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PROFESSIONAL LOUDSPEAKERS
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PRO6FX240Nd

COAXIAL TRANSDUCER

KEY FEATURES

- High power handling: 400 / 80 W Program Power (LF / HF)
- High Sensitivity: 94 / 103 dB (LF / HF)
- Extended controlled displacement: X_{max} 5,5 mm
- Shorting copper pad for low harmonic distortion and linear impedance
- Carbon Fiber cone with High End quality sound
- CONEX spider for higher resistance and consistency
- Common Neodymium magnetic system for low weight and mounting depth
- Excellent off-axis response
- 70º conical coverage for HF dispersion control
- PM4 diaphragm for natural sound



TECHNICAL SPECIFICATIONS

Nominal diameter	165 mm	6,5 in
Rated impedance (LF/HF)		8 / 8 Ω
Minimum impedance (LF/HF)		5,9 / 5 Ω
Power capacity [1] (LF/HF)		200 / 40 W_{AES}
Program power [2] (LF/HF)		400 / 80 W
Sensitivity (LF/HF [3])	94 dB	1W / 1m @ Z_N
	103 dB	1W / 1m @ Z_N
Frequency range		100 - 20.000 Hz
Recom. HF crossover		2,5 kHz or higher (12 dB/oct min slope)
Voice coil diameter (LF/HF)	50,8 mm	2 in
	44,4 mm	1,75 in
Bl factor		9,1 N/A
Moving mass		0,015 kg
Voice coil length		14 mm
Air gap height		7 mm
X_{damage} (peak to peak)		26 mm

THIELE-SMALL PARAMETERS [4]

Resonant frequency, f_s	100 Hz
D.C. Voice coil resistance, R_e	4,6 Ω
Mechanical Quality Factor, Q_{ms}	3,5
Electrical Quality Factor, Q_{es}	0,56
Total Quality Factor, Q_{ts}	0,48
Equivalent Air Volume to C_{ms}, V_{as}	4 l
Mechanical Compliance, C_{ms}	146 µm / N
Mechanical Resistance, R_{ms}	2,89 kg / s
Efficiency, η_0	0,83 %
Effective Surface Area, S_d	0,0135 m^2
Maximum Displacement, X_{max} [5]	5,5 mm
Displacement Volume, V_d	74 cm^3
Voice Coil Inductance, L_e	0,24 mH

Notes:

[1] The power capaticty 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.

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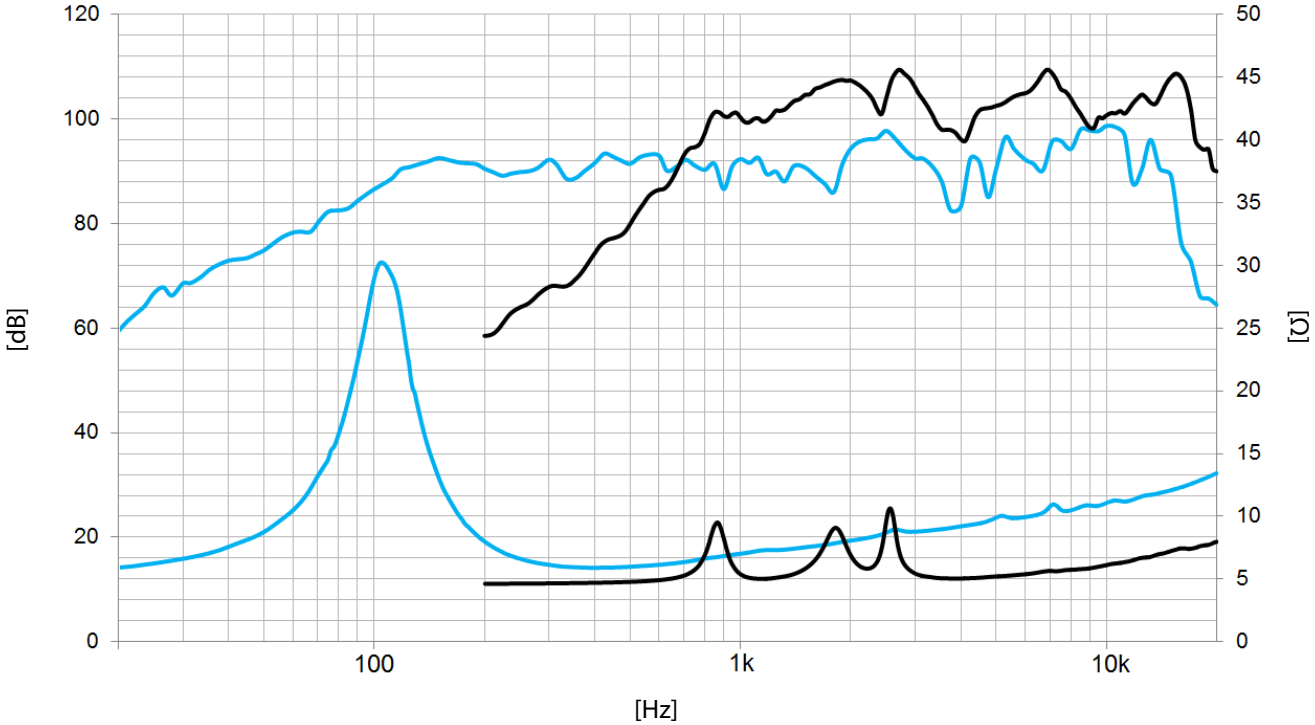
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Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

MOUNTING INFORMATION

Overall diameter	174 mm	6,9 in
Bolt circle diameter	158 mm	6,2 in
Baffle cutout diameter:		
- Front mount	145,1 mm	5,71 in
Depth	103,1 mm	4,0 in
Net weight	1,9 kg	4,2 lb
Shipping weight	2,1 kg	4,6 lb

DIMENSION DRAWING

