beyma))

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	12 in
Rated impedance	8 Ω	
Minimum impedance	5,6 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
Bl factor	25,3 N/A	
Moving mass	0,067 kg	
Voice coil length	20 mm	
Air gap height	12 mm	
X_{damage} (peak to peak)	52 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 l
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
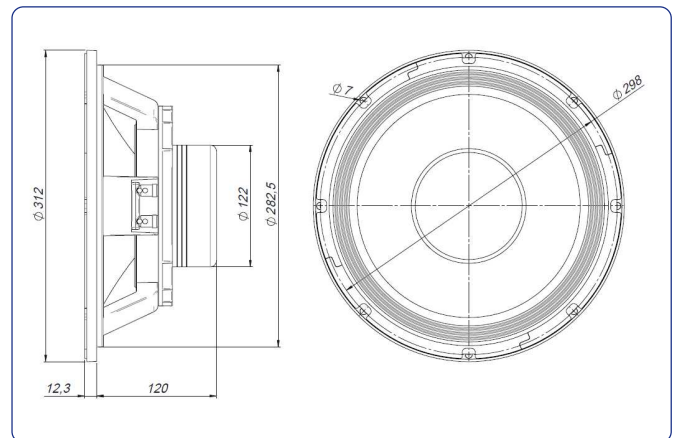
MOUNTING INFORMATION

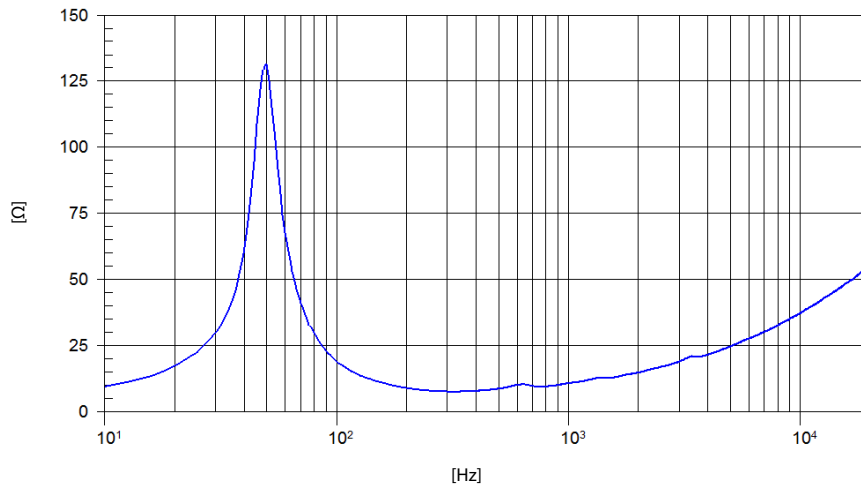|		
Overall diameter	312 mm	12,28 in
Bolt circle diameter	298 mm	11,73 in
Baffle cutout diameter:		
- Front mount	283 mm	11,12 in
Depth	130 mm	5,12 in
Net weight	5,6 kg	12,32 lb
Shipping weight	6,3 kg	13,86 lb

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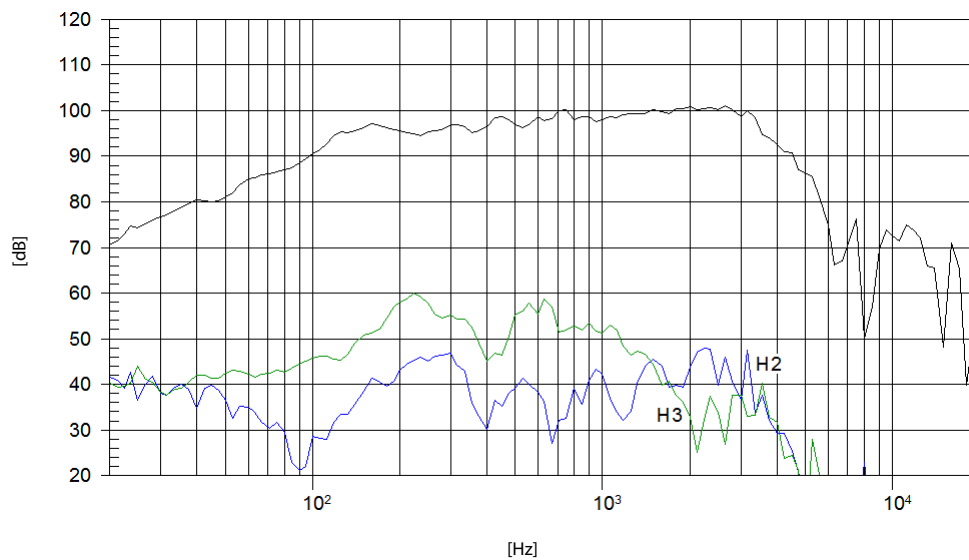
** T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

*** 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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PROFESSIONAL LOUDSPEAKERS
www.beyma.com

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LOW FREQUENCY TRANSDUCER
P80 Series

FREE AIR IMPEDANCE CURVE

FREQUENCY RESPONSE AND DISTORTION

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