



PHL Audio 1428

6.5 inches low - mid frequency driver

Nominal Diameter	17 cm / 6.5 "
Rated Impedance	16
Reference efficiency (1W @ 1m)	93 dB SPL
Power Handling Capacity	100 W AES
SPL max (continuous)	109 dB SPL
Usable frequency range	60 - 4000 Hz
Speaker net mass	2.15 kg

Architecture highlights :

Double side Coated diaphragm (Tropical withstanding)
High compliance double half-roll Fabric Surround
High excursion vented voice coil



Motor architecture			
Voice coil diameter	mm		38
Voice coil length	mm		12.5
Air gap height	mm		6

Typical characteristics			
Rated impedance	Z	Ω	16
Half space sensitivity (1W@1m)	-	dB SPL	93.0
Usable freq. range	-	Hz	60 - 4000
Power handling capacity (AES)	-	W	100
Max Sound Pressure Level	SPL _{max}	dB SPL	109
Min. impedance modulus	Z _{min}	Ω @Hz	13.7@450
Voice-coil inductance @ 1kHz	Le _{1k}	mH	1.512
Voice-coil inductance @ 10kHz	Le _{10k}	mH	0.503
BL product	BL	N/A	13.1
Moving mass	Mms	kg	0.012

Thiele-Small parameters			
Resonance frequency	Fs	Hz	72 (± 12)
DC Resistance	Re	Ω	12.5 (± 1.3)
Mechanical quality factor	Qms		2.60
Electrical quality factor	Qes		0.38
Total quality factor	Qts		0.33
Suspension compliance	Cms	10^{-6} .m/N	420
Effective piston area	Sd	m ²	0.0145
Equivalent Cas air load	Vas	m ³	0.0126
Max linear excursion	Xmax	mm	± 4.0
Linear displacement volume	Vd	10^{-3} .m ³	0.0581
Reference efficiency	η_0	%	1.2
Unity load volume	Vas.Qts ²	10^{-3} .m ³	1.4

Absolute maximum ratings			
Short term max. input voltage	Vmax	V	80
Max.excursion before damage	Xdam	mm	6.0
Ambient operating temperature	Ta	$^{\circ}$ C	-10 to +50
Storage temperature		$^{\circ}$ C	-20 to +70
Environmental withstanding			Tropical

Mounting information			
Air volume occupied by the driver	10^{-3} .m ³		0.51
Speaker net mass	kg		2.15
Baffle cut-out diameter (front mounting)	mm		146.0
Bolt number & Metric diameter	-		4x M5
Bolt circle diameter	mm		172.0
Max overall dimension (on ears)	mm		187.5
Max overall dimension (out of ears)	mm		162.5
Flange height	mm		8.0
Max magnet diameter	mm		117.5
Max depth (front mounting)	mm		68.5
Recommended reflex box	Lts / Hz		8L / 80Hz
Electrical connection			6.35x0.8 FASTON

