

3411NdS (Design in progress)

Nominal Diameter
Rated Impedance
8
Sensitivity
94.5 dB SPL
Power Handling Capacity
SPL max (continuous)
Usable frequency range
Speaker net mass
10 " / 25 cm
8
4400 W AES
418 dB SPL
45 dB SPL
400 W AES
41 kg

10 inches bass driver



Architecture highlights:

- Noiseless natural convection Intercooling System
- Neodymium magnet system with symmetric BL(x) and Le(x)
- Dual side coated diaphragm
- High excursion 24.0 mm winding voice coil
- Linear BL(x) on +/-6mm

Motor architecture		
Magnet material	-	Nd
Voice coil diameter	mm	64
Voice coil length	mm	24
Air gap height	mm	10

Typical characteristics

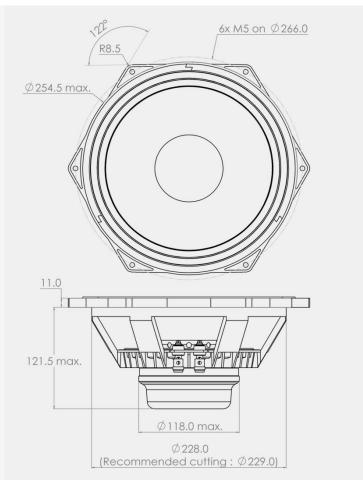
Rated impedance	Z	Ω	8
Half space sensitivity (1W@1m)	-	dB SPL	94.5
Usable freq. range	-	Hz	35 - 2000
Power handling capacity (AES)	-	W	400
Max Sound Pressure Level	SPL _{max}	dB SPL	118
Min. impedance modulus	Z_{min}	Ω@Hz	7.4@300
Voice-coil inductance @ 1kHz	Le _{1k}	mH	1.599
Voice-coil inductance @ 10kHz	Le _{10k}	mH	0.679
BL product	BL	N/A	21.6
Moving mass	Mms	kg	0.0590

Thiele-Small parameters

Resonance frequency	Fs	Hz	48 (±7)
DC Resistance	Re	Ω	5.6 (±0.6)
Mechanical quality factor	Qms	1	3.97
Electrical quality factor	Qes	1	0.21
Total quality factor	Qts	1	0.20
Suspension compliance	Cms	10 ⁻⁶ .m/N	180
Effective piston area	Sd	m^2	0.0356
Equivalent Cas air load	Vas	m^3	0.0333
Max linear excursion	Xmax	mm	± 8.0
Linear displacement volume	Vd	10 ⁻³ .m ³	0.2851
Reference efficiency	η_0	%	1.7
Unity load volume	Vas.Qts ²	10 ⁻³ .m ³	1.4

Absolute maximum ratings

3			
Short term max. input voltage	Vmax	V	115
Max.excursion before damage	Xdam	mm	± 12.0
Ambient operating temperature	Та	°C	-10 to +50
Storage temperature		°C	-20 to +70
Environmental withstanding			Tropical



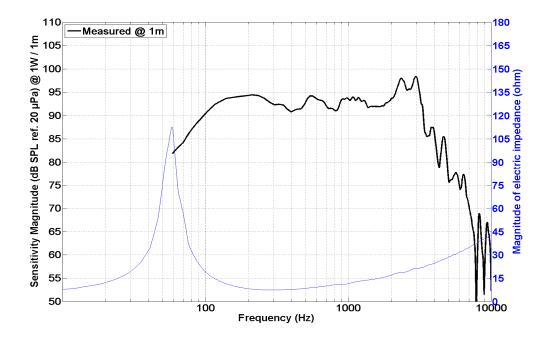
Mounting information

Air volume occupied by the driver	10 ⁻³ .m ³	1.10
Speaker net mass	kg	4.10
Baffle cut-out diameter (front mounting)	mm	229.0
Bolt number & Metric diameter	-	6x M5
Bolt circle diameter	mm	266.0
Max overall dimension (on ears)	mm	283.5
Max overall dimension (out of ears)	mm	254.5
Flange height	mm	11.0
Max magnet diameter	mm	118.0
Max depth (front mounting)	mm	121.5
Recommended reflex box	Lts / Hz	-
Electrical connection	Ø4 mm Push buttons	



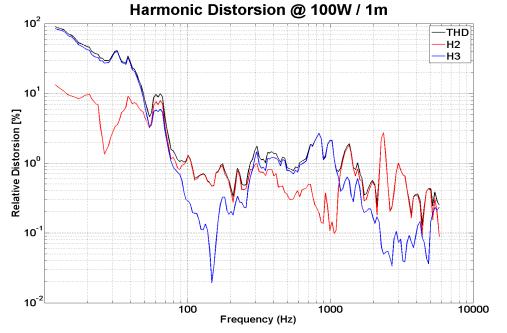
SPL curves measured on CEI standard baffle :

. at 1 m for reference



HD curves measured on CEI standard baffle :

- . at 1 meter
- . at power = $P_AES/4$



Non linear curves measured thanks to Klippel software and hardware, in free air

