



PHL Audio HP4131

12 inches bass driver

Nominal Diameter	30 cm / 12 "
Rated Impedance	8 Ω
Reference efficiency (1W @ 1m)	96 dB SPL
Power Handling Capacity	400 W AES
SPL max (continuous)	118 dB SPL
Usable frequency range	50 - 2500 Hz
Speaker net mass	8.9 kg

Architecture highlights :

- Natural Convection Intercooling System
- Both sides coated Curvilinear cone (Tropical withstanding)
- High compliance double half-roll Fabric Surround



Motor architecture			
Voice coil diameter	mm	77	
Voice coil length	mm	18	
Air gap height	mm	10	

Typical characteristics			
Rated impedance	Z	Ω	8
Half space sensitivity (1W@1m)	-	dB SPL	96
Usable freq. range	-	Hz	50 - 2500
Power handling capacity (AES)	-	W	400
Max Sound Pressure Level	SPL _{max}	dB SPL	118
Min. impedance modulus	Z _{min}	Ω @Hz	6.0@260
Voice-coil inductance @ 1kHz	Le _{1k}	mH	1.158
Voice-coil inductance @ 10kHz	Le _{10k}	mH	0.541
BL product	BL	N/A	21.2
Moving mass	Mms	kg	0.076

Thiele-Small parameters			
Resonance frequency	Fs	Hz	42 (± 5)
DC Resistance	Re	Ω	5.3 (± 0.5)
Mechanical quality factor	Qms	1	4.46
Electrical quality factor	Qes	1	0.24
Total quality factor	Qts	1	0.22
Suspension compliance	Cms	10 ⁻⁶ .m/N	190
Effective piston area	Sd	m ²	0.0531
Equivalent Cas air load	Vas	m ³	0.0746
Max linear excursion	Xmax	mm	± 6.0
Linear displacement volume	Vd	10 ⁻³ .m ³	0.3186
Reference efficiency	η_0	%	2.3
Unity load volume	Vas.Qts ²	10 ⁻³ .m ³	3.8

Absolute maximum ratings			
Short term max. input voltage	Vmax	V	115
Max.excursion before damage	Xdam	mm	14.0
Ambient operating temperature	Ta	°C	-10 to +50
Storage temperature		°C	-20 to +70
Environemental withstanding			tropical

Mounting information		
Air volume occupied by the driver	10 ⁻³ .m ³	2.7
Speaker net mass	kg	8.9
Baffle cut-out diameter (front mounting)	mm	282.0
Bolt number & Metric diameter	-	8x M6
Bolt circle diameter	mm	300 to 308
Max overall dimension (on ears)	mm	326.5
Max overall dimension (out of ears)	mm	307.0
Flange height	mm	13.0
Max magnet diameter	mm	204.0
Max depth (front mounting)	mm	128.5
Recommended reflex box	Lts / Hz	50L / 53Hz
Electrical connection	$\varnothing$ 4 mm Push buttons	

