

# 8CX300Fe

**COAXIAL TRANSDUCER** 

# **KEY FEATURES**

- High power handling: 600 W / 100 W program power
- 2,5" / 1,75" voice coil (LF/HF)
- High sensitivity: 95 / 105 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

200 mm

Nominai diameter	200 mm		8 in
Rated impedance (LF/HF)			8 / 16 Ω
Minimum impedance (LF/HF)		6,	6 / 10,1 Ω
Power capacity 1 (LF/HF)		300 /	50 W <sub>AES</sub>
Program power <sup>2</sup> (LF/HF)		60	0 / 100 W
Sensitivity (LF/HF <sup>3</sup> )	95 dB	1W /	1m @ Z <sub>N</sub>
	105 dB	1W /	1m @ Z <sub>N</sub>
Frequency range		90 - 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 r	nm	1,75 in
BI factor			9,6 N/A
Moving mass			0,020 kg
Voice coil length			15 mm
Air gap height			7 mm

# THIELE-SMALL PARAMETERS4

Resonant frequency, f <sub>s</sub>	89 Hz
D.C. Voice coil resistance, Re	5,2 Ω
Mechanical Quality Factor, Q <sub>ms</sub>	4,2
Electrical Quality Factor, Q <sub>es</sub>	0,63
Total Quality Factor, Qts	0,55
Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub>	10,8 I
Mechanical Compliance, C <sub>ms</sub>	158 μm / N
Mechanical Resistance, R <sub>ms</sub>	2,7 kg/s
Efficiency, η <sub>0</sub>	1,2 %
Effective Surface Area, S <sub>d</sub>	0,022 m <sup>2</sup>
Maximum Displacement, X <sub>max</sub> <sup>5</sup>	6 mm
Displacement Volume, V <sub>d</sub>	132 cm <sup>3</sup>
Voice Coil Inductance, Le @ 1 kHz	0,2 mH

#### Notes:

Nominal diameter

<sup>&</sup>lt;sup>1</sup> The power capaticty is determined according to AES2-1984 (r2003) standard.

<sup>&</sup>lt;sup>2</sup> Program power is defined as power capacity + 3 dB.

<sup>&</sup>lt;sup>3</sup> Sensitivity was measured at 1m distance, on axis, with 1W input, averaged in the range 2 - 10 kHz

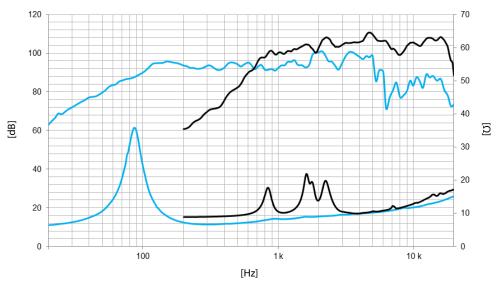
<sup>&</sup>lt;sup>4</sup> T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

 $<sup>^{6}</sup>$  The  $\rm X_{max}$  is calculated as ( $\rm L_{vc}$  -  $\rm H_{ag}$ )/2 + ( $\rm H_{ag}$ /3,5), where  $\rm L_{vc}$  is the voice coil length and  $\rm H_{ag}$  is the air gap height.



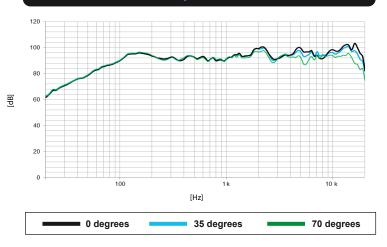
# 8CX300Fe

**COAXIAL TRANSDUCER** 



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

#### FILTERED FREQUENCY RESPONSE

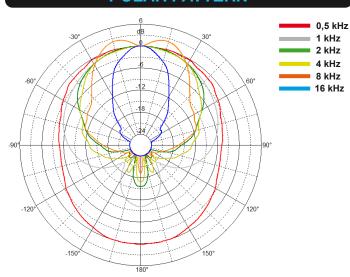


Note: Filtered frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m using filter FD-2CX

# **MOUNTING INFORMATION**

Overall diameter	211,5 mm	8,3 in
Bolt circle diameter	198 mm	7,8 in
Baffle cutout diameter:		
- Front mount	179,5 mm	7,1 in
Depth	126 mm	4,9 in
Net weight	4,6 kg	10,1 lb
Shipping weight	4,9 kg	10,8 lb

### POLAR PATTERN



# **DIMENSION DRAWING**

