



M20

PROFESSIONAL SERIES

2540

 8 Ω 

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

APPLICATIONS

Midrange transducer dedicated to the reproduction of 200-5000Hz frequencies. Equipped with a progressive wave diaphragm for precise transcription of the midrange band.

The medium power handling capacity version of the 2520.

Usable either for direct radiation or horn loaded application.

FEATURES

Power handling capacity	160 W AES
Reference efficiency (1W @ 1m)	99 dB SPL
SPL max (continuous)	117 dB SPL
Usable frequency range	200-5000 Hz
Environmental withstanding	Outdoor

2540

8" • 20 cm Midrange Driver

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TYPICAL CHARACTERISTICS

Rated impedance	Z	8	Ω
Reference efficiency (1 W@1 m)	-	99	dB SPL
Usable frequency range ¹	-	200-5000	Hz
Power handling capacity ²	(AES)	160	W
Max Sound Pressure Level ³	SPLmax	117	dB SPL
Min. impedance modulus	Zmin	6.8 @ 470Hz	Ω
Voice-coil inductance ⁴ @ 1 kHz	Le1k	0.89	mH
@ 10 kHz	Le10k	0.46	mH
Bl product	BL	11.7	N/A
Moving mass	Mms	0.0183	Kg

THIELE-SMALL PARAMETERS : TYPICAL (QC LIMITS)

Resonance frequency ⁵	Fs	110 (± 22)	Hz
DC resistance ⁶	Re	6.0 (± 0.6)	Ω
Mechanical quality factor	Qms	2.5	1
Electrical quality factor	Qes	0.55	1
Total quality factor	Qts	0.46	1
Mechanical suspension compliance	Cms	115	10^{-6} m/N
Effective piston area	Sd	0.0241	m ²
Equivalent Cas air load	Vas	0.0093	m ³
Max. linear excursion	Xmax	± 2.5	mm
Linear displacement volume	Vd	0.060	10^{-3} m ³
Half-space efficiency		2.1	%
Unity load volume	Vas Qts ²	1.9	10^{-3} m ³

ABSOLUTE MAXIMUM RATINGS

Short term max. input voltage ⁷	Vmax	70	V
Max. excursion before damage	Xdam	± 4	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	3-4 / Sealed	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°C ambient temp, according to AES2-1984 standard using IEC268-1 simulated programme signal and a 3-4 liter sealed test enclosure with a 2nd order high-pass filter @ 300Hz.

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°C ambient temp. in free air conditions, after full run and rest.

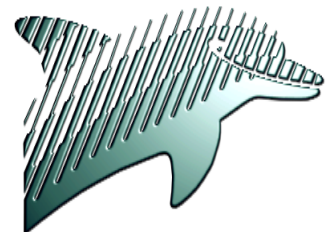
Note 6 : Measured at 20°C ambient temp. QC limits are ± 10 %

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.



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