

8CX300Nd/N COAXIAL TRANSDUCER

KEY FEATURES

- High power handling: 250 / 50 W_{AES} (LF / HF)
- High sensitivity: 96 / 104 dB (LF / HF)
- Low resonant frequency: 61 Hz
- Low weight and compact common magnet system design
- Demodulating ring for low harmonic distortion
- PM4 diaphragm allows a natural sound
- Waterproof Carbon Fiber loaded paper cone with Santoprene surround for high efficiency
- 70° coverage horn for HF dispersion control



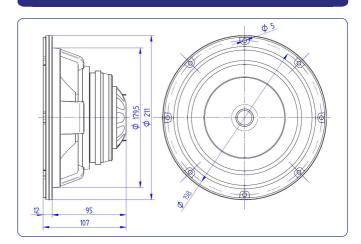
Nominal diameter	200 mn	n 8 in	
Rated impedance (LF/HF)		8/8Ω	
Minimum impedance (LF/HF)		5,3 / 4,7 Ω	
Power capacity* (LF/HF)	250 / 50 W _{AES}		
Program power (LF/HF)	500 / 100 W		
Sensitivity (LF/HF**)	96 dB	1W @ Z _N	
	104 dB	1W @ Z _N	
Frequency range	60 - 3	20.000 Hz	
Recom. HF crossover	1,5 kHz or higher (12 dB/oct min slope)		
Voice coil diameter (LF/HF)	•	2,5 in	
	44,45 mm	1,75 in	
BL factor		9,4 N/A	
Moving mass		0,013 kg	
Voice coil length		15 mm	
Air gap height		7 mm	
X _{damage} (peak to peak)		24 mm	

THIELE-SMALL PARAMETERS***

Resonant frequency, f _s	61 Hz
D.C. Voice coil resistance, R _e	5,1 Ω
Mechanical Quality Factor, Q _{ms}	13,3
Electrical Quality Factor, Q _{es}	0,28
Total Quality Factor, Q _{ts}	0,27
Equivalent Air Volume to C _{ms} , V _{as}	36,2 I
Mechanical Compliance, C _{ms}	529 μm / N
Mechanical Resistance, R _{ms}	0,37 kg / s
Efficiency, η ₀	2,8 %
Effective Surface Area, S _d	$0,022 \text{ m}^2$
Maximum Displacement, X _{max} ****	6 mm
Displacement Volume, V _d	132 cm ³
Voice Coil Inductance, L _e @ 1 kHz	0,25 mH



DIMENSION DRAWINGS



MOUNTING INFORMATION

Overall diameter	212 mm	8,34 in
Bolt circle diameter	198 mm	7,79 in
Baffle cutout diameter:		
- Front mount	181 mm	7,12 in
- Rear mount	183 mm	7,20 in
Depth	108 mm	4,25 in
Volume displaced by driver	1,5 I	0,056 ft ³
Net weight	2,8 kg	6,17 lb
Shipping weight	3 kg	6,61 lb

Notes:

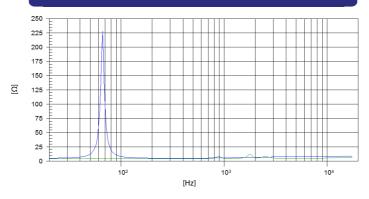
- * The power capaticty is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.
- ** Sensitivity was measured at 1m distance, on axis, with 1W input, averaged in the range 1 7 kHz.
- *** T-S parameters are measured 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.



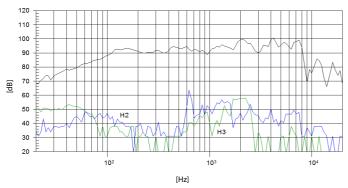
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COAXIAL TRANSDUCER

FREE AIR IMPEDANCE CURVE

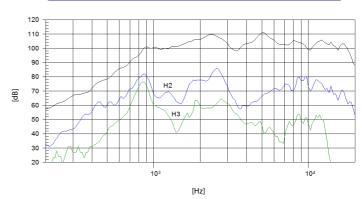


FREQUENCY RESPONSE LF



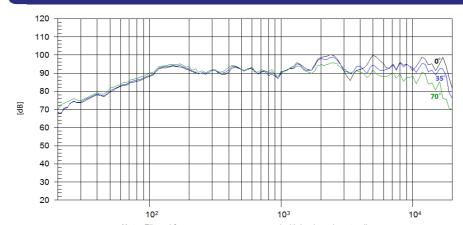
Note: On axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

FREQUENCY RESPONSE HF



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

FILTERED AND OFF-AXIS FREQUENCY RESPONSE



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

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