



B20

PROFESSIONAL SERIES

2400 8Ω

2410 16Ω



8" . 20cm
Bass Midrange Driver
High SPL - High Sounding Quality

APPLICATIONS

Bass Midrange transducer dedicated to the reproduction of 70-3000Hz frequencies. Usable for direct radiation in small volumes from 10L tuned at 80 Hz. Its design gives priority to SPL and high sounding quality.

FEATURES

Power handling capacity	250 W AES
Reference efficiency (1W @ 1m)	95 dB SPL
SPL max (continuous)	115 dB SPL
Usable frequency range	70-3000 Hz
Environmental withstanding	Outdoor

2400 - 2410

8" - 20 cm Bass Midrange Driver

2400 2410

TYPICAL CHARACTERISTICS

Rated impedance	Z	8	16	Ω
Reference efficiency (1 W@1 m)	-	95	95	dB SPL
Usable frequency range ¹	-	70-3000	70-3000	Hz
Power handling capacity ²	(AES)	250	250	W
Max Sound Pressure Level ³	SPLmax	115	115	dB SPL
Min. impedance modulus	Zmin	5.6 @ 400Hz	14.1 @ 400Hz	Ω
Voice-coil inductance ⁴ @ 1 kHz	Le1k	0.94	2.48	mH
@ 10 kHz	Le10k	0.53	1.26	mH
Bl product	BL	15.9	23.0	N/A
Moving mass	Mms	0.025	0.025	Kg

THIELE-SMALL PARAMETERS : TYPICAL (QC LIMITS)

Resonance frequency ⁵	Fs	72(\pm 10)	72(\pm 10)	Hz
DC resistance ⁶	Re	5.4 (\pm 0.6)	11.6 (\pm 1.2)	Ω
Mechanical quality factor	Qms	4.5	4.5	1
Electrical quality factor	Qes	0.24	0.25	1
Total quality factor	Qts	0.23	0.24	1
Mechanical suspension compliance	Cms	200	200	10 ⁻⁶ m/N
Effective piston area	Sd	0.0219	0.0219	m ²
Equivalent Cas air load	Vas	0.0130	0.0130	m ³
Max. linear excursion	Xmax	\pm 4.0	\pm 4.0	mm
Linear displacement volume	Vd	0.088	0.088	10 ⁻³ m ³
Half-space efficiency		1.9	1.9	%
Unity load volume	Vas Qts ²	0.7	0.7	10 ⁻³ m ³

ABSOLUTE MAXIMUM RATINGS

Short term max. input voltage ⁷	Vmax	90	125	V
Max. excursion before damage	Xdam	\pm 10	\pm 10	mm
Ambient operating temperature		-10 to +50		$^{\circ}$ C
Storage temperature ⁸		-20 to +70		$^{\circ}$ C
Environmental conditions ⁹		Outdoor		

APPLICATION INFORMATION

Air volume occupied by the driver ¹⁰		0.980	0.980	10 ⁻³ m ³
Speaker net mass		4.48	4.48	Kg
Recommended reflex box	Vb/Fb	10 / 80	10 / 80	L / Hz
Electrical polarity		A positive voltage applied on the red terminal produces forward cone motion.		

SPECIFICATION NOTES

Note 1 : Allowing for energy response, excursion capability, Power spectrum, and -3dB low freq. roll-off for standard reflex tuning.

Note 2 : Established at 20 $^{\circ}$ C ambient temp, according to AES2-1984 standard using IEC268-1 simulated programme signal and a 10 liter Bass-Reflex test enclosure tuned at 80Hz.

Note 3 : Established at 1m on axis of the loudspeaker mounted in test enclosure, when driven at full AES Power Handling Capacity, including 4dB of thermal compression loss.

Note 4 : Measured at 20 mA in free air.

Note 5 : Measured at 20 mA and 20 $^{\circ}$ C ambient temp. in free air conditions, after full run and rest.

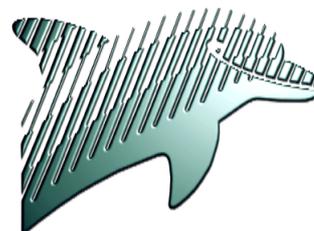
Note 6 : Measured at 20 $^{\circ}$ C ambient temp. QC limits are \pm 10 %

Note 7 : Stated in RMS voltage according to IEC 268-5.

Note 8 : Includes shipping conditions. The lower limit prevents from demagnetization.

Note 9 : Our products are classified in three categories : Indoor, Outdoor, and Outdoor+ for permanent outdoor use or severe conditions.

Note 10 : Calculated for front mounting on to a 18 mm thick board.



PHL
A U D I O

461, rue des chênes .Z.A
77590 CHARTRETTES
FRANCE

Tél : 33 01 64 81 29 80

Fax : 33 01 60 69 10 28

e-mail : phaudio@phaudio.com

<http://www.phaudio.com>