3005NdU

10 inches bass driver

Nominal Diameter	**10 " / 25 cm**
Rated Impedance	**8 q**
Sensitivity	**91.5 dB SPL**
Power Handling Capacity	**250 W AES**
SPL max (continuous)	**112 dB SPL**
Usable frequency range	**40 - 3000 Hz**
Speaker net mass	**3 kg**

Architecture highlights :

- Noiseless natural convection Intercooling System
- High excursion 22.0 mm winding voice coil
- Neodymium magnet system with symmetric BL(x) and Le(x)
- High compliance double half-roll Fabric Surround for low Fs
- Dual side coated diaphragm

Motor architecture

Magnet material	-	Nd
Voice coil diameter	mm	51
Voice coil length	mm	22
Air gap height	mm	8

Typical characteristics

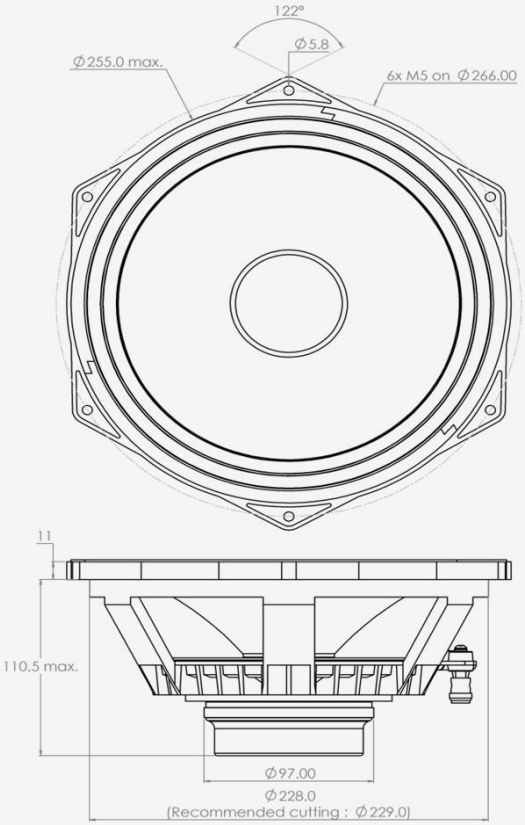
Rated impedance	Z	Ω	8
Half space sensitivity (1W@1m)	-	dB SPL	91.5
Usable freq. range	-	Hz	40 - 3000
Power handling capacity (AES)	-	W	250
Max Sound Pressure Level	SPL_{max}	dB SPL	112
Min. impedance modulus	Z_{min}	Ω@Hz	5.7@280
Voice-coil inductance @ 1kHz	Le_{1k}	mH	1.050
Voice-coil inductance @ 10kHz	Le_{10k}	mH	0.584
BL product	BL	N/A	12.6
Moving mass	Mms	kg	0.0510

Thiele-Small parameters

Resonance frequency	Fs	Hz	53 (±8)
DC Resistance	Re	Ω	4.7 (±0.5)
Mechanical quality factor	Qms	1	5.66
Electrical quality factor	Qes	1	0.50
Total quality factor	Qts	1	0.46
Suspension compliance	Cms	10^{-6}.m/N	180
Effective piston area	Sd	m^2	0.0356
Equivalent Cas air load	Vas	m^3	0.0318
Max linear excursion	Xmax	mm	± 9.0
Linear displacement volume	Vd	$10^{-3}.m^3$	0.3207
Reference efficiency	η_0	%	0.9
Unity load volume	$Vas.Qts^2$	$10^{-3}.m^3$	6.8

Absolute maximum ratings

Short term max. input voltage	Vmax	V	90
Max.excursion before damage	Xdam	mm	± 12.0
Ambient operating temperature	Ta	°C	-10 to +50
Storage temperature		°C	-20 to +70
Environmental withstanding			Tropical



Mounting information

Air volume occupied by the driver	$10^{-3}.m^3$	1.40
Speaker net mass	kg	3.00
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	97.0
Max depth (front mounting)	mm	110.5
Recommended reflex box	Lts / Hz	-
Electrical connection		Ø4 mm Push buttons

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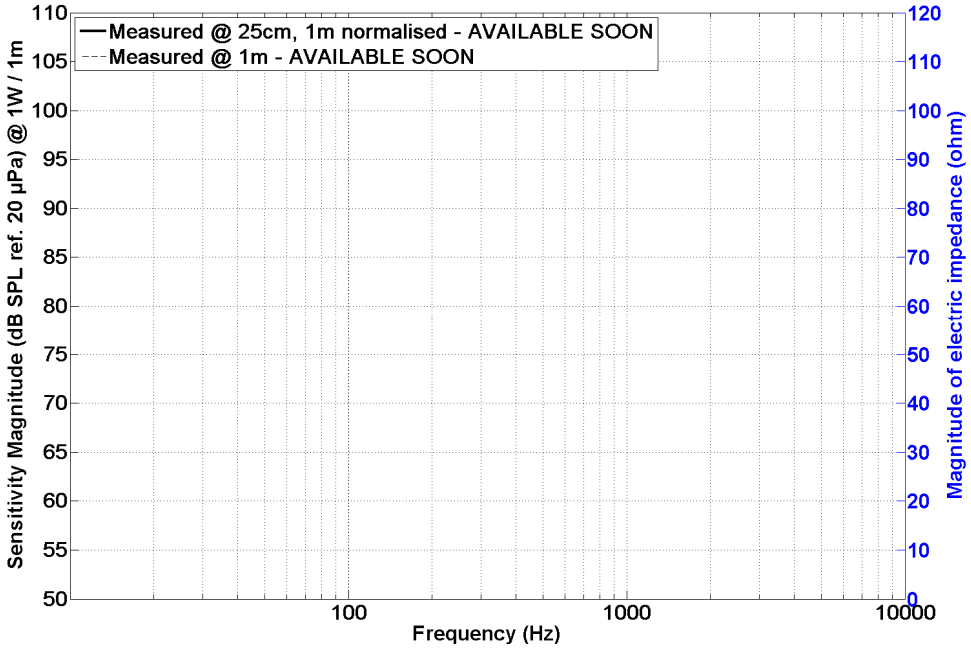
SPL curves measured on CEI standard baffle :

. at 25 cm, normalised 1 m

. at 1 m for reference

. Graph amplitude = 60 dB (PHL Audio standard)

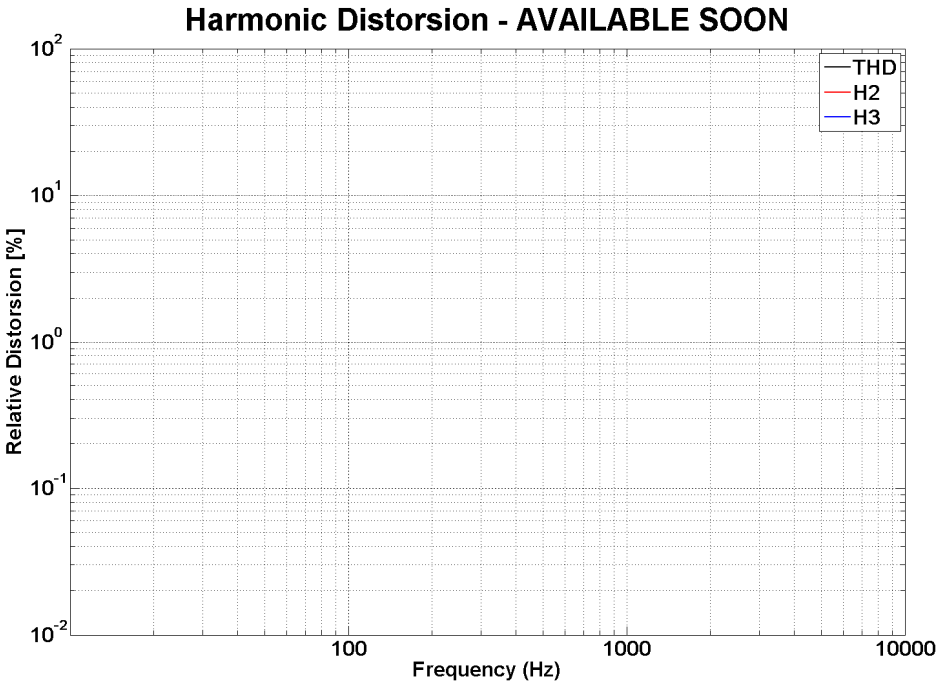


HD curve measured on CEI standard baffle :

. at 1 meter

. at power = P_AES / 4

. Graph amplitude 0.01 % to 100 % (PHL Audio standard for P_AES/4)



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