sub> <sup>4</sup>        | 11 mm                |
| Displacement Volume, V <sub>d</sub>                        | 605 cm <sup>3</sup>  |
| Voice Coil Inductance, L <sub>e</sub>                      | 1,7 mH               |



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

— Frequency response on axis  
- - - Frequency response 45° off axis

## MOUNTING INFORMATION

|                            |          |                      |
|----------------------------|----------|----------------------|
| Overall diameter           | 315 mm   | 12,4 in              |
| Bolt circle diameter       | 297,5 mm | 11,7 in              |
| Baffle cutout diameter:    |          |                      |
| - Front mount              | 282 mm   | 11,1 in              |
| Depth                      | 166 mm   | 6,5 in               |
| Volume displaced by driver | 3,5 l    | 0,12 ft <sup>3</sup> |
| Net weight                 | 10,4 kg  | 22,9 lb              |
| Shipping weight            | 11,1 kg  | 24,4 lb              |

## DIMENSION DRAWING

