

A replacement 8-inch woofer

Your 25 litre ported speakers, 185 mm hole, on your AV receiver

MY SUGGESTION

The **Dayton Audio RS225P-8A**, an 8-inch 8-ohm woofer that drops into your 185 mm hole, on the vent your speakers already have. It reaches about 48 Hz in your 25 litres, and the pair is \$409.90.

48 Hz

bass extension (F3) in 25 L

89 dB

sensitivity, 2.83 V at 1 m

120 mm

vent length

\$109

over your \$300

Why this one

I checked every 8-inch woofer in stock against your hole and the 90 mm behind your baffle: most are too deep or need a bigger hole. Of the ones that fit, this one plays flattest in your box.

Driver	F3	Sensitivity	Pair, 24 Oct	My take
RS225P-8A Dayton Audio, 8" 8 ohm	48 Hz	89 dB	\$409.90	MY PICK Drops into your hole and plays flattest in your box: \$409.90 the pair.
RS225-8 Dayton Audio, 8" 8 ohm	39 Hz	87 dB	\$449.90	The same frame, deeper at about 39 Hz, with a small bass lift: \$449.90 the pair.
SB20PFCR30-8 SB Acoustics, 8" 8 ohm	51 Hz	91 dB	\$131.90	Inside your budget at \$131.90, but it stops higher, and its cut-out isn't in my data: measure first.
830869 Peerless, 8" 8 ohm	47 Hz	91 dB	\$309.90	Needs your hole opened up a little and only just fits the depth: \$309.90 the pair.

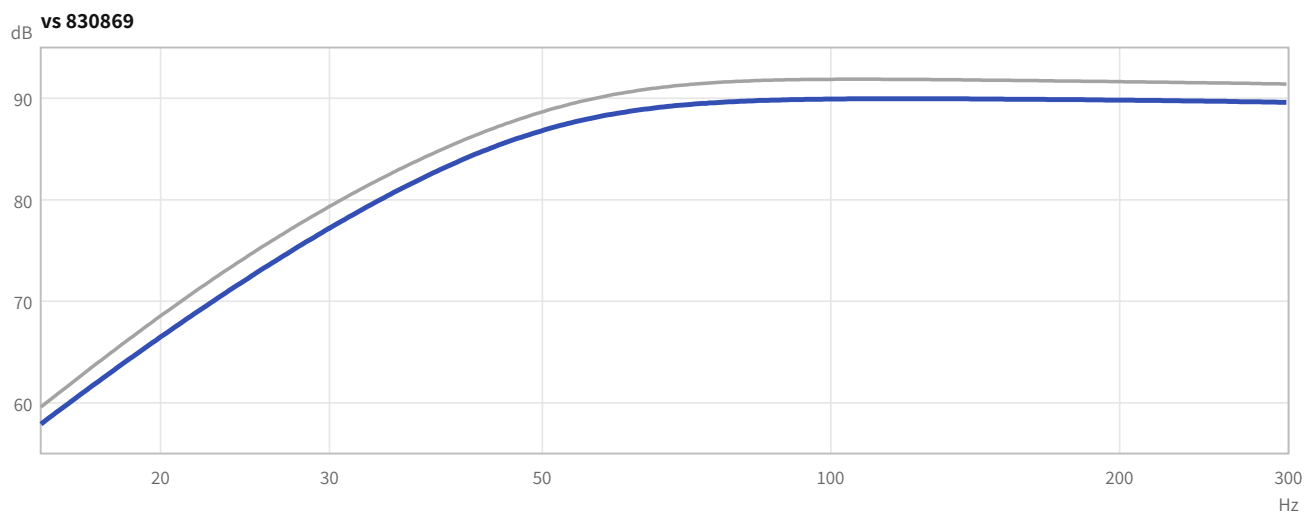
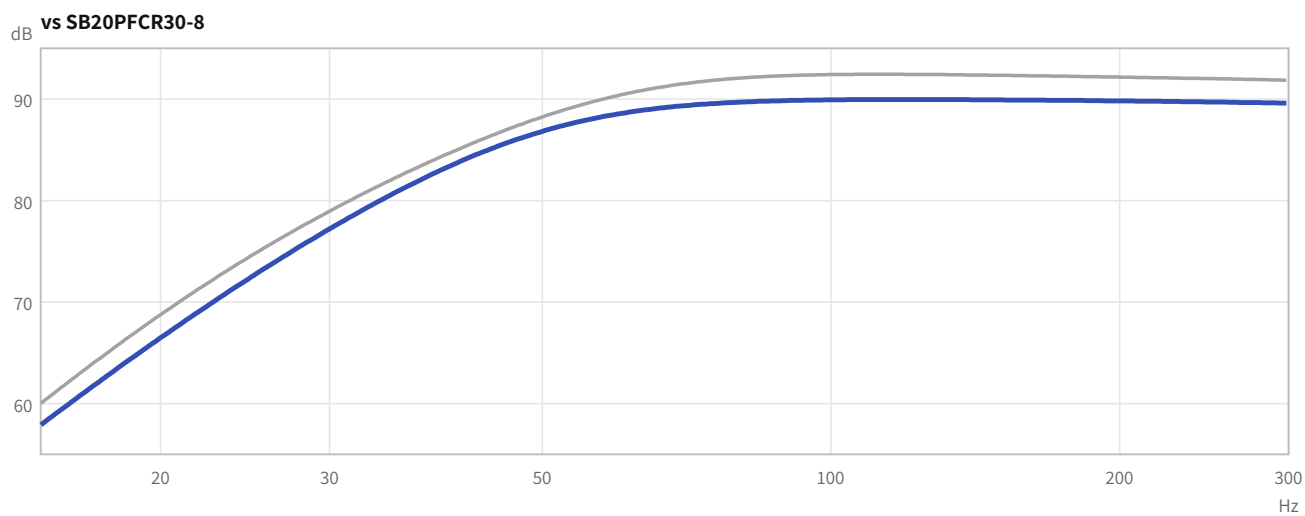
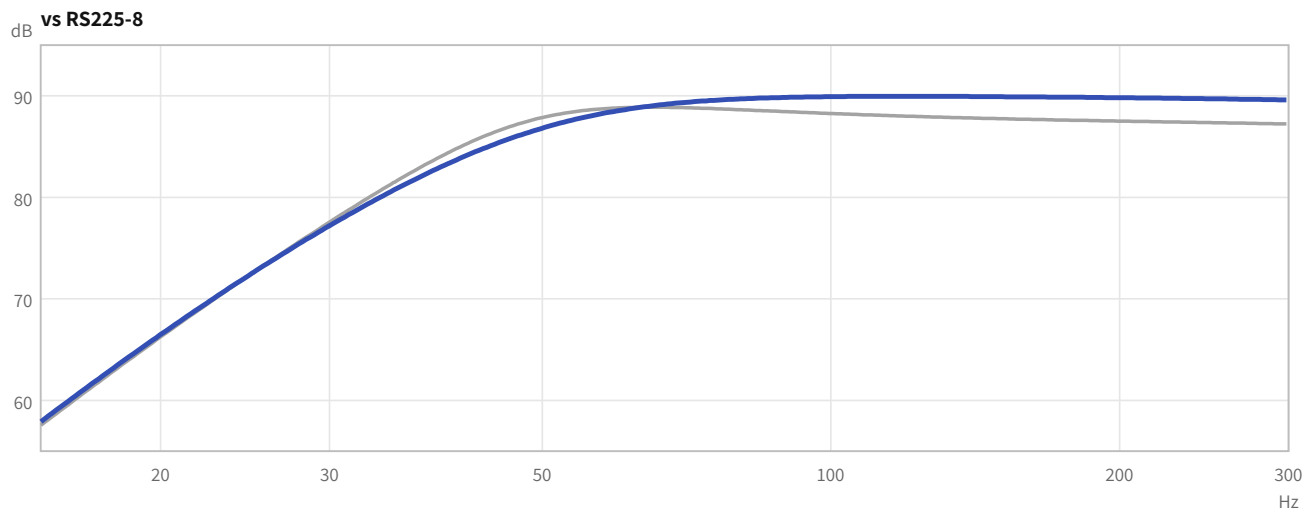
Words in this report

F3: where the bass is 3 dB down. Lower means deeper bass. **Sensitivity:** how loud it plays from 2.83 V at 1 m. Higher needs less amp. **Xmax:** how far the cone can move cleanly. Run out of it and the bass distorts.

Inside: page 2, how each plays in your box · page 3, how loud each can play cleanly · page 4, your box and parts list · page 5, how I made this, and more from NB Audio

How each plays in your box

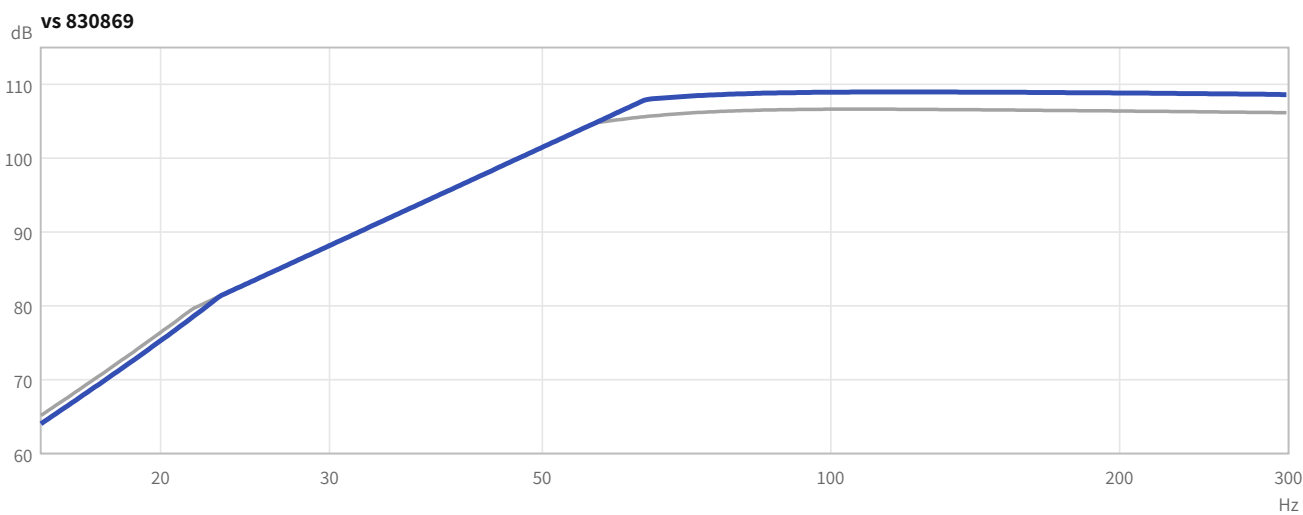
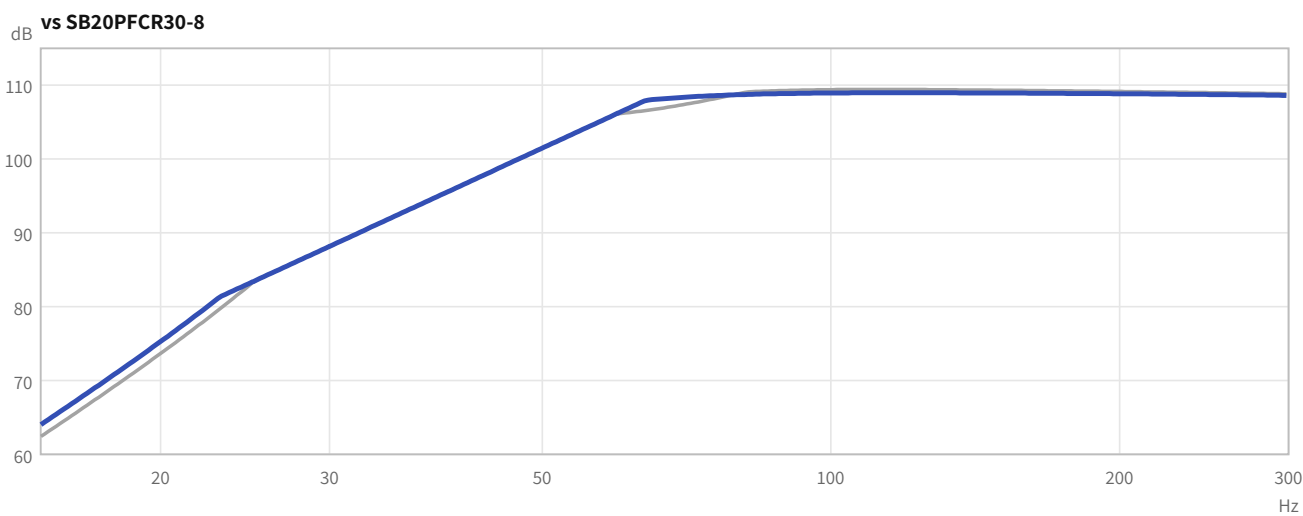
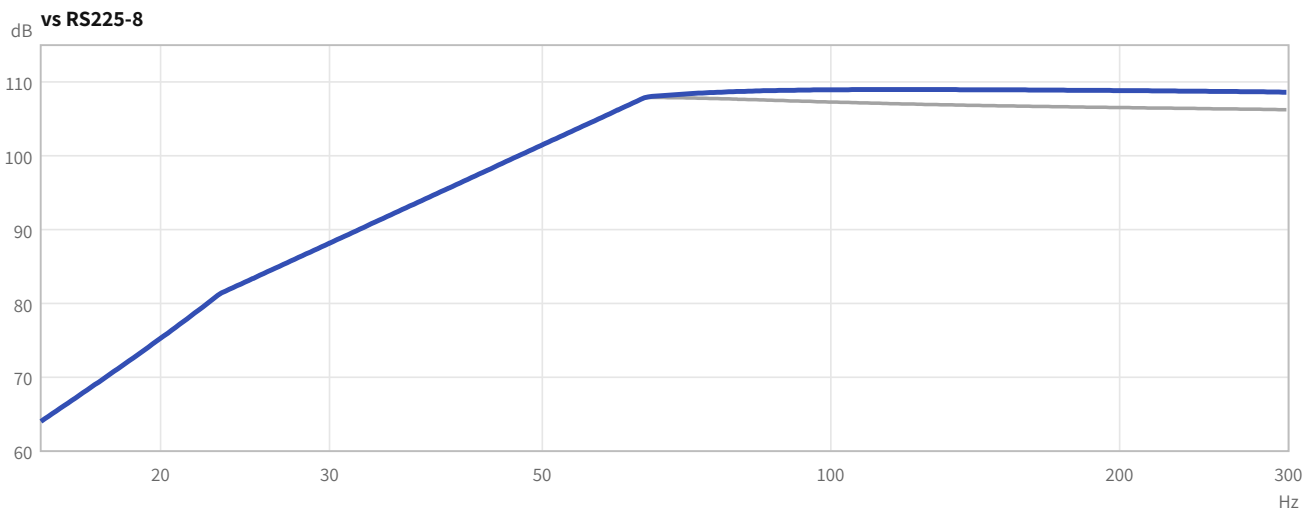
my suggestion, RS225P-8A the driver named on each panel



Level at 2.83 V in 25 L net. No room gain: a room usually adds deep bass.

How loud each can play cleanly

my suggestion, RS225P-8A the driver named on each panel



The loudest each can play at each frequency, limited by whichever comes first: cone travel, the power rating, the amp, or vent air speed (17 m/s).

Your box

- Fit check: its 184 mm cut-out matches your 185 mm hole; it's 84 mm deep, inside the 90 mm behind your baffle.
- Your 50 x 120 mm vent tunes 25 litres to about 38.7 Hz. I've kept it as it is.
- A 50 mm vent is small for an 8-inch: turned right up, it's the vent that runs out first. At moderate levels it's fine.
- You didn't say the board, so I've assumed 18 mm MDF.
- I've assumed your receiver is happy down to 6 ohms, so I've kept to 8-ohm woofers.

Will it work in your speaker?

Check	Result	Notes
Fit	Check	See the fit check under Your box. Measure your hole and the screw holes before you order.
Electrical	OK	8 ohms: an easy load for your receiver.
Acoustic	Close	Your crossover stays as it is, so the level against the tweeter may not match exactly. If your receiver has room EQ, run it again after the swap.

Parts list

Part	Qty	Each	Total
Dayton Audio - 8" Reference Woofer - RS225P-8A My suggestion	2	\$204.95	\$409.90
From the store, 24 October 2026			\$409.90

You supply: nothing else: you keep your own box, port and crossover.

How I made this report

This report comes from the design tool I use alongside the NB Speaker Builder. It uses the same enclosure simulation engine as the builder and the store's driver database, which holds each maker's published specifications. First it checked every 8-inch woofer or mid-woofer in stock against the hole in your speaker: one has no full published specs, and six of the other 31 fit (three of them need the hole opened up a little). It simulated five of them cleanly in your speaker, then I compared four of them in detail: my pick, a value option, a step up and one more from the top of the list. A total of 32 drivers were considered and 18 simulations were run. The tool does the number crunching; I went through the results and picked what I'd use.

What it doesn't cover: the simulations use the maker's figures at 1 m in half space and leave out the original crossover or amp EQ, your room and differences between individual drivers, so read the numbers as a fair comparison rather than a promise. Prices are the store's on 24 October 2026. This is a sample report from a made-up enquiry. Prices as at 24 Oct 2026; check the store for today's.

About me



I'm Jeshua (Jesh) Miller. NB stands for No Bullsh*t: it started in 2018 as NB Speaker Cables, and building cables led to building speakers, subwoofers first, until I'd built my own 7.2.4 home theatre. NB Audio has sold parts for people who build their own speakers since 2024, and since January 2026 it's been my main focus. I won't tell you a part is the 'best'. I'll tell you what it does, what it suits and what it doesn't.

More on [who's behind NB Audio](#) and [how I think about sound](#).

Guides for your build

- [Why you can't just swap out drivers in a multi-way loudspeaker](#)
- [Upgrading or repairing commercial speakers: driver swaps, recapping and refoaming](#)
- [How to read driver specs: Thiele-Small parameters in plain English](#)
- [Speaker wiring and impedance, explained](#)
- New to building? The 8-part [Beginner Guide](#), every part also a [free PDF book](#). [All the guides](#).

Free tools and advice

- Every driver and amp in this report links to its page in the store, with the price on 24 October 2026.
- The [Driver Fit Finder](#) shows which drivers fit a cabinet you already have.
- Coming soon: the [NB Speaker Builder](#), to design a speaker box around the drivers in the store and see how it'll play before you cut any wood.
- Questions about this report, or your next build? Advice on choosing parts is free: email sales@nbaudio.com.au.

Let me know if you have any questions, or if you'd like to go ahead.