

12MC700Nd

LOW & MID FREQUENCY TRANSDUCER

MC Series

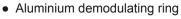
KEY FEATURES — Maltcross

- High power handling: 1.400 W program power
- Exclusive Malt Cross[®] Technology Cooling System
- Low power compression losses
- High sensitivity: 99 dB (1W / 1m)
- FEA optimized neodymium magnetic circuit
- · Optimized non-linear behaviour
- 3" DUO double layer in/out copper voice coil



TECHNICAL SPECIFICATIONS

Nominal diameter	300	mm	12 in
Rated impedance			8 Ω
Minimum impedance			7 Ω
Power capacity ¹		70	0 W _{AES}
Program power ²		1	.400 W
Sensitivity	99 dB	1W / 1r	n @ Z _N
Frequency range		60 - 4.	000 Hz
Recom. enclosure		V	′ _b = 40 I
(Bass-reflex design)		F _b =	= 67 Hz
Voice coil diameter	76,2	mm	3 in
BI factor		2	1,6 N/A
Moving mass		0	,072 kg
Voice coil length			18 mm
Air gap height			10 mm
X _{damage} (peak to peak)			48 mm



- Weatherproof cone with treatment for both sides
- Extended controlled displacement: Xmax ± 7 mm
- 48 mm peak-to-peak excursion before damage
- Weight 3,7 kg
- · Optimized for bass or mid-bass high performance audio systems



THIELE-SMALL PARAMETERS³

Resonant frequency, f _s	51 Hz
D.C. Voice coil resistance, R _e	5,2 Ω
Mechanical Quality Factor, Q _{ms}	4,1
Electrical Quality Factor, Q _{es}	0,26
Total Quality Factor, Q _{ts}	0,24
Equivalent Air Volume to C _{ms} , V _{as}	58 I
Mechanical Compliance, C _{ms}	136 µm / N
Mechanical Resistance, R _{ms}	5,6 kg / s
Efficiency, η ₀	2,8 %
Effective Surface Area, S _d	0,055 m²
Maximum Displacement, X _{max} ⁴	7 mm
Displacement Volume, V _d	375 cm ³
Voice Coil Inductance, L _e @ 1 kHz	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 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).

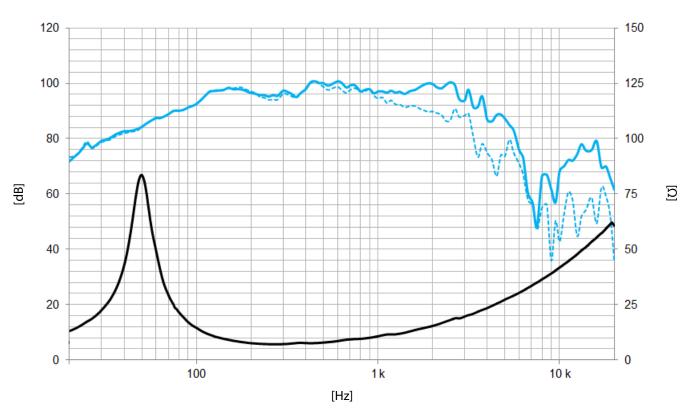
⁴ The X_{max} is calculated as (L_{vc} - H_{aq})/2 + (H_{aq}/3,5), where L_{vc} is the voice coil length and H_{aq} is the air gap height.



12MC700Nd

LOW & MID FREQUENCY TRANSDUCER

MC Series



Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m Frequency response on axis Frequency response 45° off axis

MOUNT	NEODI	ATION
	VFURI	

Overall diameter	312 mm	12,3 in
Bolt circle diameter	294,5 mm	11,6 in
Baffle cutout diameter:		
- Front mount	278 mm	10,9 in
Depth	143 mm	5,6 in
Net weight	3,7 kg	8,2 lb
Shipping weight	4,4 kg	9,7 lb

