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PROFESSIONAL LOUDSPEAKERS
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12P80FeV2

LOW FREQUENCY TRANSDUCER
Preliminary Data Sheet

KEY FEATURES

- 700 W_{AES} power handling capacity
- High sensitivity: 100 dB
- Wide usable frequency range and low harmonic distortion
- Low resonant frequency: 51 Hz
- Extended controlled displacement: X_{max} ± 7,5 mm
- Extended mechanical displacement capability: X_{dam} ± 52 mm
- Low power compression losses
- CONEX spider
- Designed with *MMSS technology*

TECHNICAL SPECIFICATIONS

Nominal diameter	300 mm	12 in
Rated impedance		8 Ω
Minimum impedance		6,5 Ω
Power capacity*		700 W_{AES}
Program power		1.400 W
Sensitivity	100 dB	1W / 1m @ Z_N
Frequency range		50 - 4.000 Hz
Voice coil diameter	101,6 mm	4 in
Bl factor		23 N/A
Moving mass		0,068 kg
Voice coil length		20 mm
Air gap height		12 mm
X_{damage} (peak to peak)		52 mm

THIELE-SMALL PARAMETERS**

Resonant frequency, f_s	51 Hz
D.C. Voice coil resistance, R_e	4,8 Ω
Mechanical Quality Factor, Q_{ms}	4,2
Electrical Quality Factor, Q_{es}	0,20
Total Quality Factor, Q_{ts}	0,19
Equivalent Air Volume to C_{ms}, V_{as}	60,4 l
Mechanical Compliance, C_{ms}	140 µm / N
Mechanical Resistance, R_{ms}	5,2 kg / s
Efficiency, η_0	3,9 %
Effective Surface Area, S_d	0,055 m^2
Maximum Displacement, X_{max} * **	7,5 mm
Displacement Volume, V_d	412,5 cm^3
Voice Coil Inductance, L_e @ 1 kHz	1 mH

Notes:

* The power capaticty is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.

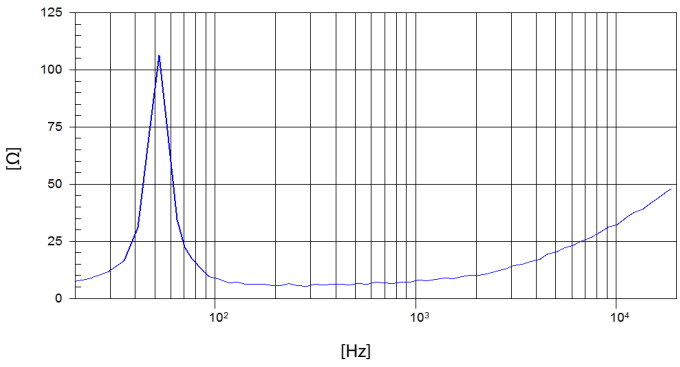
** T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

*** 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.

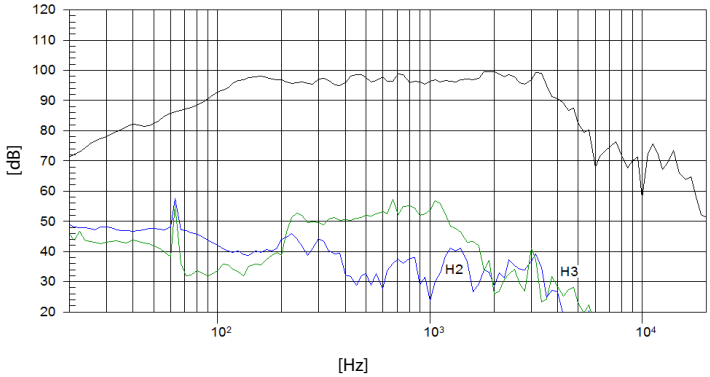
MOUNTING INFORMATION

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	11,5 kg	25,35 lb
Shipping weight	12,2 kg	26,90 lb

FREE AIR IMPEDANCE CURVE



FREQUENCY RESPONSE & DISTORTION



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