



B20

PROFESSIONAL SERIES

2420

 8 Ω 

8" . 20cm
Bass Midrange Driver
High Sensitivity
High Sounding Quality

APPLICATIONS

Bass midrange transducer dedicated to the reproduction of 70-3000Hz frequencies. The medium power handling capacity version of the 2400. Its design gives priority to bass extension.

FEATURES

Power handling capacity	200 W AES
Reference efficiency (1W @ 1m)	94 dB SPL
SPL max (continuous)	113 dB SPL
Usable frequency range	70-3000 Hz
Environmental withstanding	Outdoor

2420

8" ■ 20 cm Bass Midrange Driver

2420

TYPICAL CHARACTERISTICS

Rated impedance	Z	8	Ω
Reference efficiency (1 W@1 m)	-	94	dB SPL
Usable frequency range ¹	-	70-3000	Hz
Power handling capacity ²	(AES)	200	W
Max Sound Pressure Level ³	SPLmax	113	dB SPL
Min. impedance modulus	Zmin	5.6 @ 370Hz	Ω
Voice-coil inductance ⁴ @ 1 kHz	Le1k	0.85	mH
@ 10 kHz	Le10k	0.46	mH
Bl product	BL	12.9	N/A
Moving mass	Mms	0.025	Kg

THIELE-SMALL PARAMETERS : TYPICAL (QC LIMITS)

Resonance frequency ⁵	Fs	72(\pm 10)	Hz
DC resistance ⁶	Re	5.4 (\pm 0.6)	Ω
Mechanical quality factor	Qms	4.5	1
Electrical quality factor	Qes	0.37	1
Total quality factor	Qts	0.34	1
Mechanical suspension compliance	Cms	200	10^{-6} m/N
Effective piston area	Sd	0.0219	m ²
Equivalent Cas air load	Vas	0.0130	m ³
Max. linear excursion	Xmax	\pm 5.0	mm
Linear displacement volume	Vd	0.110	10^{-3} m ³
Half-space efficiency		1.3	%
Unity load volume	Vas Qts ²	1.5	10^{-3} m ³

ABSOLUTE MAXIMUM RATINGS

Short term max. input voltage ⁷	Vmax	80	V
Max. excursion before damage	Xdam	\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		0.720	10^{-3} m ³
Speaker net mass		3.020	Kg
Recommended reflex box	Vb/Fb	15 / 70	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 15 liter Bass-Reflex test enclosure tuned at 70Hz.

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.

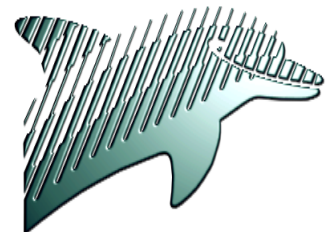
Note 6 : Measured at 20 $^{\circ}$ C ambient temp. QC limits are \pm 10 %

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>