

14MC700Nd

LOW & MID FREQUENCY TRANSDUCER Preliminary Data Sheet



- 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

- Aluminium demodulating ring
- Waterproof cone with treatment for both sides
- Extended controlled displacement: Xmax ± 7 mm
- 48 mm peak-to-peak excursion before damage
- Weight 4 kg
- · Optimized for bass or mid-bass high performance audio systems





TECHNICAL SPECIFICATIONS

Nominal diameter	350 ו	mm 14 in
Rated impedance		8 Ω
Minimum impedance		7,2 Ω
Power capacity ¹		700 W _{AES}
Program power ²		1.400 W
Sensitivity	99 dB	1W / 1m @ Z _N
Frequency range		55 - 4.000 Hz
Recom. enclosure		$V_{b} = 55 I$
(Bass-reflex design)		$F_{b} = 60 \text{ Hz}$
Voice coil diameter	76,2 :	mm 3 in
BI factor		22 N/A
Moving mass		0,086 kg
Voice coil length		18 mm
Air gap height		10 mm
X _{damage} (peak to peak)		48 mm

THIELE-SMALL PARAMETERS 3

Resonant frequency, f _s	51 Hz
D.C. Voice coil resistance, R _e	5,3 Ω
Mechanical Quality Factor, Q _{ms}	3,3
Electrical Quality Factor, Q _{es}	0,30
Total Quality Factor, Q _{ts}	0,28
Equivalent Air Volume to C _{ms} , V _{as}	78 I
Mechanical Compliance, C _{ms}	110 μm / N
Mechanical Resistance, R _{ms}	8,3 kg / s
Efficiency, η ₀	3,3 %
Effective Surface Area, S _d	$0,070 \text{ m}^2$
Maximum Displacement, X _{max} ⁴	7 mm
Displacement Volume, V _d	490 cm^3
Voice Coil Inductance, Le	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).

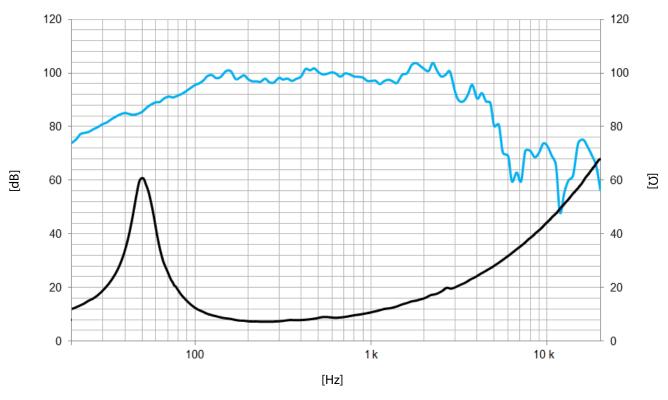
 $^{^4}$ The X_{max} is calculated as (L_{vc} - H_{aq})/2 + (H_{aq}/3,5), where L_{vc} is the voice coil length and H_{aq} is the air gap height.



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

MOUNTING INFORMATION

Overall diameter	359 mm	14,1 in
Bolt circle diameter	342 mm	13,5 in
Baffle cutout diameter:		
- Front mount	323 mm	12,7 in
Depth	166 mm	6,5 in
Volume displaced by driver	3,01	0,11 ft ³
Net weight	4,0 kg	8,8 lb
Shipping weight	5,0 kg	11,0 lb

DIMENSION DRAWING

