

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	0 W _{AES}
Program power ²		60 W
Sensitivity	90,5 dB 1W / 1n	n @ Z _N
Frequency range	135 - 20.	000 Hz
Voice coil diameter	20,3 mm	0,8 in
BI factor		4,5 N/A
Moving mass	0,0	0023 kg
Voice coil length		6 mm
Air gap height		5 mm

THIELE-SMALL PARAMETERS 3

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, Qes	0,56
Total Quality Factor, Qts	0,51
Equivalent Air Volume to C _{ms} , V _{as}	1,0 I
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).

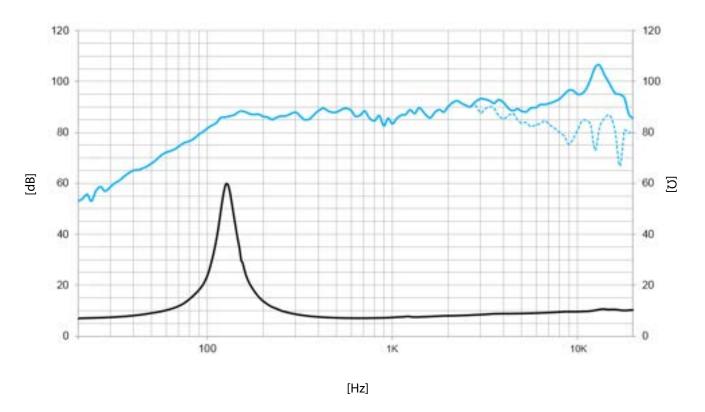
 $^{^4}$ The X_{max} is calculated as (L_{vc} - H_{ag})/2 + (H_{ag}/3,5), where L_{vc} is the voice coil length and H_{ag} is the air gap height.

⁵ Product designed by Acústica Beyma S.L.



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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 45° 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

