

5CX200Fe COAXIAL TRANSDUCER

KEY FEATURES

- High power handling: 150 / 40 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
- 70° conical dispersion

TECHNICAL SPECIFICATIONS

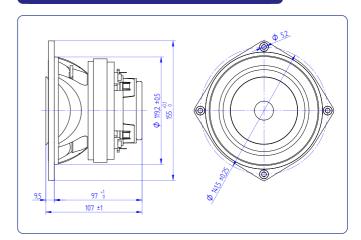
Nominal diameter	125 mı	m 5 in
Rated impedance (LF/HF)		8/8Ω
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Minimum impedance (LF/HF)		5,2 / 5,9 Ω
Power capacity* (LF/HF)	150 / 40 W _{AES}	
Program power (LF/HF)	300 / 80 W	
Sensitivity (LF/HF**)	92,5 dB	1W @ Z _N
	102 dB	1W @ Z _N
Frequency range	69 -	20.000 Hz
Recom. HF crossover	3,5 kHz or higher	
	(12 dB/o	ct 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
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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, Qts	0,31
Equivalent Air Volume to C _{ms} , V _{as}	8,91
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	$0,0095 \text{ m}^2$
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



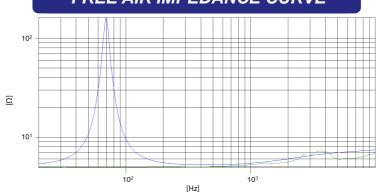
MOUNTING INFORMATION

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

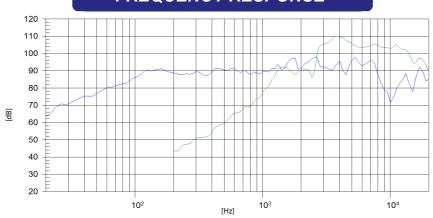
Notes:

- * 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.

FREE AIR IMPEDANCE CURVE

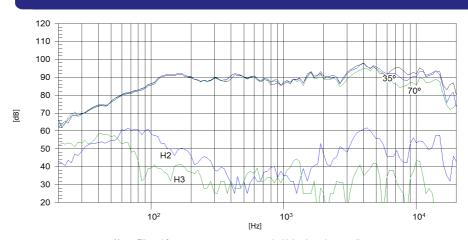


FREQUENCY RESPONSE



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

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