

10XC25 COAXIAL TRANSDUCER

KEY FEATURES

- High power handling: 250 / 40 W_{AES} (LF / HF)
- High sensitivity: 97 / 102 dB (LF / HF)
- Extended and linear frequency response
- Low resonant frequency: 63 Hz
- Low weight (Neodymium compression driver)
- 2,5" aluminium voice coil
- Waterproof LF cone
- Polyester diaphragm
- 70° coverage horn for HF dispersion control
- Designed for compact bass-reflex cabinets



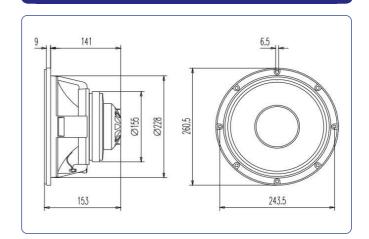
| Nominal diameter Rated impedance (LF/HF) | 2 | | n 10 in 8 / 16 Ω |
|---|--------|--------|----------------------|
| Minimum impedance (LF/HF) | | | 5,5 / 10 Ω |
| Power capacity* (LF/HF) | | | 40 W _{AES} |
| Program power (LF/HF) | | 50 | 00 / 80 W |
| Sensitivity (LF/HF**) | 97 dB | 1W / | 1m @ Z _N |
| | 102 dB | 1W / | 1m @ Z _N |
| Frequency range | | 60 - 2 | 0.000 Hz |
| Recom. HF crossover | | | or higher min slope) |
| Voice coil diameter (LF/HF) | • | | 2,5 in |
| | 44,4 | 5 mm | 1,75 in |
| BL factor | | | 13,8 N/A |
| Moving mass | | | 0,031 kg |
| Voice coil length | | | 17 mm |
| Air gap height | | | 7 mm |
| X _{damage} (peak to peak) | | | 24 mm |

THIELE-SMALL PARAMETERS***

| Resonant frequency, f _s | 63 Hz |
|--|---------------------|
| D.C. Voice coil resistance, R _e | 6,1 Ω |
| Mechanical Quality Factor, Q _{ms} | 6,3 |
| Electrical Quality Factor, Q _{es} | 0,40 |
| Total Quality Factor, Q _{ts} | 0,38 |
| Equivalent Air Volume to C _{ms} , V _{as} | 41 I |
| Mechanical Compliance, C _{ms} | 200 μm / N |
| Mechanical Resistance, R _{ms} | 2 kg / s |
| Efficiency, η ₀ | 2,5 % |
| Effective Surface Area, S _d | $0,038 \text{ m}^2$ |
| Maximum Displacement, X _{max} **** | 5 mm |
| Displacement Volume, V _d | 190 cm ³ |
| Voice Coil Inductance, Le @ 1 kHz | 0,4 mH |



DIMENSION DRAWINGS



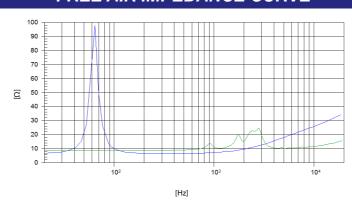
MOUNTING INFORMATION

| Overall diameter | 260,5 mm | 10,26 in |
|-------------------------|----------|----------|
| Bolt circle diameter | 243,5 mm | 9,59 in |
| Baffle cutout diameter: | | |
| - Front mount | 228 mm | 8,98 in |
| Depth | 153 mm | 6,02 in |
| Net weight | 5,1 kg | 11,22 lb |
| Shipping weight | 5,9 kg | 12,98 lb |
| | | |

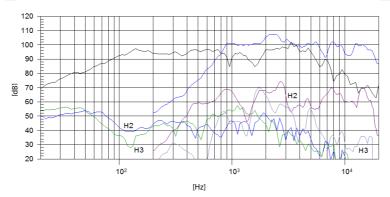
Notes:

- * The power capaticty is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.
- ** Sensitivity was measured at 1m distance, on axis, with 1W input, averaged in the range 1 6 kHz.
- *** 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

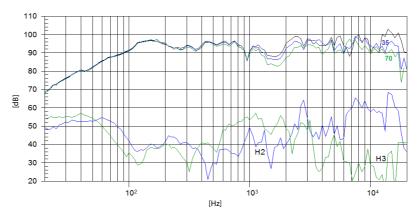


FREQUENCY RESPONSE



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

FILTERED FREQUENCY RESPONSE



Note: Filtered frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m with FD-2XC2

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