

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
- Waterproof cone with treatment for both sides of the cone
- PM4 diaphragm for natural sound
- 70° conical coverage horn





TECHNICAL SPECIFICATIONS

Nominal diameter	250 mm <i>′</i>		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, f _s	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}	$307~\mu m$ / 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

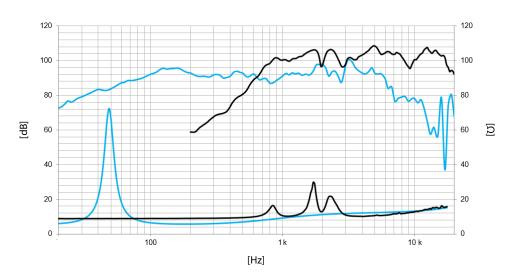
⁴ T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

 $^{^{6}}$ 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.



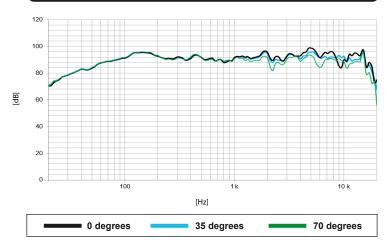
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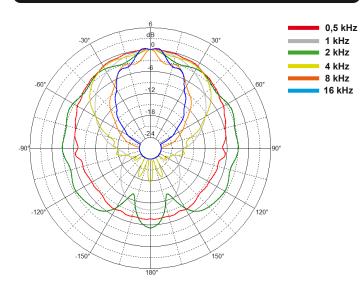
Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

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

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

