



PHL Audio HP7091

18 inches bass driver

Nominal Diameter	46 cm / 18 "
Rated Impedance	8 Ω
Reference efficiency (1W @ 1m)	97 dB SPL
Power Handling Capacity	1000 W AES
SPL max (continuous)	123 dB SPL
Usable frequency range	30 - 800 Hz
Speaker net mass	10.9 kg

Architecture highlights :

- Forced-air Intercooling System for low thermal compression
- Both sides coated Curvilinear cone (Tropical withstanding)
- High compliance double half-roll fabric surround



Motor architecture			
Voice coil diameter	mm	101	
Voice coil length	mm	22	
Air gap height	mm	10	

Typical characteristics			
Rated impedance	Z	Ω	8
Half space sensitivity (1W@1m)	-	dB SPL	97
Usable freq. range	-	Hz	30 - 800
Power handling capacity (AES)	-	W	1000
Max Sound Pressure Level	SPL _{max}	dB SPL	123
Min. impedance modulus	Z _{min}	Ω @Hz	6.8@200
Voice-coil inductance @ 1kHz	Le _{1k}	mH	1.796
Voice-coil inductance @ 10kHz	Le _{10k}	mH	0.866
BL product	BL	N/A	26.6
Moving mass	Mms	kg	0.195

Thiele-Small parameters			
Resonance frequency	Fs	Hz	34 (± 5)
DC Resistance	Re	Ω	5.6 (± 0.6)
Mechanical quality factor	Qms	1	4.17
Electrical quality factor	Qes	1	0.33
Total quality factor	Qts	1	0.31
Suspension compliance	Cms	10 ⁻⁶ .m/N	110
Effective piston area	Sd	m ²	0.1282
Equivalent Cas air load	Vas	m ³	0.2585
Max linear excursion	Xmax	mm	± 8.5
Linear displacement volume	Vd	10 ⁻³ .m ³	1.0896
Reference efficiency	η_0	%	3.0
Unity load volume	Vas.Qts ²	10 ⁻³ .m ³	24.1

Absolute maximum ratings			
Short term max. input voltage	Vmax	V	180
Max.excursion before damage	Xdam	mm	16.0
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	7.0	
Speaker net mass	kg	10.9	
Baffle cut-out diameter (front mounting)	mm	422.0	
Bolt number & Metric diameter	-	8x M6	
Bolt circle diameter	mm	454.0	
Max overall dimension (on ears)	mm	476.0	
Max overall dimension (out of ears)	mm	457.0	
Flange height	mm	15.0	
Max magnet diameter	mm	225.0	
Max depth (front mounting)	mm	171.0	
Recommended reflex box	Lts / Hz	180L / 38Hz	
Electrical connection	Ø4 mm Push buttons		

