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PROFESSIONAL LOUDSPEAKERS
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15CXA400Fe

COAXIAL TRANSDUCER

KEY FEATURES

- Program power: 800 / 160 W (LF / HF)
- Sensitivity: 98 / 105 dB (1W / 1m) (LF / HF)
- 4” voice coil woofer
- 2.85” voice coil compression driver
- Common ferrite magnet system design
- Demodulating rings in both LF and HF units
- Composite Titanium / Polyester HF diaphragm
- Weatherproof LF cone
- 60º coverage horn for HF dispersion control





TECHNICAL SPECIFICATIONS

Nominal diameter	380 mm	15 in
Rated impedance (LF/HF)		8 / 16 Ω
Minimum impedance (LF/HF)		6,3 / 11,3 Ω
Power capacity [1] (LF/HF)		400 / 80 W_{AES}
Program power [2] (LF/HF)		800 / 160 W
Sensitivity (LF/HF [3])	98 dB	1W / 1m @ Z_N
	105 dB	1W / 1m @ Z_N
Frequency range		40 - 20.000 Hz
Recom. HF crossover		1,5 kHz or higher (12 dB/oct min slope)
Voice coil diameter (LF/HF)	101,6 mm	4 in
	72,4 mm	2,85 in
Bl factor		18,2 N/A
Moving mass		0,090 kg
Voice coil length		16 mm
Air gap height		10 mm
X_{damage} (peak to peak)		51 mm

THIELE-SMALL PARAMETERS [4]

Resonant frequency, f_s	40 Hz
D.C. Voice coil resistance, R_e	6,3 Ω
Mechanical Quality Factor, Q_{ms}	16,4
Electrical Quality Factor, Q_{es}	0,43
Total Quality Factor, Q_{ts}	0,42
Equivalent Air Volume to C_{ms}, V_{as}	191 l
Mechanical Compliance, C_{ms}	175 μm / N
Mechanical Resistance, R_{ms}	1,4 kg / s
Efficiency, η_0	2,75 %
Effective Surface Area, S_d	0,088 m^2
Maximum Displacement, X_{max} [5]	6 mm
Displacement Volume, V_d	350 cm^3
Voice Coil Inductance, L_e	1 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 - 7 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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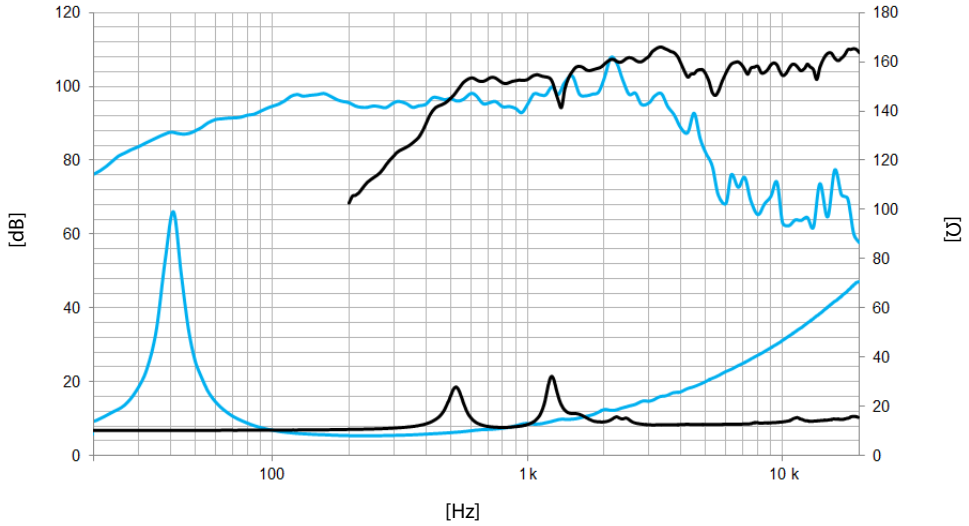
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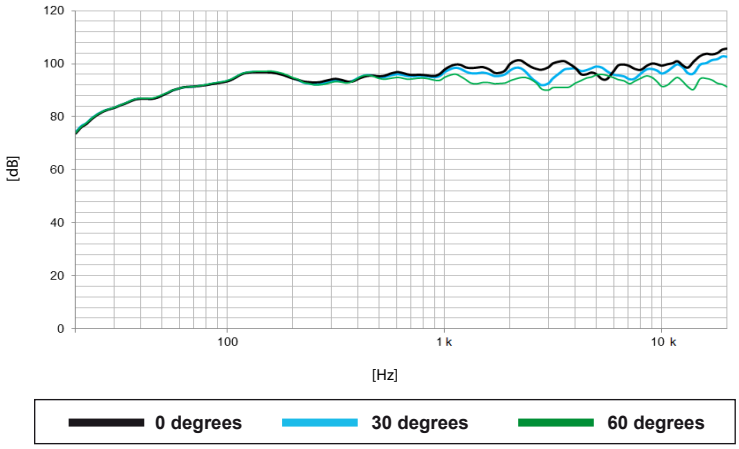
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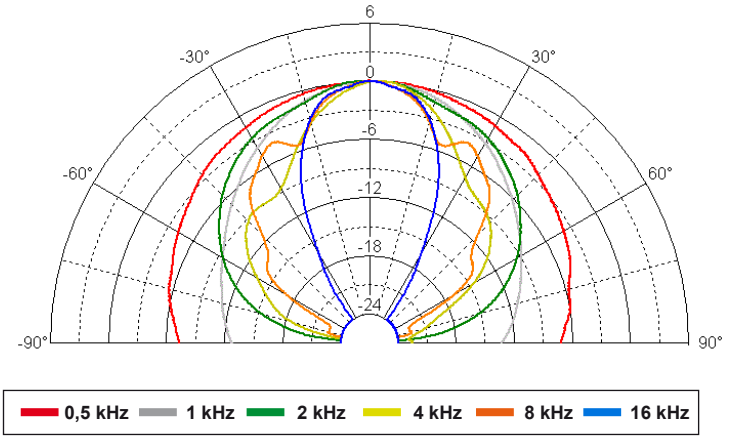
Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

FILTERED FREQUENCY RESPONSE



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

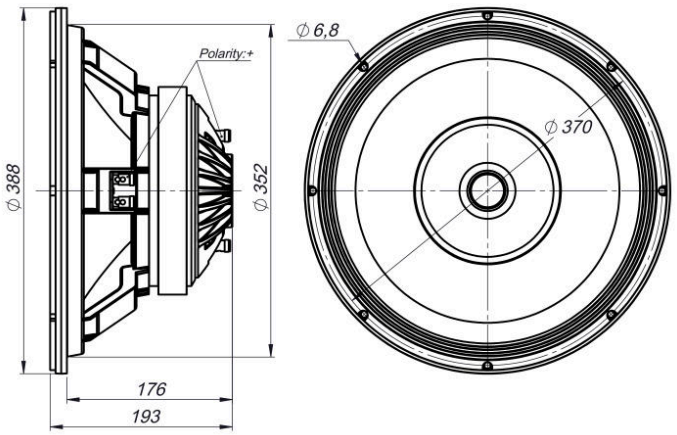
POLAR PATTERN



MOUNTING INFORMATION

Overall diameter	388 mm	15,3 in
Bolt circle diameter	370 mm	14,6 in
Baffle cutout diameter:		
- Front mount	352 mm	13,8 in
Depth	193 mm	7,6 in
Volume displaced by driver	7 l	0,25 ft³
Net weight	11,9 kg	26,2 lb
Shipping weight	12,4 kg	27,3 lb

DIMENSION DRAWING



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07/22