

12CMV2

LOW & MID FREQUENCY TRANSDUCER

Preliminary Data Sheet

KEY FEATURES

- High power handling: 640 W program power
- 2.5" CCAW wire voice coil
- High sensitivity: 96 dB (1W / 1m)
- Very linear extended response and low distortion
- Treated triple roll cloth surround

- Optimized pressed steel frame
- Ferrite magnet
- Designed for bass and midbass applications in small vented cabinets





TECHNICAL SPECIFICATIONS

Nominal diameter	300 mm	12 in
Rated impedance		8 Ω
Minimum impedance		7,2 Ω
Power capacity*	;	320 W _{AES}
Program power		640 W
Sensitivity	96 dB 1W /	1m @ Z _N
Frequency range	50 -	6.000 Hz
Recom. enclosure		$V_{b} = 50 \text{ I}$
(Bass-reflex design)	F	_b = 44 Hz
Voice coil diameter	63,5 mm	2,5 in
BI factor		14,3 N/A
Moving mass		0,054 kg
Voice coil length		17 mm
Air gap height		7 mm
X _{damage} (peak to peak)		29 mm

THIELE-SMALL PARAMETERS**

Resonant frequency, f _s	45 Hz
D.C. Voice coil resistance, R _e	5,9 Ω
Mechanical Quality Factor, Q _{ms}	4,6
Electrical Quality Factor, Q _{es}	0,45
Total Quality Factor, Qts	0,41
Equivalent Air Volume to C _{ms} , V _{as}	89 I
Mechanical Compliance, C _{ms}	225 μm / N
Mechanical Resistance, R _{ms}	3,4 kg / s
Efficiency, η ₀	1,8 %
Effective Surface Area, S _d	0,053 m ²
Maximum Displacement, X _{max} ***	7 mm
Displacement Volume, V _d	371 cm ³
Voice Coil Inductance, L _e @ 1 kHz	1 mH

Notes

^{*} The power capaticty is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.

^{**} 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).

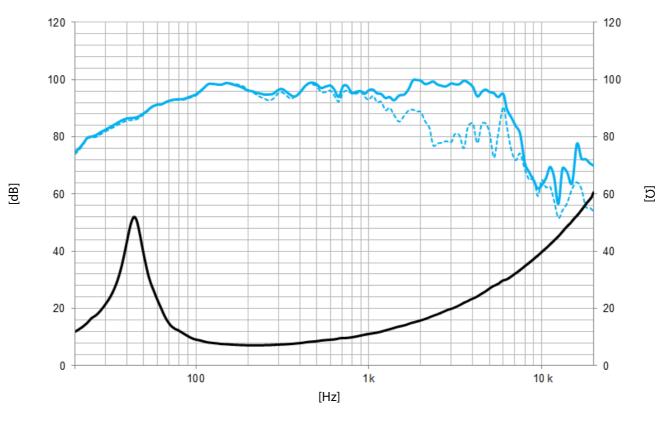
^{***} The X_{max} is calculated as $(L_{vc} - H_{ag})/2 + (H_{ag}/3.5)$, where L_{vc} is the voice coil length and H_{ag} is the air gap height.



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

Frequency response on axis
Frequency response 45° off axis

MOUNTING INFORMATION

Overall diameter	310 mm	12,2 in
Bolt circle diameter	292 mm	11,5 in
Baffle cutout diameter:		
- Front mount	280 mm	11,0 in
Depth	130 mm	5,1 in
Net weight	4,6 kg	10,1 lb
Shipping weight	5,3 kg	11,7 lb

DIMENSION DRAWING

