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PROFESSIONAL LOUDSPEAKERS
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4FR40

FULL RANGE FREQUENCY TRANSDUCER

KEY FEATURES

- 4” full-range compact ferrite loudspeaker
- 80 W program power
- Extended response and low distortion
- Paper cone and Santoprene™ surround
- Pressed steel basket
- Ceramic magnet
- Ideal form beam-steering application (columns), portable array and compact applications





TECHNICAL SPECIFICATIONS

Nominal diameter	100 mm	4 in
Rated impedance		8 Ω
Minimum impedance		7,3 Ω
Power capacity [1]		40 W_{AES}
Program power [2]		80 W
Sensitivity	87 dB	1W / 1m @ Z_N
Frequency range		100 - 20.000 Hz
Voice coil diameter	20,3 mm	0,8 in
Bl factor		4,2 N/A
Moving mass		0,0044 kg
Voice coil length		7,7 mm
Air gap height		5 mm

THIELE-SMALL PARAMETERS [3]

Resonant frequency, f_s	92 Hz
D.C. Voice coil resistance, R_e	6,4 Ω
Mechanical Quality Factor, Q_{ms}	11,3
Electrical Quality Factor, Q_{es}	0,96
Total Quality Factor, Q_{ts}	0,88
Equivalent Air Volume to C_{ms}, V_{as}	2,8 l
Mechanical Compliance, C_{ms}	668 µm / N
Mechanical Resistance, R_{ms}	0,23 kg / s
Efficiency, η_0	0,22 %
Effective Surface Area, S_d	0,0055 m^2
Maximum Displacement, X_{max} [4]	3 mm
Displacement Volume, V_d	11 cm^3
Voice Coil Inductance, L_e @ 1 kHz	0,2 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.

[5] Product designed by Acústica Beyma S.L.

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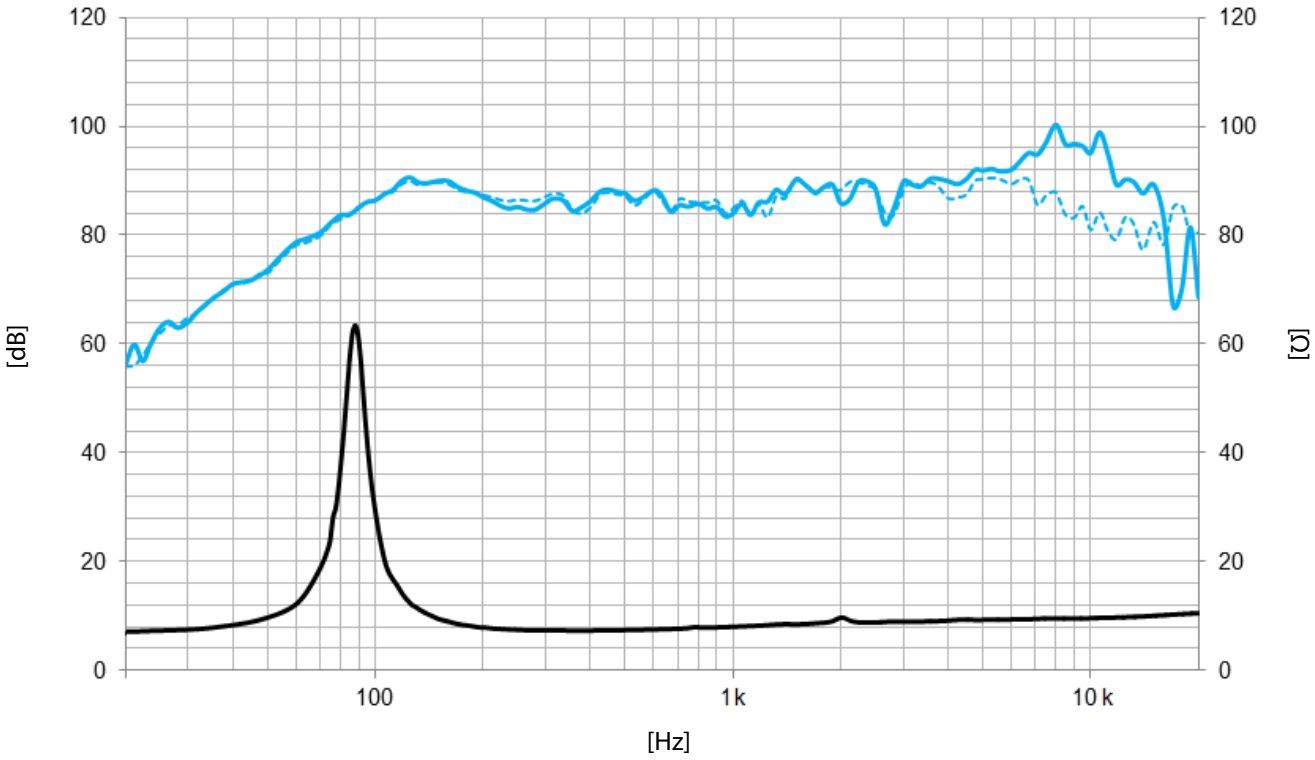
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Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

Frequency response on axis
Frequency response 45º off axis

MOUNTING INFORMATION

Overall diameter	118,2 mm	4,6 in
Bolt circle diameter	108,2 mm	4,3 in
Baffle cutout diameter:		
- Front mount	92 mm	3,6 in
Depth	60 mm	2,4 in
Net weight	0,55 kg	1,2 lb
Shipping weight	0,75 kg	1,6 lb

DIMENSION DRAWING

