

5208C 8" Coaxial driver



- designed for high SPL applications where precise 100° conical coverage in a very compact coaxial system is required
- ideal for high performance pro sound applications and surround systems in small cinema rooms for immersive digital audio formats
- Radian proprietary Aluminum alloy diaphragm with highest tensile strength to weight ratio and fatigue resistance
- dual magnet design with independent magnetic gaps eliminates flux modulation and dramatically reduces intermodulation distortion in HF range
- 500 W continuous program power
- maximum power, edge-wound ribbon copper clad aluminum voice coil on fiberglass former
- extended to 25kHz frequency range
- high transparency and resolution
- optional premium XO
- optional matching 70V transformers

SPECIFICATIONS GENERAL/LF

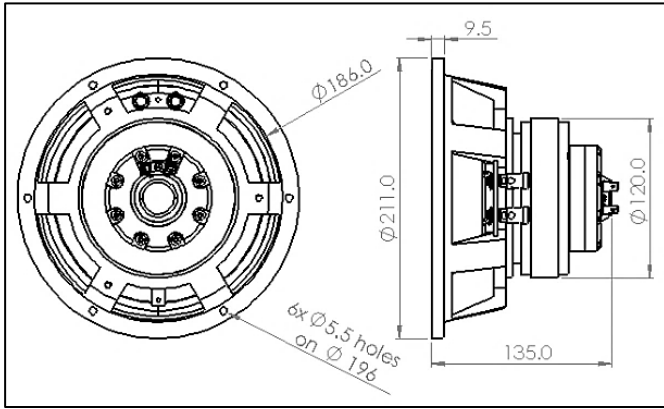
Nominal diameter	8"/205mm
Rated impedance	8 Ω
Power handling ¹	250 W
Continuous program power ²	500 W
Sensitivity ³	95 dB
Effective frequency range ⁴	60 Hz – 25 kHz
Coverage angle ⁵	100° conical
Recommended max. XO frequency	2.0 kHz
Minimum impedance	7.2 Ω
Cone material	Paper/Kevlar composite
Voice coil diameter	51 mm (2")
Voice coil winding	edge wound ribbon
Voice coil wire	copper clad Aluminum
Voice coil former	Fiberglass
Displacement limit for VC	14 mm
Voice coil winding height	11mm
Magnetic gap height	8 mm
Suspension	M-roll, Poly-cotton
Magnet	Ferrite ring
Frame	Cast Aluminum

Thiele-Small parameters

Fs	90 Hz
Sd	221.0 cm ²
Re	5.9 Ω
Qms	6.8
Qes	0.66
Qts	0.61
Vas	10.8 dm ³ (L)
Cms	0.155 mm/N
Mms	19.9 g
BL	10.1 N/A
Le	0.7 mH
Xmax ⁶	3.5 mm

SPECIFICATIONS HF

Nominal exit diameter	1"
Rated impedance	16 Ω (8 Ω optional)
Power handling ¹	40 W
Continuous program power ²	80 W
Sensitivity ³	105 dB
Effective frequency range ⁴	800 Hz – 25 kHz
Min. XO frequency (12 dB/oct.)	1.2kHz
Dome/surround material	Aluminum alloy/polymer
Voice coil diameter	44 mm (1.5")
Voice coil winding	edge wound ribbon
Voice coil wire	Aluminum
Magnet	Ferrite ring

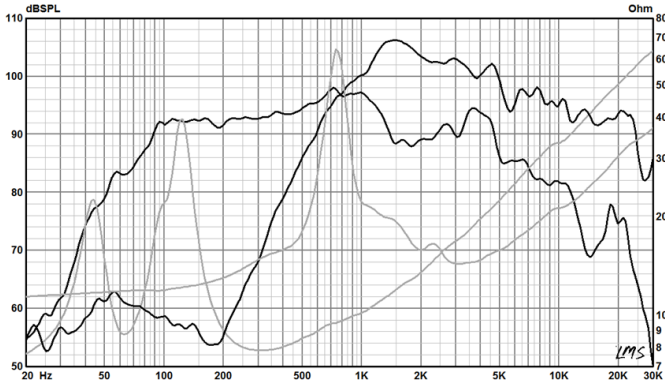


Mounting parameters

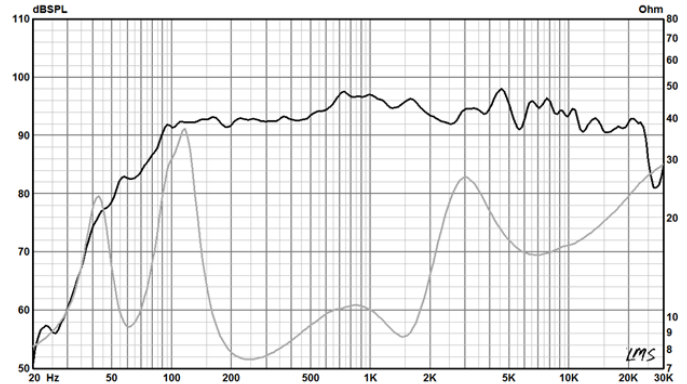
Overall diameter	210 mm (8.3 in)
Bolt circle diameter	196 mm (7.72 in)
Baffle cut-out diameter	190 mm (7.48 in)
Overall depth	131.0 mm (5.16 in)
Net weight	3.7 kg (8.15 lbs.)

Optional Accessories

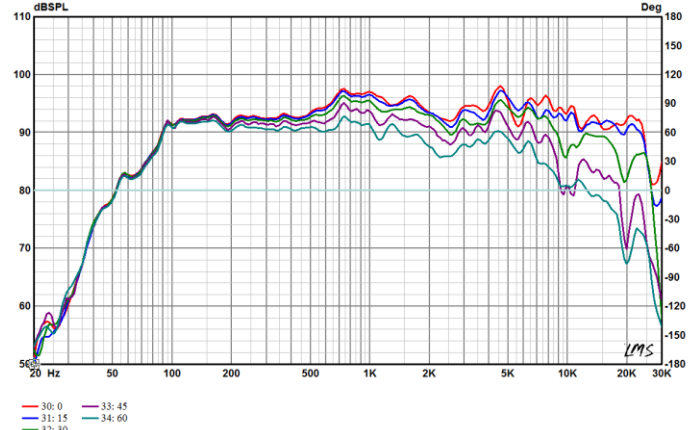
Crossover	322-08B
70V matching transformer	TR-3070, TR-6070, TR-10070



Frequency response and impedance of LF and HF components with 5208C driver mounted in 15L/Fb=62Hz vented box, free field.



Frequency response and impedance with recommended XO in 15 L/Fb=62 Hz vented box. free field.



Directivity response curves of 5208C driver with recommended XO

Specifications notes

- As per AES2-1984 Rev.2003. Radian Audio tests power using voltage levels calculated based on rated impedance, according to AES and IEC 60268-5 standards, as better reflecting real life operating conditions. To be distinguished from power specification approach that uses minimum impedance, resulting in inflated power rating.
- Continuous program power is defined at 3dB higher than AES power and reflects power handling capacity for typical music and cinema content reproduction.
- Driver mounted in specified test box, measured at 1m, at 2.83V in simulated free field conditions as per AES 2-2012 and IEC 60268-5 (Ed.3.1 2007-09). Sensitivity is calculated based on SPL frequency response averaged in reference octave bands, 500Hz-1kHz for LF and 1.5 kHz – 3 kHz for HF as per IEC 60268-5 and scaled, when necessary, to 1W/1m conditions based on driver rated impedance.
- Specified for complete coaxial unit with recommended XO, mounted in specified test box. Measured in accordance with IEC 60268-5 (Ed. 3.1 2007-09), defined at -10 dB below combined SPL, averaged in 300 Hz-5kHz range.
- Coverage angle is specified for complete unit with recommended XO. Defined at -6dB, averaged on octave band points in 500-10000Hz range.
- Xmax is defined as $X_{max} = (H_{vc} - H_{gap}) / 2 + H_{gap} / 4$ and based on actual BL linearity data measured for each driver by laser based analyser with 82% reduction limit from normalized maximum at voice coil rest position. Hvc – voice coil height, Hgap – active magnetic gap height.