beyma))

PRO-8WNd 4Ω
LOW FREQUENCY TRANSDUCER

TECHNICAL SPECIFICATIONS

Nominal diameter	200 mm	8 in
Rated impedance		4 Ω
Minimum impedance		4,5 Ω
Power capacity*		250 W_{AES}
Program power		500 W
Sensitivity	93 dB	1W / 1m @ Z_N
Frequency range		80 - 4.000 Hz
Voice coil diameter	63,5 mm	2,5 in
Bl factor		8,6 N/A
Moving mass		0,025 kg
Voice coil length		16 mm
Air gap height		7 mm
X_{damage} (peak to peak)		23 mm

THIELE-SMALL PARAMETERS**

Resonant frequency, f_s	74 Hz
D.C. Voice coil resistance, R_e	3,2 Ω
Mechanical Quality Factor, Q_{ms}	4,3
Electrical Quality Factor, Q_{es}	0,50
Total Quality Factor, Q_{ts}	0,44
Equivalent Air Volume to C_{ms}, V_{as}	13 l
Mechanical Compliance, C_{ms}	188 μm / N
Mechanical Resistance, R_{ms}	2,7 kg / s
Efficiency, η_0	1,01 %
Effective Surface Area, S_d	0,022 m^2
Maximum Displacement, X_{max} ***	6,8 mm
Displacement Volume, V_d	149 cm^3
Voice Coil Inductance, L_e @ 1 kHz	0,2 mH
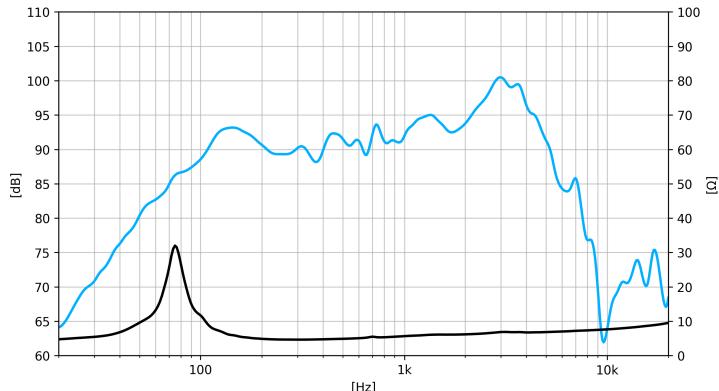
Note: On axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

MOUNTING INFORMATION

Overall diameter	212 mm	8,3 in
Bolt circle diameter	198 mm	7,8 in
Baffle cutout diameter:		
- Front mount	181 mm	7,1 in
Depth	96 mm	3,8 in
Net weight	3,3 kg	7,3 lb
Shipping weight	3,5 kg	7,6 lb
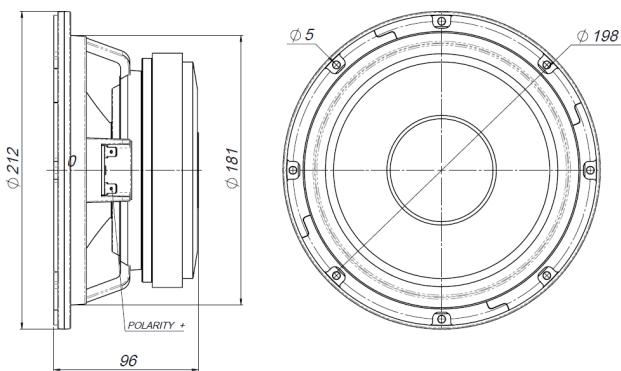
Notes:

This datasheet is done with the measurement of a laboratory prototype. Small differences may appear when thw driver is transferred to the production line and manufactured in big quantities.

* The power capaticty is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.

** 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).

*** 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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