

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 HF diaphragm
- 70° conical coverage horn





TECHNICAL SPECIFICATIONS

Nominal diameter	250 mm 10		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 PARAMETERS 4

Resonant frequency, fs	48 Hz
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, Qts	0,38
Equivalent Air Volume to C _{ms} , V _{as}	63 I
Mechanical Compliance, C _{ms}	307 μ m / N
Mechanical Resistance, R _{ms}	2 kg / s
Efficiency, η ₀	1,7 %
Effective Surface Area, S _d	$0,038 \text{ m}^2$
Maximum Displacement, X _{max} ⁵	6,7 mm
Displacement Volume, V _d	256 cm ³
Voice Coil Inductance, Le	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

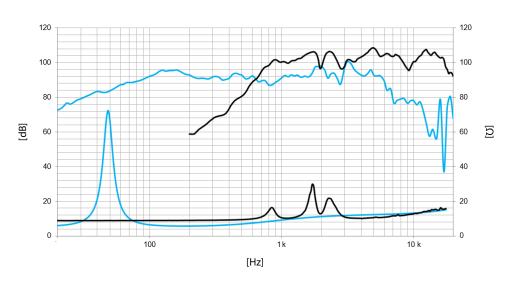
⁴ T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

 $^{^{5}}$ 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.



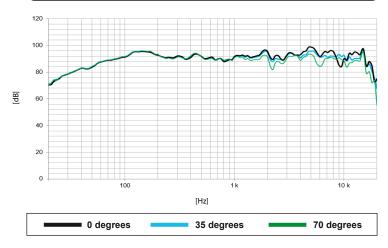
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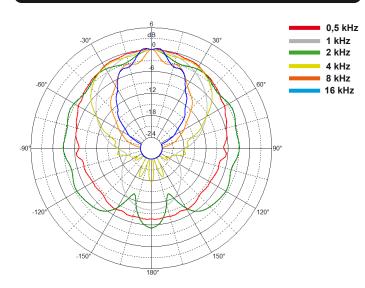
Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

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

260,5 mm	10,3 in
243,5 mm	9,6 in
228 mm	9,0 in
145 mm	5,7 in
5,1 kg	11,2 lb
5,5 kg	12,1 lb
	243,5 mm 228 mm 145 mm 5,1 kg

DIMENSION DRAWING

