

# 5215B 15" Coaxial driver



- Designed for very high SPL applications where precise 90° conical coverage in a compact coaxial system is required
- ideal for surround systems in medium to large cinema rooms for immersive digital audio formats
- 1250 W continuous program power LF with 4" edge wound ribbon wire VC
- extremely linear response
- dual magnet design with independent magnetic gaps eliminates flux modulation and dramatically reduces intermodulation distortion in HF range
- 3" HF driver diaphragm made from proprietary hardened aerospace grade aluminum alloy with highest tensile strength to weight ratio and superior long term fatigue resistance
- heat stabilized polymer suspension ensures low distortion at high peak SPL and long term stability in most demanding applications
- high performance edge-wound ribbon wire voice coils for maximum reliability
- high transparency and resolution
- optional premium XO
- optional matching 70V transformer
- HF driver with 16 ohms impedance option

## SPECIFICATIONS GENERAL/LF

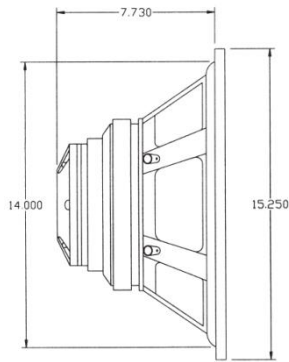
Nominal diameter	15"/380mm
Rated impedance	8 Ω
Power handling <sup>1</sup>	625 W
Continuous program power <sup>2</sup>	1250 W
Sensitivity <sup>3</sup>	99 dB
Rated frequency range <sup>4</sup>	40 Hz – 18 kHz
Coverage angle <sup>5</sup>	90° conical
Recommended XO frequency	1.0 kHz
Minimum impedance	6.7 Ω
Cone material	paper/Kevlar composite
Voice coil diameter	101.6 mm (4")
Voice coil winding	edge wound ribbon
Voice coil wire	copper clad aluminum
Voice coil former	fiberglass
Displacement limit for VC	19 mm
Voice coil winding height	16.5 mm
Magnetic gap height	10 mm
Suspension	triple roll, Poly-cotton
Magnet	ferrite ring
Frame	cast aluminum
Recommended enclosure volume	50 – 80 L ( 1.4-2.8 ft <sup>3</sup> )

## Thiele-Small parameters

Fs	40 Hz
Sd	880 cm <sup>2</sup>
Re	5.3 Ω
Qms	3.28
Qes	0.29
Qts	0.26
Vas	202 dm <sup>3</sup> (L)
Cms	0.184 mm/N
Mms	88 g
BL	20.0 N/A
Le	1.3 mH
Xmax <sup>6</sup>	5.5 mm

## SPECIFICATIONS HF

Nominal exit diameter	2"/50.8 mm
Rated impedance	8 Ω/16 Ω
Power handling <sup>1</sup>	80 W
Continuous program power <sup>2</sup>	160 W
Sensitivity <sup>3</sup>	109 dB
Rated frequency range <sup>4</sup>	800 Hz – 18 kHz
Min. XO frequency (12dB/Oct.)	800 Hz
Dome/surround material	aluminum alloy/polymer
Voice coil diameter	76.2 mm (3")
Voice coil winding	edge wound ribbon
Voice coil wire	copper clad aluminum
Magnet	ferrite ring

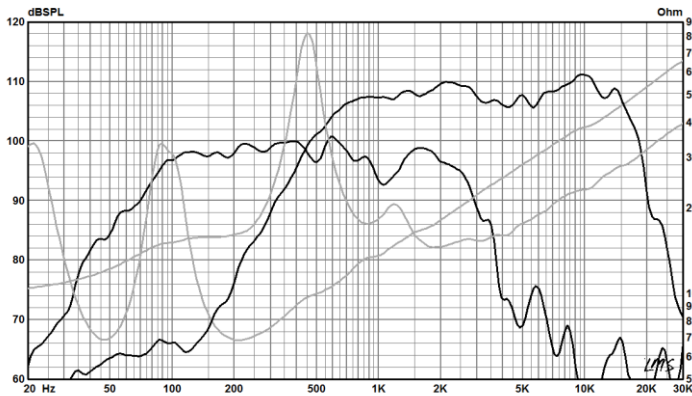


## Mounting and mechanical parameters

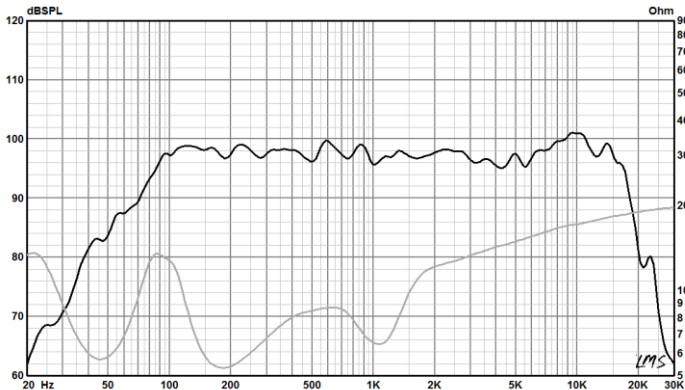
Overall diameter	387.5 mm (15.25 in)
Bolt circle diameter	369.8 mm (14.56in)
Baffle cut-out diameter	355.6 mm (14.0 in)
Flange and gasket thickness	12.7 mm ( 0.5 in )
Overall depth	209 mm (8.23 in)
Net weight	14 kg (31.0 lbs.)

## Optional Accessories

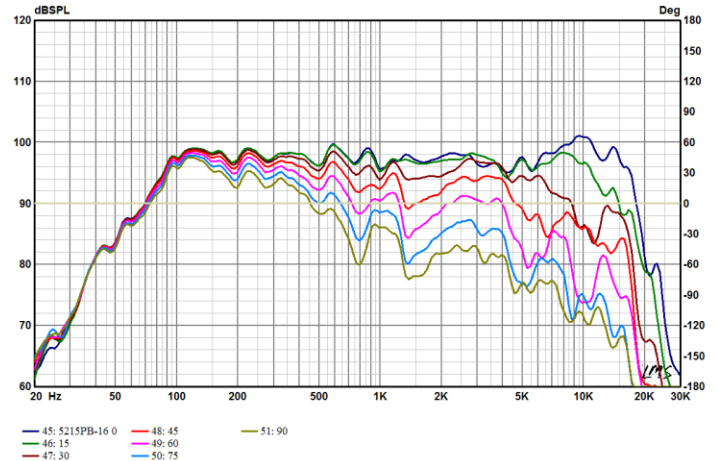
Crossover	322/5215
70V matching transformer	TR-10070
Replacement diaphragm assembly	1750PB-8/16 –binding posts 1750ZT-8/16 - spade lugs



Frequency response and impedance of individual drive units in 50 L/Fb=47 Hz vented box, free field.



Combined frequency response and impedance of 5215B with recommended XO in 50 L/Fb=47Hz vented box, free field.



Directivity response curves of 5215B with recommended XO in 50 L/Fb=47 Hz vented box, free field.

## Specifications notes

- As per AES2-1984 Rev.2003.
- 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 within 100Hz-500Hz band for LF and 1.5 kHz – 3 kHz band for HF as per IEC 60268-5 and scaled, when necessary, to 1W/1m conditions based on driver rated impedance.
- Specified in accordance with IEC 60268-5 (Ed. 3.1 2007-09). Defines recommended operating frequency band. A larger enclosure than the one used for this data sheet measurements may be required for maximum LF extension. Higher LF cut off is possible if higher max SPL of program reproduction is required.
- Coverage angle is specified for coaxial driver with optional 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 70% BL reduction limit from normalized maximum at voice coil rest position. Hvc – voice coil height, Hgap – active magnetic gap height.