beyma ♪♪

3FR30V2

FULL RANGE FREQUENCY TRANSDUCER

KEY FEATURES

- 3" full-range compact ferrite loudspeaker
- 60 W program power
- FEA optimized magnetic circuit
- Shorting cup for extended response and very low distortion
- Optimized surround design for minimal resonance behaviour

- Optimized linearity and dispersion pattern
- Weatherproof paper cone and extreme resistance elastomer surround
- Pressed Steel Frame
- Ideal for beam-steering application, portable array, columns and compact applications

TECHNICAL SPECIFICATIONS

Nominal diameter	77 mm	3 in
Rated impedance		8 Ω
Minimum impedance		7 Ω
Power capacity [1]		30 W$_{AES}$
Program power [2]		60 W
Sensitivity	90,5 dB	1W / 1m @ Z$_N$
Frequency range		135 - 20.000 Hz
Voice coil diameter	20,3 mm	0,8 in
Bl factor		4,5 N/A
Moving mass		0,0023 kg
Voice coil length		6 mm
Air gap height		5 mm

THIELE-SMALL PARAMETERS [3]

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Resonant frequency, f$_s$	133 Hz
D.C. Voice coil resistance, R$_e$	5,8 Ω
Mechanical Quality Factor, Q$_{ms}$	5,9
Electrical Quality Factor, Q$_{es}$	0,56
Total Quality Factor, Q$_{ts}$	0,51
Equivalent Air Volume to C$_{ms}$, V$_{as}$	1,0 l
Mechanical Compliance, C$_{ms}$	624 μm / N
Mechanical Resistance, R$_{ms}$	0,32 kg / s
Efficiency, η$_0$	0,4 %
Effective Surface Area, S$_d$	0,003 m^2
Maximum Displacement, X$_{max}$ [4]	2 mm
Displacement Volume, V$_d$	5 cm^3
Voice Coil Inductance, L$_e$ @ 1 kHz	0,16 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.
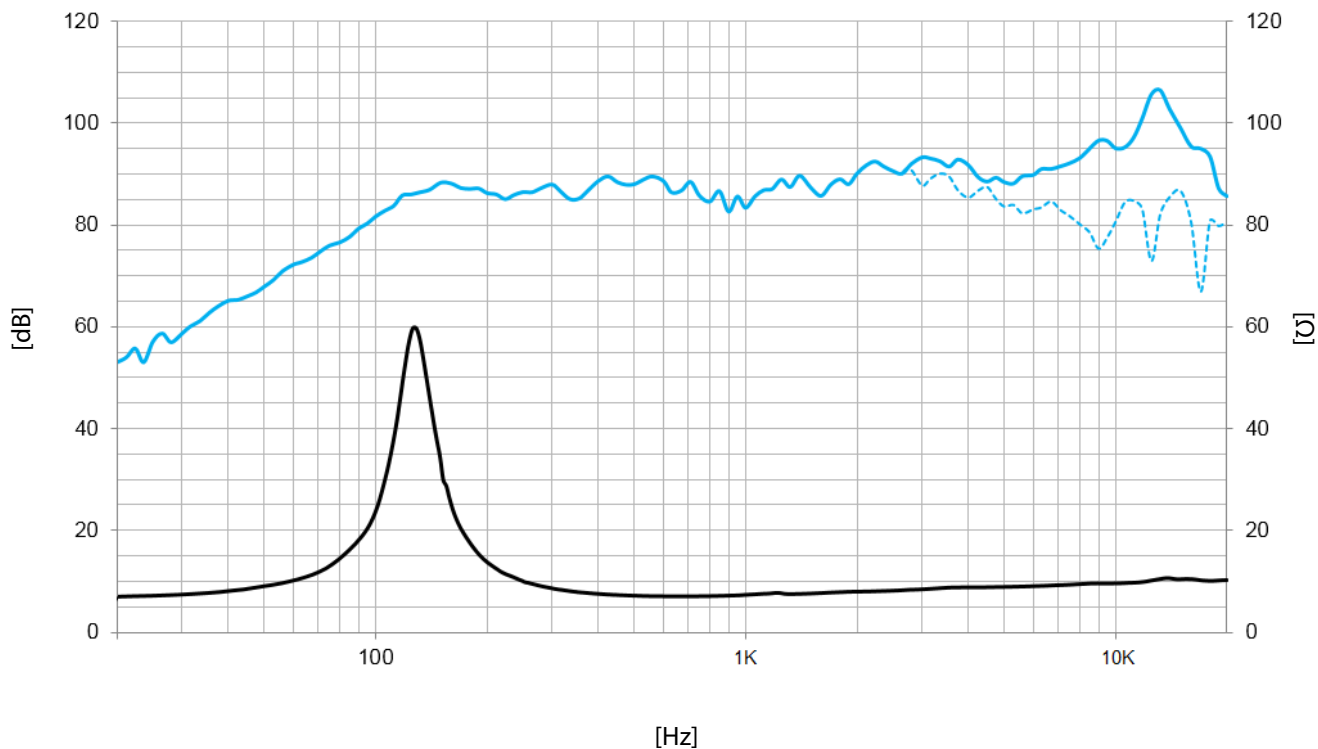
Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

───── Frequency response on axis
▪▪▪▪▪ Frequency response 45º off axis

MOUNTING INFORMATION

Overall diameter	93,5 mm	3,7 in
Bolt circle diameter	85 mm	3,4 in
Baffle cutout diameter:		
- Front mount	75 mm	3,9 in
Depth	52 mm	2 in
Net weight	0,57 kg	1,2 lb
Shipping weight	0,70 kg	1,5 lb

DIMENSION DRAWING

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01/21