

8CX300Fe

COAXIAL TRANSDUCER
Preliminary Data Sheet

TECHNICAL SPECIFICATIONS

Nominal diameter		200 mm	n 8 in
Rated impedance (LF/HF)			8 / 16 Ω
Minimum impedance (LF/H	IF)	6	/ 10,2 Ω
Power capacity* (LF/HF)		250 / 5	0 W _{AES}
Program power (LF/HF)		500	/ 100 W
Sensitivity (LF/HF**)	96 / 104 dB	1W / 1	m @ Z _N
Frequency range		80 - 20	.000 Hz
Recomended crossover		2 kHz o	r higher
		(12 dB/oct r	min slope)
Voice coil diameter (LF/HF)	6	3,5 mm	2,5 in
	44	,45 mm	1,75 in
Air gap height			7 mm
Voice coil length			15 mm
BI factor		1	0,2 N/A
Moving mass		C),018 kg

THIELE-SMALL PARAMETERS***

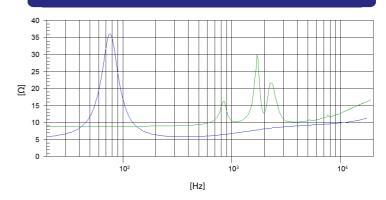
Resonant frequency, f _s	76 Hz
D.C. Voice coil resistance, Re	5,3 Ω
Mechanical Quality Factor, Q _{ms}	2,6
Electrical Quality Factor, Q _{es}	0,45
Total Quality Factor, Qts	0,38
Equivalent Air Volume to C _{ms} , V _{as}	16,3 I
Mechanical Compliance, C _{ms}	239 μm / N
Mechanical Resistance, R _{ms}	3,35 kg / s
Efficiency, η ₀	1,55 %
Effective Surface Area, S _d	$0,022 \text{ m}^2$
Maximum Displacement, X _{max} ****	6 mm
Voice Coil Inductance, Le	0,25 mH

MOUNTING INFORMATION

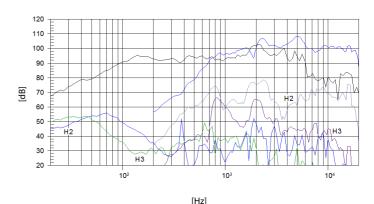
Overall diameter	211,5 mm	8,33 in
Bolt circle diameter	198,3 mm	7,81 in
Baffle cutout diameter:		
- Front mount	179,5 mm	7,07 in
Depth	125 mm	4,92 in
Net weight	4,6 kg	10,1 lb
Shipping weight	4,9 kg	10,8 lb



FREE AIR IMPEDANCE CURVE



FREQUENCY RESPONSE & DISTORTION



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

Notes:

This datasheet is done with the measurements of a laboratory prototype. Small differences may appear once the driver is transferred to the production line and manufactured in big quantities. Please refer to the serial datasheet for the definitive information of the average production.

^{*} 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.