

12P80NdV2

LOW FREQUENCY TRANSDUCER P80 Series

KEY FEATURES

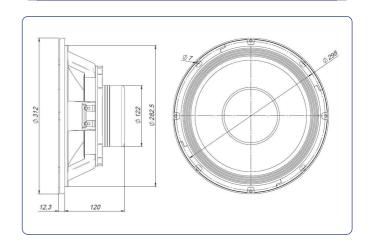
- 700 W_{AES} power handling capacity
- High sensitivity: 101 dB
- Wide usable frequency range and low harmonic distortion
- Extended controlled displacement: X_{max} ± 7,5 mm
- Extended mechanical displacement capability:
 X_{damage} ± 52 mm
- Low power compression losses
- Designed with MMSS technology



TECHNICAL SPECIFICATIONS

Nominal diameter	300 mm 1:	2 in
Rated impedance		Ω 8
Minimum impedance	5,1	6 Ω
Power capacity*	700 W	AES
Program power	1.400) W
Sensitivity	101 dB 1W / 1m @	Z_N
Frequency range	50 - 4.000	Hz
Voice coil diameter	101,6 mm	4 in
BI factor	25,3	N/A
Moving mass	0,067	' kg
Voice coil length	20 ו	mm
Air gap height	12 ו	mm
X _{damage} (peak to peak)	52 ו	mm

DIMENSION DRAWINGS



THIELE-SMALL PARAMETERS**

Resonant frequency, f _s	50 Hz
D.C. Voice coil resistance, R _e	5,1 Ω
Mechanical Quality Factor, Q _{ms}	4,25
Electrical Quality Factor, Q _{es}	0,17
Total Quality Factor, Q _{ts}	0,16
Equivalent Air Volume to C _{ms} , V _{as}	65 I
Mechanical Compliance, C _{ms}	150 μm / N
Mechanical Resistance, R _{ms}	5 kg/s
Efficiency, η ₀	4,65 %
Effective Surface Area, S _d	0,055 m ²
Maximum Displacement, X _{max} ***	7,5 mm
Displacement Volume, V _d	413 cm ³
Voice Coil Inductance, L _e @ 1 kHz	0,75 mH

MOUNTING INFORMATION

Overall diameter	312 mm	12,28 in
Bolt circle diameter	298 mm	11,73 in
Baffle cutout diameter:		
- Front mount	283 mm	11,12 in
Depth	130 mm	5,12 in
Net weight	5,6 kg	12,32 lb
Shipping weight	6,3 kg	13,86 lb

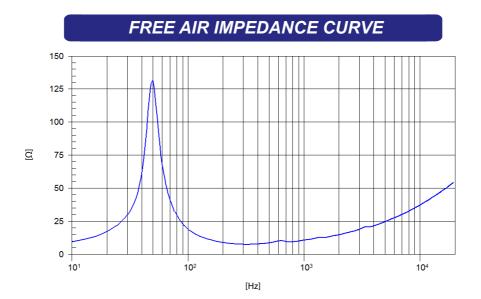
Notes

- * The power capacity 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.

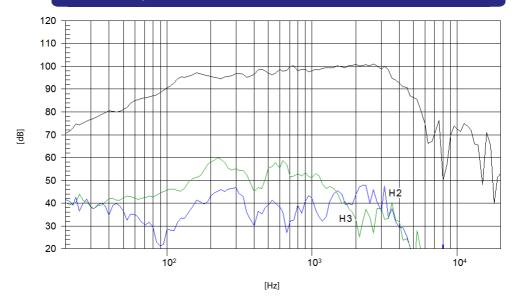


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FREQUENCY RESPONSE AND DISTORTION



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

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