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8CX300Nd/N

COAXIAL TRANSDUCER

KEY FEATURES

- High power handling: 500 / 100 W program power
- High sensitivity: 96 / 104 dB (1W / 1m) (LF / HF)
- 2,5" / 1,75" voice coil (LF/HF)
- Common neodymium magnet system design
- Shorting cap for extended response

- Weatherproof Carbon Fiber loaded paper cone
- Santoprene™ surround
- PM4 diaphragm for natural sound
- 70º coverage horn for HF dispersion control

TECHNICAL SPECIFICATIONS

Nominal diameter	200 mm	8 in
Rated impedance (LF/HF)		8 / 8 Ω
Minimum impedance (LF/HF)		5,3 / 4,7 Ω
Power capacity [1] (LF/HF)		250 / 50 W$_{AES}$
Program power [2] (LF/HF)		500 / 100 W
Sensitivity (LF/HF [3])	96 dB	1W / 1m @ Z$_N$
	104 dB	1W / 1m @ Z$_N$
Frequency range		60 - 20.000 Hz
Recom. HF crossover		1,5 kHz or higher
		(12 dB/oct min slope)
Voice coil diameter (LF/HF)	63,5 mm	2,5 in
	44,4 mm	1,75 in
Bl factor		12 N/A
Moving mass		0,020 kg
Voice coil length		15 mm
Air gap height		7 mm
X$_{damage}$ (peak to peak)		24 mm

THIELE-SMALL PARAMETERS [4]

Resonant frequency, f$_s$	61 Hz
D.C. Voice coil resistance, R$_e$	5,4 Ω
Mechanical Quality Factor, Q$_{ms}$	13
Electrical Quality Factor, Q$_{es}$	0,30
Total Quality Factor, Q$_{ts}$	0,29
Equivalent Air Volume to C$_{ms}$, V$_{as}$	23 l
Mechanical Compliance, C$_{ms}$	335 μm / N
Mechanical Resistance, R$_{ms}$	0,6 kg / s
Efficiency, η$_0$	1,6 %
Effective Surface Area, S$_d$	0,022 m^2
Maximum Displacement, X$_{max}$ [5]	6 mm
Displacement Volume, V$_d$	132 cm^3
Voice Coil Inductance, L$_e$	0,3 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

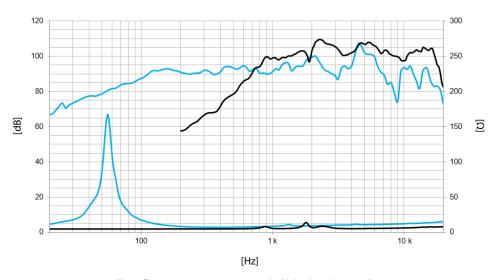[4] T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

[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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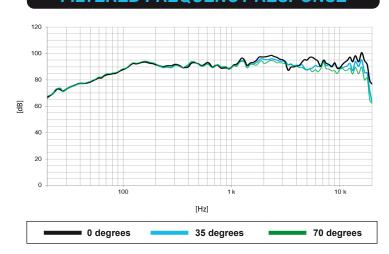**PROFESSIONAL LOUDSPEAKERS**
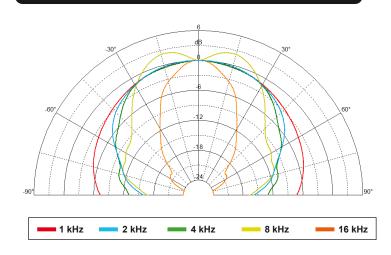www.beyma.com

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

FILTERED FREQUENCY RESPONSE

■ 0 degrees	■ 35 degrees	■ 70 degrees

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

POLAR PATTERN

■ 1 kHz	■ 2 kHz	■ 4 kHz	■ 8 kHz	■ 16 kHz

MOUNTING INFORMATION

Overall diameter	212 mm	8,3 in
Bolt circle diameter	198 mm	7,8 in
Baffle cutout diameter:		
- **Front mount**	180 mm	7,1 in
Depth	106 mm	4,2 in
Net weight	2,8 kg	6,2 lb
Shipping weight	3,0 kg	6,6 lb

DIMENSION DRAWING

01/21