

475PB 1" exit HF driver



SPECIFICATIONS

Nominal exit diameter	1"/25.4 mm
Rated impedance	8/16 Ω
Power handling ¹	50 W
Continuous program power ²	100 W
Sensitivity ³	109.5 dB
Rated frequency range ⁴	1.0 kHz – 25 kHz
Recommended min. XO frequency ⁴	1.2 kHz
Re	6.2/11.5 Ω
Minimum impedance	7.6/ 14.0 Ω
Diaphragm material	structural aluminum alloy
Voice coil diameter	44.5 mm (1.75")
Voice coil winding	edge-wound ribbon
Voice coil wire	copper-clad aluminum
Voice coil former	high temperature polyimide
Magnet	ferrite ring
Exit angle ⁵	11.4°

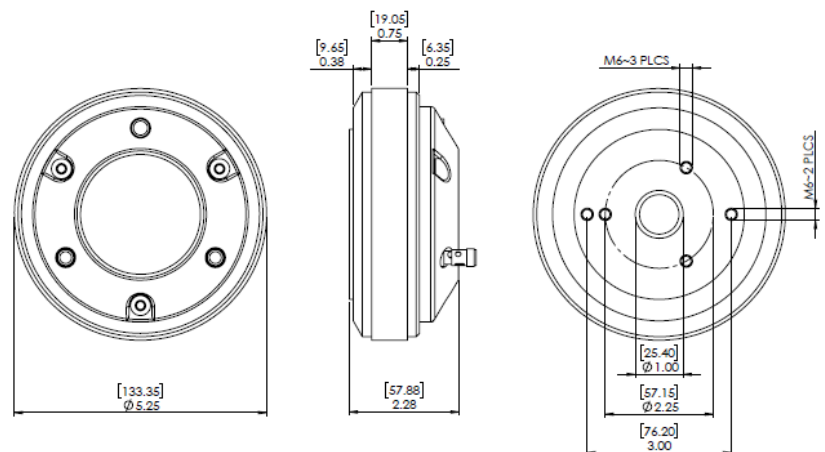
Mounting and mechanical parameters

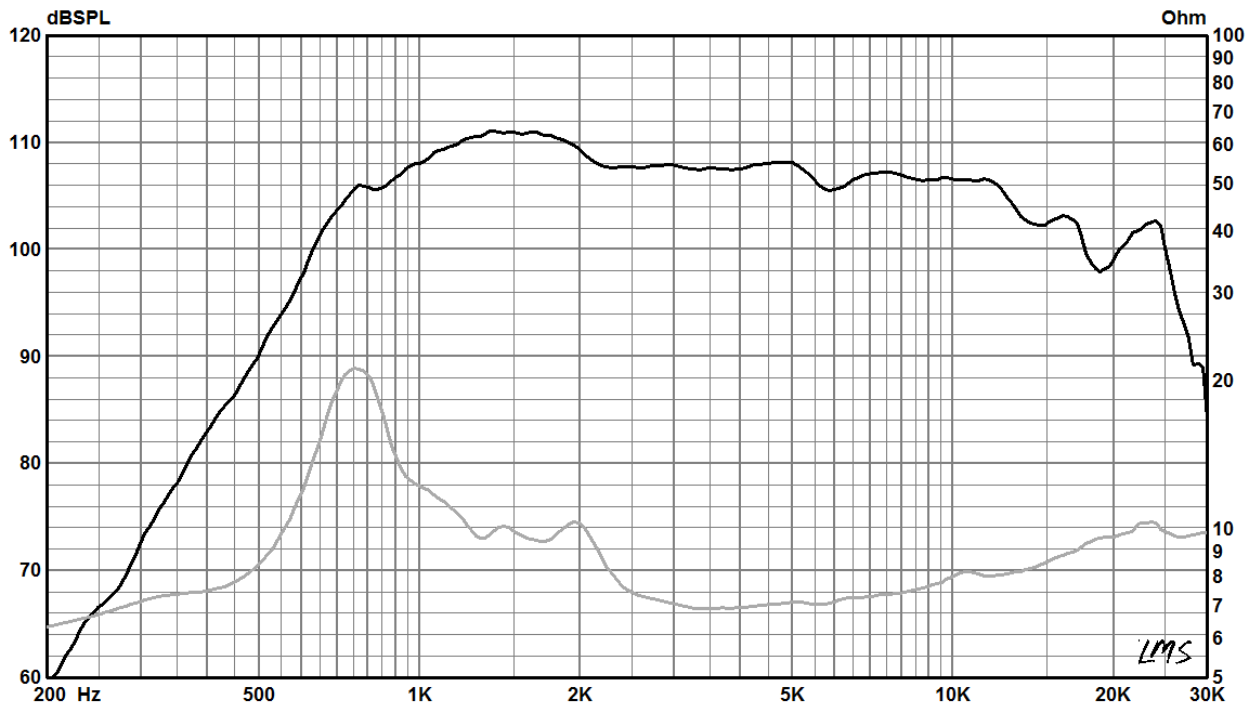
Mounting	2 x 1/4"-20 holes on $\varnothing 3.0"$ (76.2mm)@180° 3x1/4"-20 holes on $\varnothing 2.25$ (57 mm)@120°
Overall diameter	133.4 mm (5.25 in)
Overall depth	56.0 mm (2.2 in)
Net weight	2.9 kg (6.4 lbs.)

Optional accessories

Replacement diaphragm assembly	1450PB – binding posts
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- Distinguished by transparent, high resolution sound
- designed to withstand long term high stress operation with high peak factor
- ideal for touring sound, stage monitors, high performance installed and portable sound systems
- proprietary aerospace grade Aluminum alloy diaphragm with highest tensile strength to weight ratio guarantees long term fatigue resistance, extended HF and accurate signal peak reproduction
- diaphragm with high damping eliminates ringing typical for other metal domes
- heat stabilized polymer surround ensures low distortion at high SPL and long term performance stability
- high performance 44.5mm (1.7") edge-wound ribbon wire voice coil with advanced adhesives for maximum reliability
- copper demodulation ring inside magnetic gap
- extended to 25 kHz frequency range
- 100 W continuous program power
- self-aligning diaphragm assembly





Frequency response and impedance of 475PB-8 on specified horn, free field ³.

Specifications notes

1. 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. Tested with 24dB/oct@1.5kHz slope XO.
2. Continuous program power is defined at 3dB higher than AES power and reflects power handling capacity for typical music and cinema content reproduction.
3. Driver mounted on horn with 90°x40° nominal coverage and following dimensions: 254 mm (10") mouth width, 125mm (5") mouth height, 152mm (6") horn depth. Measured at 1W/1m 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 at 1W/1m, averaged in 1.2 kHz – 5 kHz band.
4. Specified in accordance with IEC 60268-5 (Ed. 3.1 2007-09). Defines minimum recommended operating frequency band for typical application with 24 dB/Oct. high pass filter. If lower filter slope rate is used, a higher XO point is recommended. Higher XO frequency is recommended, if higher max SPL is required.
5. Total flare angle of conical exit. The angle should be considered for proper coupling with a waveguide/horn. The waveguide/horn throat expansion angle and shape should provide smooth continuity of mated surfaces for best results. The driver exit angle and its integration with a horn will also affect dispersion at very high frequencies.