beyma

PROFESSIONAL LOUDSPEAKERS
www.beyma.com

5CX200Fe
COAXIAL TRANSDUCER

KEY FEATURES

- High power handling: 150 / 25 W_{AES} (LF / HF)
- High sensitivity: 92,5/ 102 dB (LF / HF)
- Low resonant frequency: 69 Hz
- Extended controlled displacement: X_{Max} ± 5,7 mm
- Extended mechanical displacement capability: X_{Damage} ± 21 mm
- Designed with MMSS technology for high control, symmetry and linearity
- Demodulating ring for low harmonic distortion
- CONEX spider for higher resistance and consistency
- Waterproof paper cone with Santoprene™ surround
- Excellent off-axis response
- 70º conical dispersion

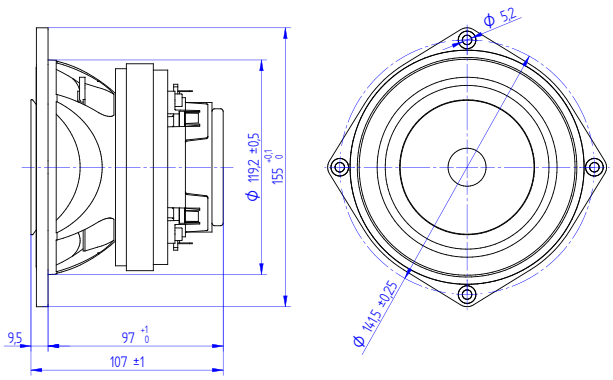
TECHNICAL SPECIFICATIONS

Nominal diameter	125 mm	5 in
Rated impedance (LF/HF)	8 / 8 Ω	
Minimum impedance (LF/HF)	5,2 / 5,9 Ω	
Power capacity* (LF/HF)	150 / 25 W_{AES}	
Program power (LF/HF)	300 / 50 W	
Sensitivity (LF/HF**)	92,5 dB 1W @ Z_N	
	102 dB 1W @ Z_N	
Frequency range	69 - 20.000 Hz	
Recom. HF crossover	3,5 kHz or higher (12 dB/oct min slope)	
Voice coil diameter (LF/HF)	38,1 mm	1,5 in
	44,45 mm	1,75 in
BL factor	7,18 N/A	
Moving mass	0,007 kg	
Voice coil length	14 mm	
Air gap height	6 mm	
X_{damage} (peak to peak)	21 mm	

THIELE-SMALL PARAMETERS***

Resonant frequency, f_s	69 Hz
D.C. Voice coil resistance, R_e	5,1 Ω
Mechanical Quality Factor, Q_{ms}	10,07
Electrical Quality Factor, Q_{es}	0,32
Total Quality Factor, Q_{ts}	0,31
Equivalent Air Volume to C_{ms}, V_{as}	8,9 l
Mechanical Compliance, C_{ms}	697 µm / N
Mechanical Resistance, R_{ms}	0,32 kg / s
Efficiency, η_0	0,86 %
Effective Surface Area, S_d	0,0095 m^2
Maximum Displacement, X_{max} ****	5,7 mm
Displacement Volume, V_d	48,1 cm^3
Voice Coil Inductance, L_e	0,22 mH

DIMENSION DRAWINGS



MOUNTING INFORMATION

Overall diameter	155 mm	6,10 in
Bolt circle diameter	141,5 mm	5,57 in
Baffle cutout diameter:		
- Front mount	119,2 mm	4,69 in
- Rear mount	127 mm	5,0 in
Depth	107 mm	4,21 in
Volume displaced by driver	0,5 l	0,02 ft^3
Net weight	2,51 kg	5,54 lb
Shipping weight	2,59 kg	5,73 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.

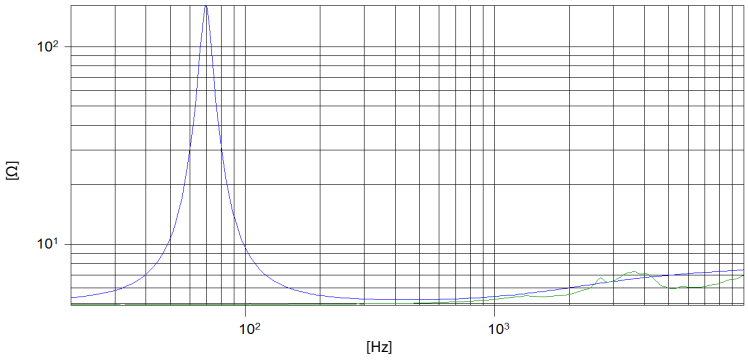
** Sensitivity was measured at 1m distance, on axis, with 1W input, averaged in the range 2 - 7 kHz.

*** 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).

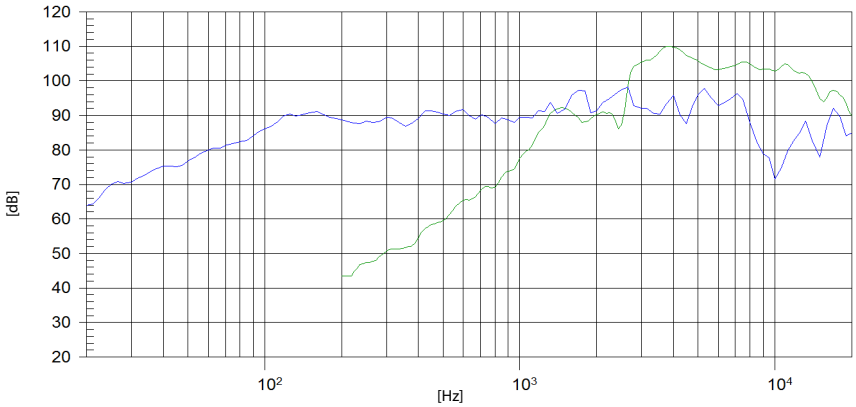
**** The X_{max} is calculated as $(L_{vc} - H_{ag})/2 + (H_{ag}/3,5)$, where L_{vc} is the voice coil length and H_{ag} is the air gap height.

5CX200Fe
COAXIAL TRANSDUCER

FREE AIR IMPEDANCE CURVE

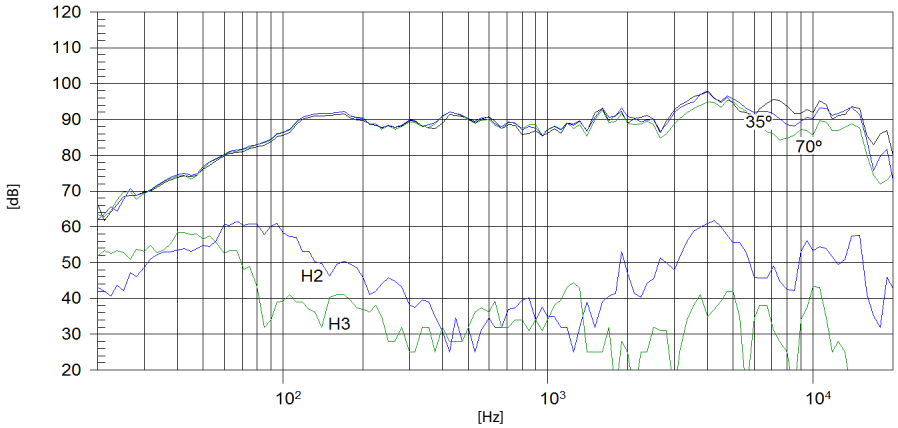


FREQUENCY RESPONSE



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/Fe

beyma
Polígono Industrial Moncada II ▪ C/. Pont Sec, 1c ▪ 46113 MONCADA - Valencia (Spain)
▪ Tel.: (34) 96 130 13 75 ▪ Fax: (34) 96 130 15 07 ▪ http://www.beyma.com ▪ E-mail: beyma@beyma.com ▪