

## **5550MNdS**

Nominal Diameter	38 cm / 15 "
Rated Impedance	8
Sensitivity	96 dB SPL
Power Handling Capacity	500 W AES
SPL max (continuous)	120 dB SPL
Usable frequency range	40 - 1500 Hz
Speaker net mass	5.1 kg

## Architecture highlights :

- Ultra light injection molded Magnesium basket
- Neodymium magnet system with symmetric BL(x) and Le(x) characteristics
- Natural convection Intercooling system for noiseless sound reproduction
- Heavy duty long excursion suspension with linear behavior for large signal
- Coated diaphragm

#### Motor architecture

Magnet material	-	Nd
Voice coil diameter	mm	77
Voice coil length	mm	28
Air gap height	mm	12

#### **Typical characteristics**

Rated impedance	Z	Ω	8
Half space sensitivity (1W@1m)	-	dB SPL	96.0
Usable freq. range	-	Hz	40 - 1500
Power handling capacity (AES)	-	W	500
Max Sound Pressure Level	SPL <sub>max</sub>	dB SPL	120
Min. impedance modulus	Z <sub>min</sub>	Ω@Hz	6.6@200
Voice-coil inductance @ 1kHz	Le <sub>1k</sub>	mH	1.784
Voice-coil inductance @ 10kHz	Le <sub>10k</sub>	mH	0.663
BL product	BL	N/A	23.5
Moving mass	Mms	kg	0.130

#### Thiele-Small parameters

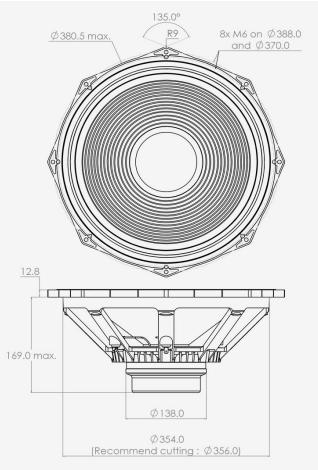
Resonance frequency	Fs	Hz	42 (±6)
DC Resistance	Re	Ω	5.3 (±0.5)
Mechanical quality factor	Qms	1	5.28
Electrical quality factor	Qes	1	0.33
Total quality factor	Qts	1	0.31
Suspension compliance	Cms	10 <sup>-6</sup> .m/N	110
Effective piston area	Sd	m²	0.0871
Equivalent Cas air load	Vas	m <sup>3</sup>	0.1184
Max linear excursion	Xmax	mm	± 11.0
Linear displacement volume	Vd	10 <sup>-3</sup> .m <sup>3</sup>	0.9580
Reference efficiency	$\eta_0$	%	2.6
Unity load volume	Vas.Qts <sup>2</sup>	10 <sup>-3</sup> .m <sup>3</sup>	11.4

### Absolute maximum ratings

Short term max. input voltage	Vmax	V	120
Max.excursion before damage	Xdam	mm	± 20.0
Ambient operating temperature	Та	°C	-10 to +50
Storage temperature		°C	-20 to +70
Environmental withstanding			Tropical

# 15 inches bass driver





## Mounting information

Air volume occupied by the driver	10⁻³.m³	3.90
Speaker net mass	kg	5.1
Baffle cut-out diameter (front mounting)	mm	355.0
Bolt number & Metric diameter	-	8x M6
Bolt circle diameter	mm	370 and 388
Max overall dimension (on ears)	mm	406.5
Max overall dimension (out of ears)	mm	380.5
Flange height	mm	13.0
Max magnet diameter	mm	138.0
Max depth (front mounting)	mm	169.0
Recommended reflex box	Lts / Hz	100L / 40Hz
Electrical connection	6.35x0.8 + 4.8	x0.5 FASTON

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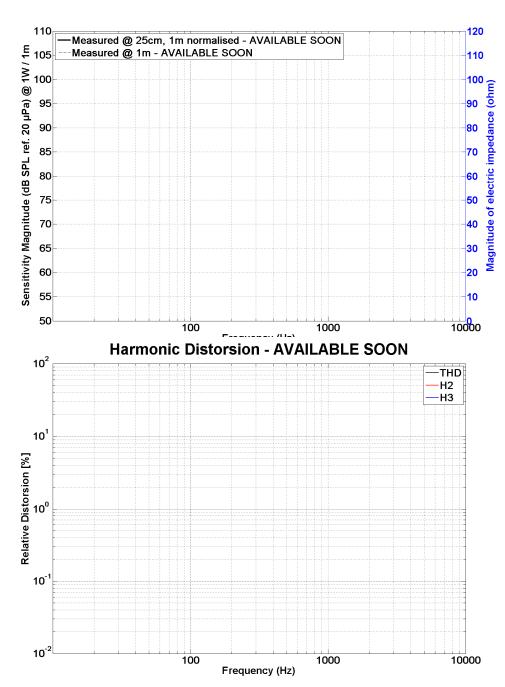


SPL curves measured on CEI standard baffle :

- . 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

