beyma

PROFESSIONAL LOUDSPEAKERS

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PRO8CF

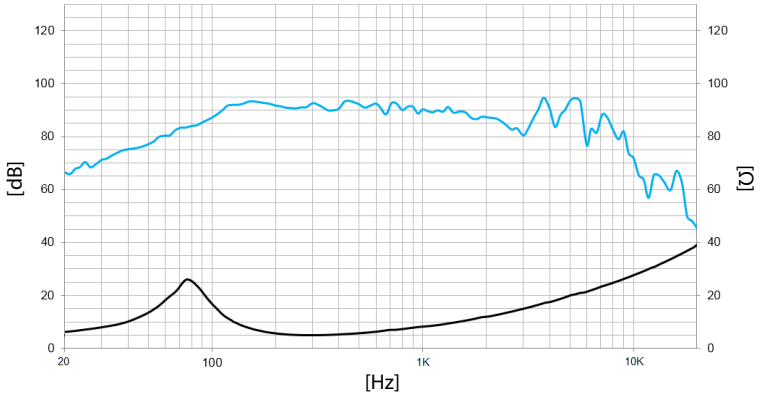
Preliminary Data Sheet

TECHNICAL SPECIFICATIONS

Nominal diameter	200 mm	8 in
Rated impedance		4 Ω
Minimum impedance		5 Ω
Power capacity [1]		300 W_{AES}
Program power [2]		600 W
Sensitivity	93 dB	1W / 1m @ Z_N
Frequency range		80 - 2.000 Hz
Voice coil diameter	50,8 mm	2 in
Bl factor		12,6 N/A
Moving mass		0,033 kg
Voice coil length		30 mm
Air gap height		8 mm
X_{damage} (peak to peak)		30 mm

THIELE-SMALL PARAMETERS [3]

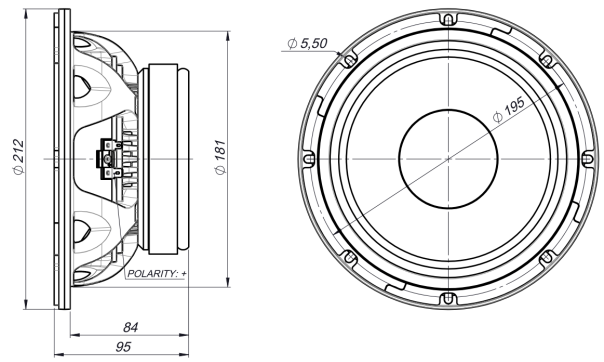
Resonant frequency, f_s	78 Hz
D.C. Voice coil resistance, R_e	3,7 Ω
Mechanical Quality Factor, Q_{ms}	2,3
Electrical Quality Factor, Q_{es}	0,38
Total Quality Factor, Q_{ts}	0,32
Equivalent Air Volume to C_{ms}, V_{as}	8,8 l
Mechanical Compliance, C_{ms}	128 μm / N
Mechanical Resistance, R_{ms}	6,9 kg / s
Efficiency, η_0	1,1 %
Effective Surface Area, S_d	0,022 m^2
Maximum Displacement, X_{max} [4]	6.3 mm
Displacement Volume, V_d	138 cm^3
Voice Coil Inductance, L_e	0,6 mH



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

MOUNTING INFORMATION

Overall diameter	212 mm	8,3 in
Bolt circle diameter	195 mm	7,7 in
Baffle cutout diameter:		
- Front mount	181 mm	7,1 in
Depth	95 mm	3,7 in
Net weight	3,3 kg	7,3 lb
Shipping weight	3,6 kg	7,9 lb



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.