



X20 + HF UNIT *

COAXIAL+HIGH FREQ. UNIT • 20cm / 8"

Speaker type	B202-8 + HF UNIT	E202-8 + HF UNIT					
Reference	2490	2600					

TYPICAL CHARACTERISTICS

Rated impedance	Z	Ω	8	6	8	6				
Half space sensitivity (1W@1m)	-	dB SPL	93	97 ⁽¹⁾	94	97 ⁽¹⁾				
Usable freq. range	-	Hz	70-3000	3000-20000	80-4000	3000-20000				
Coverage angle	α	$^\circ$	-	#100	-	#100				
Power handling capacity (AES)	-	W	160	60 ⁽²⁾	160	60 ⁽²⁾				
Max Sound Pressure Level	SPLmax	dB SPL	111	111	112	111				
Min. impedance modulus	Zmin	Ω @Hz	5.6@370	4.3@4500	5.4@410	4.3@4500				
Voice-coil inductance @ 1kHz	Le _{1k}	mH	0,85	-	0,69	-				
Voice-coil inductance @ 10kHz	Le _{10k}	mH	0,46	0,10	0,38	0,10				
BL product	BL	N/A	12,90	-	10,40	-				
Moving mass	Mms	kg	0,025	-	0,020	-				

(1) Measured on axis when fitted in a 8" loudspeaker

(2) Ferrofluid cooled HF UNIT . Stated with a 2nd order passive high-pass filter set @ 3 kHz

THIELE-SMALL PARAMETERS: TYPICAL (QC LIMITS)

Resonance frequency	Fs	Hz	72(±10)	1650(±250)	81(±12)	1650(±250)				
DC Resistance	Re	Ω	5.4(±0.6)	3.9(±0.5)	5.2(±0.6)	3.9(±0.5)				
Mechanical quality factor	Qms	1	4,5	-	4,1	-				
Electrical quality factor	Qes	1	0,37	-	0,49	-				
Total quality factor	Qts	1	0,34	-	0,44	-				
Mechanical suspension compliance	Cms	10 ⁻⁶ .m/N	200	-	200	-				
Effective piston area	Sd	m ²	0,0198	-	0,0198	-				
Equivalent Cas air load	Vas	m ³	0,010	-	0,010	-				
Max linear excursion	Xmax	±mm	5,0	0,2	5,0	0,2				
Linear displacement volume	Vd	10 ⁻³ .m ³	0,099	-	0,099	-				
Reference efficiency	η_0	%	1,1	-	1,1	-				
Unity load volume	Vas.Qts ²	10 ⁻³ .m ³	1,2	-	2,0	-				

ABSOLUTE MAXIMUM RATINGS

Short term max. input voltage	Vmax	V	70	40	70	40				
Max.excursion before damage	Xdam	±mm	10	-	10	-				
Lowest recommended X-over frequency	-	Hz	-	3000	-	3000				
Ambient operating temperature	Ta	$^\circ$ C	-10 to +50		-10 to +50					
Storage temperature	-	$^\circ$ C	-20 to +70		-20 to +70					
Environmental withstanding **	-	-	Outdoor	Outdoor	Outdoor	Outdoor				

APPLICATION INFORMATION

Air volume occupied by the driver	-	10 ⁻³ .m ³	0,720	-	0,720	-				
Speaker net mass		kg	3,020	53.10 ⁻³	3,020	53.10 ⁻³				
Recommended 2nd order passive X-over	C/L	μ F/mH	-	4.7 / 0.33	-	4.7 / 0.33				
Recommended reflex box	Vb/Fb	Lts/Hz	10L / 70Hz		10L / 80Hz					

* This HF UNIT is built according to PHL AUDIO's specifications and is mounted coaxially in 1.5" or 2" voice coil.

This HF UNIT has a 1" critically damped mid-soft diaphragm, a high energy double Neodymium magnets, an ultra-light aluminium voice coil.

** Our products are classified in three categories : **Indoor**, **Outdoor**, and **Outdoor +** for permanent outdoor use or severe conditions.

upgrade : 08/12/2000

These specifications are representative of current production after packaging. Because of our continuous research they are subject to change without notice.