

SM-112/N

LOW FREQUENCY TRANSDUCER
SM Series

KEY FEATURES

- High power handling 400 W_{AES}
- High sensitivity: 97 dB (1W / 1m)
- 3" copper voice coil

- Extended controlled displacement: X_{max} ± 7,25 mm
- 30 mm peak-to-peak excursion before damage
- Designed for high power woofer applications





TECHNICAL SPECIFICATIONS

Nominal diameter	300 mm	12 in
Rated impedance		8 Ω
Minimum impedance		7 Ω
Power capacity ¹	400 W _{AES}	
Program power ²		800 W
Sensitivity	97 dB 1W / 1n	n @ Z _N
Frequency range	40 - 4.	000 Hz
Recom. enclosure vol.	30 / 100 I 1,1	/ 3,5 ft ³
Voice coil diameter	76,2 mm	3 in
BI factor		17 N/A
Moving mass	0,	,058 kg
Voice coil length	17	7,5 mm
Air gap height		7 mm
X _{damage} (peak to peak)		30 mm

THIELE-SMALL PARAMETERS³

Resonant frequency, f _s	40 Hz
D.C. Voice coil resistance, R _e	6,2 Ω
Mechanical Quality Factor, Q _{ms}	8
Electrical Quality Factor, Q _{es}	0,31
Total Quality Factor, Qts	0,30
Equivalent Air Volume to C _{ms} , V _{as}	117 I
Mechanical Compliance, C _{ms}	$273~\mu m$ / N
Mechanical Resistance, R _{ms}	1,8 kg / s
Efficiency, η ₀	2,1 %
Effective Surface Area, S _d	$0,055 \text{ m}^2$
Maximum Displacement, X _{max} ⁴	7,25 mm
Displacement Volume, V _d	398 cm ³
Voice Coil Inductance, L _e	1,2 mH

Notes

¹ The power capaticty is determined according to AES2-1984 (r2003) standard.

² Program power is defined as power capacity + 3 dB.

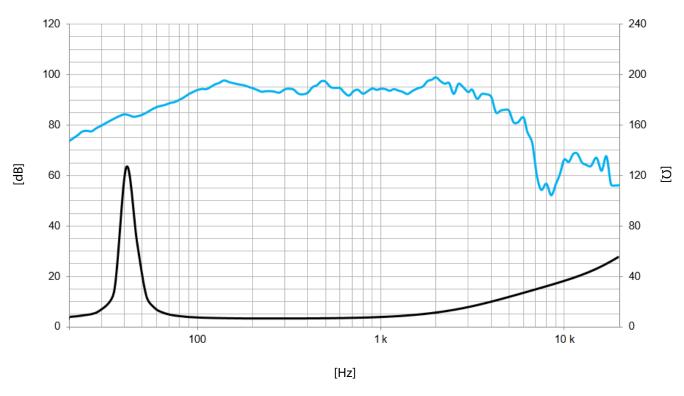
³ T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

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



SM-112/N

LOW FREQUENCY TRANSDUCER
SM Series



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

MOUNTING INFORMATION

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	134 mm	5,3 in
Volume displaced by driver	4,5 I	0,16 ft ³
Net weight	5,6 kg	12,4 lb
Shipping weight	6,3 kg	13,9 lb

DIMENSION DRAWING

