

10CX300Fe

COAXIAL TRANSDUCER

KEY FEATURES

- High power handling: 600 W / 100 W program power
- 2,5" / 1,75" voice coil (LF/HF)
- High sensitivity: 96,5 / 104 dB (1W / 1m) (LF/HF)
- FEA optimized common magnet circuit

- Shorting cap for extended response
- Weatherproof cone with treatment for both sides of the cone
- PM4 diaphragm for natural sound
- 70° conical coverage horn





TECHNICAL SPECIFICATIONS

Nominal diameter	250 mm		10 in
Rated impedance (LF/HF)			8 / 16 Ω
Minimum impedance (LF/HF)		5,	7 / 10,1 Ω
Power capacity 1 (LF/HF)		300 /	50 W _{AES}
Program power ² (LF/HF)		60	0 / 100 W
Sensitivity (LF/HF 3)	96,5 dB	1W /	1m @ Z _N
	104 dB	1W /	1m @ Z _N
Frequency range		50 - 2	20.000 Hz
Recom. HF crossover	2 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
BI factor			11,6 N/A
Moving mass			0,035 kg
Voice coil length			17,5 mm
Air gap height			10 mm
X _{damage} (peak to peak)			30 mm

THIELE-SMALL PARAMETERS4

D.C. Voice coil resistance, R_e 5,2 Ω Mechanical Quality Factor, Q_{ms} 5,3 Electrical Quality Factor, Q_{es} 0,41 Total Quality Factor, Q_{ts} 0,38 Equivalent Air Volume to C_{ms} , V_{as} 63 Mechanical Compliance, C_{ms} 307 μ m / N Mechanical Resistance, R_{ms} 2 kg / s
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Mechanical Compliance, C _{ms} 307 μm / N
Mechanical Resistance, R _{ms} 2 kg / s
Efficiency, η_0 1,7 %
Effective Surface Area, S _d 0,038 m ²
Maximum Displacement, X _{max} ⁵ 6,7 mm
Displacement Volume, V_d 256 cm ³
Voice Coil Inductance, L _e 0,4 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 - 8 kHz

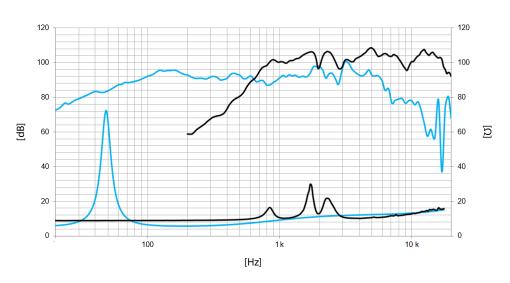
⁴ T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

 $^{^{\}rm s}$ The ${\rm X}_{\rm max}$ is calculated as $({\rm L}_{\rm VC}$ - ${\rm H}_{\rm ag})/2$ + $({\rm H}_{\rm ag}/3,5)$, where ${\rm L}_{\rm VC}$ is the voice coil length and ${\rm H}_{\rm ag}$ is the air gap height.



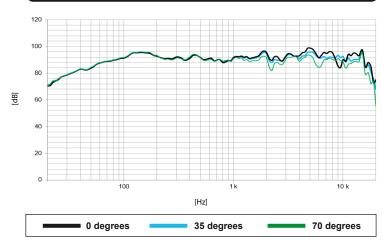
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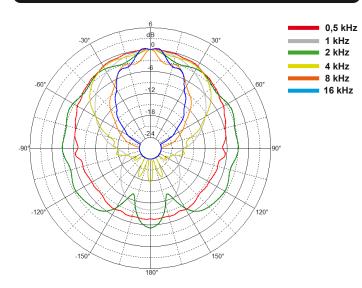
Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

FILTERED FREQUENCY RESPONSE



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

POLAR PATTERN



MOUNTING INFORMATION

Overall diameter	260,5 mm	10,3 in
Bolt circle diameter	243,5 mm	9,6 in
Baffle cutout diameter:		
- Front mount	228 mm	9,0 in
Depth	145 mm	5,7 in
Net weight	5,1 kg	11,2 lb
Shipping weight	5,5 kg	12,1 lb

DIMENSION DRAWING

