



PHL Audio HP900

5 inches low - mid frequency driver

Nominal Diameter	13 cm / 5 "
Rated Impedance	8 Ω
Reference efficiency (1W @ 1m)	90 dB SPL
Power Handling Capacity	100 W AES
SPL max (continuous)	106 dB SPL
Usable frequency range	60 - 3000 Hz
Speaker net mass	2.02 kg

Architecture highlights :

- Noiseless natural convection Intercooling System
- Ferrite magnet system with symetric BL(x) and Le(x)
- Long excursion suspension with linear behavior for large signal
- Lightweight basket

Motor architecture

Voice coil diameter	mm	38
Voice coil length	mm	16
Air gap height	mm	6

Typical characteristics

Rated impedance	Z	Ω	8
Half space sensitivity (1W@1m)	-	dB SPL	90
Usable freq. range	-	Hz	60 - 3000
Power handling capacity (AES)	-	W	100
Max Sound Pressure Level	SPL _{max}	dB SPL	106
Min. impedance modulus	Z _{min}	Ω @Hz	6.2@550
Voice-coil inductance @ 1kHz	Le _{1k}	mH	0.346
Voice-coil inductance @ 10kHz	Le _{10k}	mH	0.212
BL product	BL	N/A	8.0
Moving mass	Mms	kg	0.011

Thiele-Small parameters

Resonance frequency	Fs	Hz	66 (± 10)
DC Resistance	Re	Ω	5.7 (± 0.6)
Mechanical quality factor	Qms	1	3.87
Electrical quality factor	Qes	1	0.41
Total quality factor	Qts	1	0.37
Suspension compliance	Cms	10 ⁻⁶ .m/N	520
Effective piston area	Sd	m ²	0.0102
Equivalent Cas air load	Vas	m ³	0.0076
Max linear excursion	Xmax	mm	± 6.5
Linear displacement volume	Vd	10 ⁻³ .m ³	0.0663
Reference efficiency	η_0	%	0.5
Unity load volume	Vas.Qts ²	10 ⁻³ .m ³	1.1

Absolute maximum ratings

Short term max. input voltage	Vmax	V	55
Max.excursion before damage	Xdam	mm	± 12
Ambient operating temperature	Ta	°C	-10 to +50
Storage temperature		°C	-20 to +70
Environmental withstanding			Outdoor+



Mounting information

Air volume occupied by the driver	10 ⁻³ .m ³	0.38
Speaker net mass	kg	2.02
Baffle cut-out diameter (front mounting)	mm	124.50
Bolt number & Metric diameter	-	4x M5
Bolt circle diameter	mm	147.00
Max overall dimension (on ears)	mm	163.0
Max overall dimension (out of ears)	mm	136.0
Flange height	mm	12.50
Max magnet diameter	mm	117.50
Max depth (front mounting)	mm	75.00
Recommended reflex box	Lts / Hz	8L / 60Hz
Electrical connection	6.35x0.8 + 4.8x0.5 FASTON	

