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PROFESSIONAL LOUDSPEAKERS
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12BR70

LOW FREQUENCY TRANSDUCER

KEY FEATURES

- 250 W program power
- Sensitivity: 93 dB (1W / 1m)
- 2” copper voice coil
- Ferrite magnet
- Extended controlled displacement: X_{max} ± 8 mm
- 26 mm peak-to-peak excursion before damage
- Designed for low frequency reproduction





TECHNICAL SPECIFICATIONS

Nominal diameter	300 mm	12 in
Rated impedance		8 Ω
Minimum impedance		6,6 Ω
Power capacity [1]		125 W_{RMS}
Program power [2]		250 W
Sensitivity	93 dB	1W / 1m @ Z_N
Frequency range		35 - 4.000 Hz
Recom. enclosure vol.	50 / 120 l	1,8 / 4,2 ft^3
Voice coil diameter	50,8 mm	2 in
Bl factor		12,1 N/A
Moving mass		0,074 kg
Voice coil length		19 mm
Air gap height		7 mm
X_{damage} (peak to peak)		26 mm

THIELE-SMALL PARAMETERS [3]

Resonant frequency, f_s	31 Hz
D.C. Voice coil resistance, R_e	5,6 Ω
Mechanical Quality Factor, Q_{ms}	4,4
Electrical Quality Factor, Q_{es}	0,56
Total Quality Factor, Q_{ts}	0,50
Equivalent Air Volume to C_{ms}, V_{as}	142 l
Mechanical Compliance, C_{ms}	345 μm / N
Mechanical Resistance, R_{ms}	3,3 kg / s
Efficiency, η_0	0,8 %
Effective Surface Area, S_d	0,054 m^2
Maximum Displacement, X_{max} [4]	8 mm
Displacement Volume, V_d	340 cm^3
Voice Coil Inductance, L_e	0,8 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.

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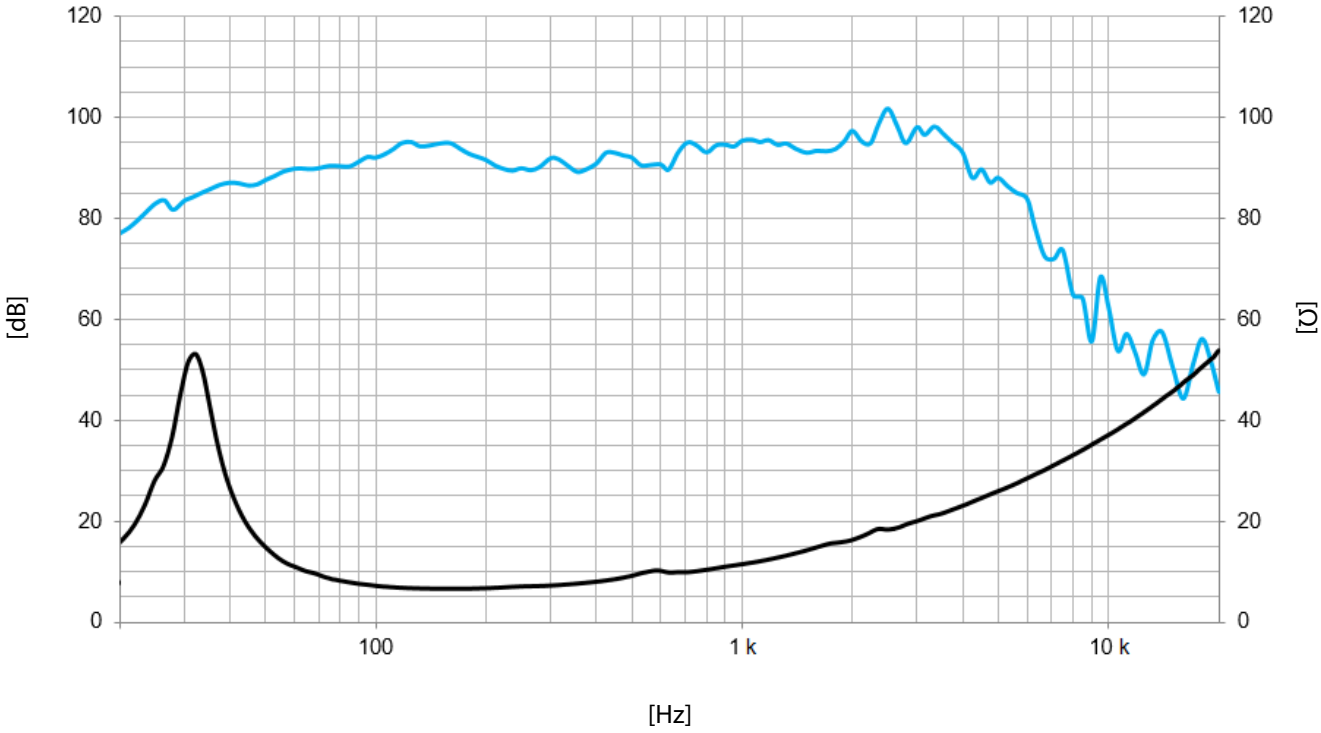
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Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

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
Net weight	3,6 kg	7,9 lb
Shipping weight	4,3 kg	9,5 lb

DIMENSION DRAWING

