



## 950Nd

Nominal Diameter	5 " / 13 cm
Rated Impedance	8
Sensitivity	94 dB SPL
Power Handling Capacity	80 W AES
SPL max (continuous)	110 dB SPL
Usable frequency range	300 - 4000 Hz
Speaker net mass	0.98 kg

## 5 inches midrange driver



### Architecture highlights :

- Noiseless natural convection Intercooling System
- Neodymium magnet system with symmetric BL(x) and Le(x)
- High definition CCAR vented voice coil
- Critical damping flat foam surround
- Lightweight basket

### Motor architecture

Magnet material	-	Nd
Voice coil diameter	mm	38
Voice coil length	mm	7.5
Air gap height	mm	6

### Typical characteristics

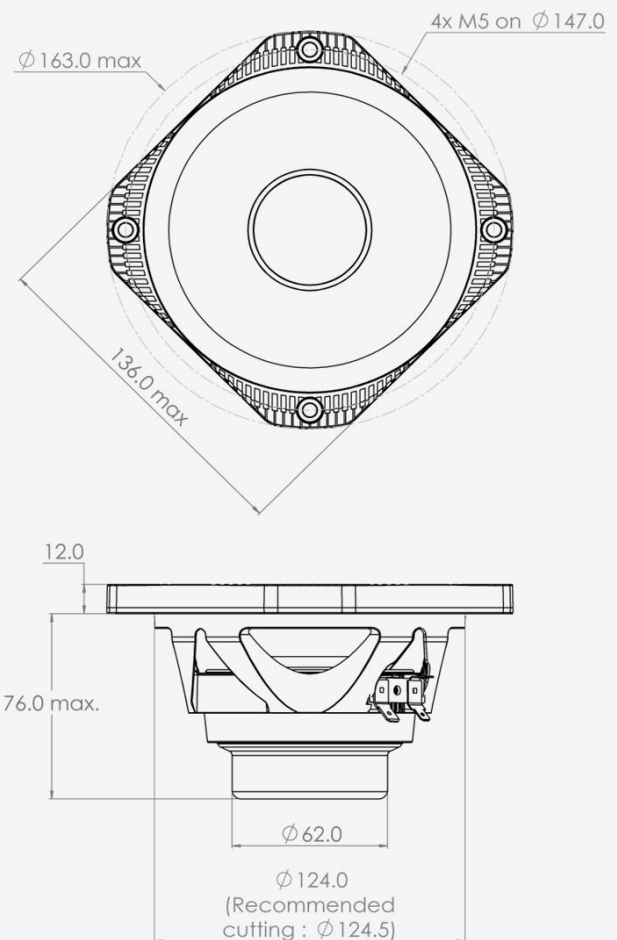
Rated impedance	Z	Ω	8
Half space sensitivity (1W@1m)	-	dB SPL	94.0
Usable freq. range	-	Hz	300 - 4000
Power handling capacity (AES)	-	W	80
Max Sound Pressure Level	SPL <sub>max</sub>	dB SPL	110
Min. impedance modulus	Z <sub>min</sub>	Ω@Hz	6.1@800
Voice-coil inductance @ 1kHz	Le <sub>1k</sub>	mH	0.641
Voice-coil inductance @ 10kHz	Le <sub>10k</sub>	mH	0.236
BL product	BL	N/A	8.9
Moving mass	M <sub>ms</sub>	kg	0.0081

### Thiele-Small parameters

Resonance frequency	F <sub>s</sub>	Hz	200 (±40)
DC Resistance	Re	Ω	5.1 (±0.5)
Mechanical quality factor	Q <sub>ms</sub>	1	5.99
Electrical quality factor	Q <sub>es</sub>	1	0.66
Total quality factor	Q <sub>ts</sub>	1	0.59
Suspension compliance	C <sub>ms</sub>	10 <sup>-6</sup> .m/N	80
Effective piston area	S <sub>d</sub>	m <sup>2</sup>	0.0109
Equivalent Cas air load	V <sub>as</sub>	m <sup>3</sup>	0.0013
Max linear excursion	X <sub>max</sub>	mm	± 2.0
Linear displacement volume	V <sub>d</sub>	10 <sup>-3</sup> .m <sup>3</sup>	0.0219
Reference efficiency	η <sub>0</sub>	%	1.6
Unity load volume	V <sub>as</sub> .Q <sub>ts</sub> <sup>2</sup>	10 <sup>-3</sup> .m <sup>3</sup>	0.5

### Absolute maximum ratings

Short term max. input voltage	V <sub>max</sub>	V	50
Max.excursion before damage	X <sub>dam</sub>	mm	± 3.0
Ambient operating temperature	T <sub>a</sub>	°C	-10 to +50
Storage temperature		°C	-20 to +70
Environmental withstanding			Humidity proof



### Mounting information

Air volume occupied by the driver	10 <sup>-3</sup> .m <sup>3</sup>	0.18
Speaker net mass	kg	0.98
Baffle cut-out diameter (front mounting)	mm	124.5
Bolt number & Metric diameter	-	4x M5
Bolt circle diameter	mm	147.0
Max overall dimension (on ears)	mm	163.0
Max overall dimension (out of ears)	mm	136.0
Flange height	mm	12.0
Max magnet diameter	mm	-
Max depth (front mounting)	mm	76.0
Recommended reflex box	Lts / Hz	-
Electrical connection		6.35x0.8 + 4.8x0.5 FASTON

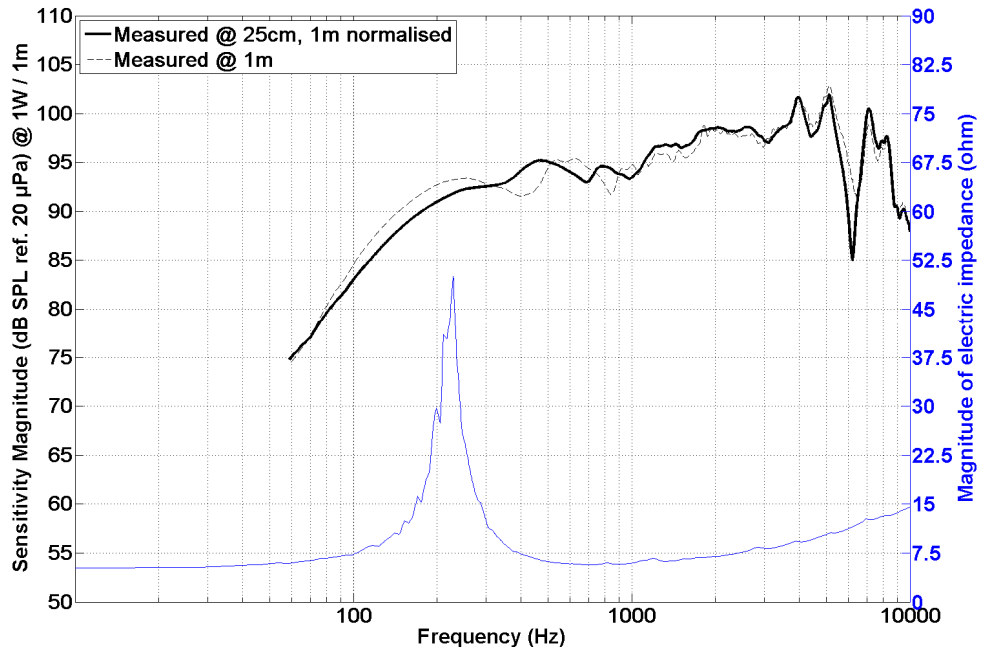


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# 5 inches midrange driver

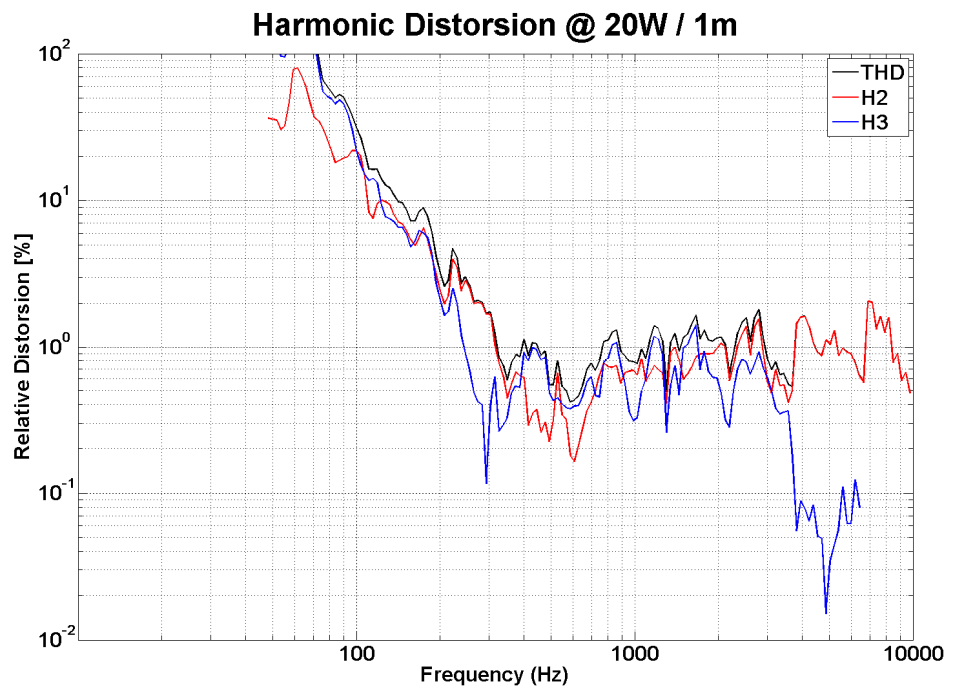
SPL curves measured on CEI standard baffle :

- . at 25 cm, normalised 1 m
- . at 1 m for reference
- . Graph amplitude = 60 dB (PHL Audio standard)



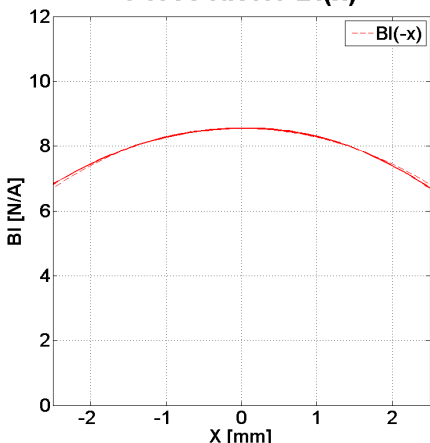
HD curve measured on CEI standard baffle :

- . at 1 meter
- . at power =  $P_{AES} / 4$
- . Graph amplitude 0.01 % to 100 % (PHL Audio standard for  $P_{AES}/4$ )

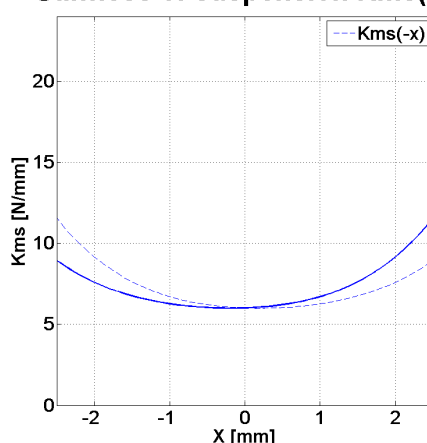


Non linear curves measured thanks to Klippel software and hardware, in free air

**Force factor BI(x)**



**Stiffness of suspension Kms(X)**



**Electrical inductance L(X,I=0)**

