

SM-115/N

LOW FREQUENCY TRANSDUCER

SM Series

KEY FEATURES

- High sensitivity: 98 dB
- High power handling: 400 W_{AES}
- 3" copper voice coil
- Optimum winding length for increased linear excursion
- Extremely linear frequency response
- Extended response in the medium frequency range
- Low harmonic distortion
- High power woofer and midbass applications





TECHNICAL SPECIFICATIONS

Nominal diameter	380 mm	15 in
Rated impedance		8 Ω
Minimum impedance		7,2 Ω
Power capacity ¹		400 W _{AES}
Program power ²		800 W
Sensitivity	98 dB 1W	/ 1m @ Z _N
Frequency range	35	- 3.000 Hz
Recom. enclosure		V _b = 75 I
(Bass-reflex design)		F _b = 48 Hz
Voice coil diameter	76,2 mm	3 in
BI factor		17,4 N/A
Moving mass		0,086 kg
Voice coil length		17,5 mm
Air gap height		7 mm
X _{damage} (peak to peak)		30 mm
Notes:		

THIELE-SMALL PARAMETERS³

Resonant frequency, f _s	35 Hz
D.C. Voice coil resistance, R _e	6,4 Ω
Mechanical Quality Factor, Q _{ms}	8,5
Electrical Quality Factor, Q _{es}	0,40
Total Quality Factor, Q _{ts}	0,38
Equivalent Air Volume to C _{ms} , V _{as}	267 I
Mechanical Compliance, C _{ms}	243 μm / N
Mechanical Resistance, R _{ms}	2,2 kg / s
Efficiency, η ₀	2,7 %
Effective Surface Area, S _d	0,088 m ²
Maximum Displacement, X _{max} ⁴	7,25 mm
Displacement Volume, V _d	638 cm ³
Voice Coil Inductance, L _e	1,2 mH

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.

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

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

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av reasons measured with laudes

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

MOUNTING INFORMATION			
Overall diameter	388 mm	15,3 in	
Bolt circle diameter	370 mm	14,6 in	
Baffle cutout diameter:			
- Front mount	352 mm	13,9 in	
Depth	156 mm	6,1 in	
Net weight	6,5 kg	14,3 lb	
Shipping weight	7,4 kg	16,3 lb	

MOUNTING INFORMATIO

DIMENSION DRAWING



Ø **370**