



Code: DR-12-047-4R-B2-C0001

REDCATT Twiggy12 12-inch ferrite professional subwoofer driver: 200 W AES, 84.2 dB sensitivity, 4 Ω , Fs 30 Hz, 76 mm voice coil. Full T/S parameters, datasheet, 2D drawing and STEP CAD file.

KEY FEATURES

- ✓ Shallow, yet high cone excursion
- ✓ Honeycomb cone
- ✓ Ideal for 4×4" wall subwoofer, car underseat subwoofers

QUICK SPECS

Impedance
4 Ω

Sensitivity
84.20 dB

Magnet
Ferrite

Program Power
400 W

Fs
30.00 Hz

Voice Coil
76 mm

[📄 Datasheet \(PDF\)](#)[📎 2D Drawing](#)[📦 3D Model \(STEP\)](#)

Design Notes

The ultimate in shallow depth woofer design! We created this powerhouse of a speaker with limited spaces in mind, allowing you to fit it into the most compact areas while still delivering massive low frequencies. The extreme shallowness of the Twiggy 12 opens up a world of possibilities, allowing designers to craft enclosures that seamlessly integrate into typical 4×4" wall structures, under vehicle seats, beneath sofas, and more.

But don't be fooled by its shallow design – the cone excursion approaches an impressive 22.4mm peak to peak, ensuring that this woofer will deliver sizable amounts of low

Our patented design guarantees that the depth versus cone excursion ratio is the best available in the market, ensuring optimal sound quality in any installation. The unique magnetic structure of the Twiggy 12 delivers a high-strength B field with minimal distortion artifacts, further enhancing the audio experience.

To top it off, this little powerhouse can handle up to 800 watts of peak power amplification, making it the go-to choice for delivering excellent sound experience.

Specifications

GENERAL SPECS

Nominal Diameter	12"
Rated Impedance	4 Ohm
Magnet	Ferrite
Basket Material	Steel

POWER HANDLING

AES Power	200 W
Continuous Power	400 W
Peak Power	800 W

Diameter	7.5 mm
Winding Wire	CCAW
Former	Glass Fiber
Winding Height	26.5 mm

T/S PARAMETERS

Resonant Frequency (Fs)	30.00 Hz
Re	3.60 Ω
Qes	1.160
Qms	16.00
Qts	1.080
Vas	59.80 liters
Sd	506.70 cm ²
Mms	160.70 grams
Rms	1.90
Cms	0.1750
Bl	9.90 T·m
Le	1.000 mH
Sensitivity	84.20 dB

General Material

RED

Cone/Dome Material	GF Honey Comb
Spider	Nomex
T-Plate	8 mm
Xmax (peak)	9.25 mm
Xmech	17.25 mm
Overall Diameter	323.00 mm
Bolt Circle Diameter	305.00 mm
Baffle Cutout Dia.	293.50 mm
Mounting Holes	8
Depth (flange to rear)	73.70 mm
Net Weight	5.10 kg
Packaging Dimensions	380X380X165 mm

ORDERING CODES

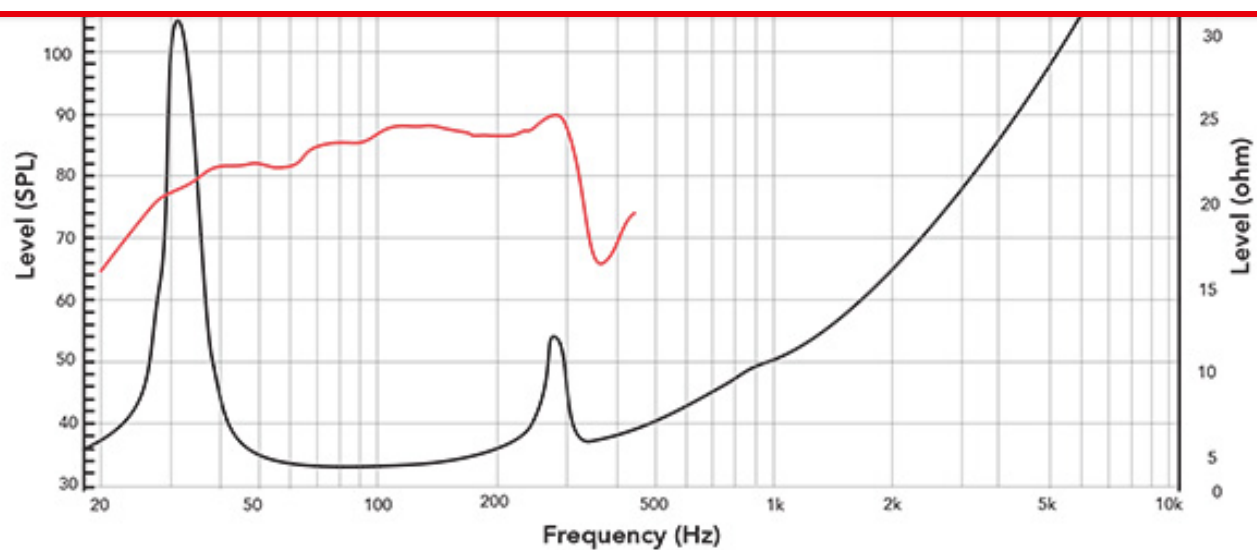
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DOWNLOADS

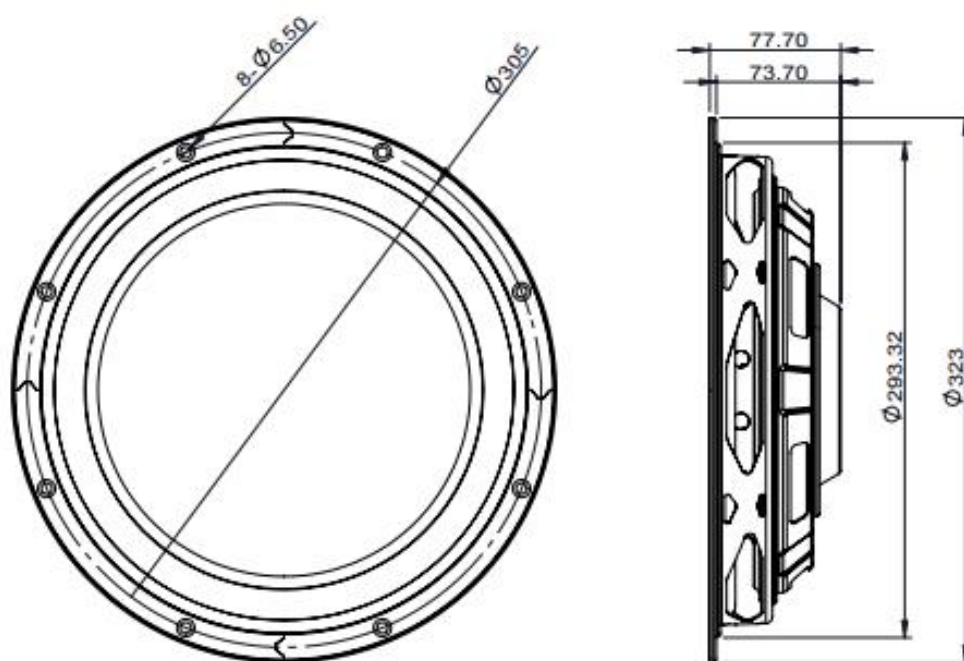
 Datasheet (PDF)
  2D Drawing (PDF)
  3D Model (STEP)

Covered by the REDCATT **3-year Limited Warranty**.

Frequency Response & Impedance



2D Drawing



systems, home theater, in-wall and under-seat installations, and similar domestic or automotive applications. It operates at 84.2 dB sensitivity (1W/1m). The driver features a compliant suspension design suited to moderate-volume enclosures with extended low-frequency response.

The driver is intended for use with moderate amplification (approx. 200 W AES / 400 W continuous) and DSP control. A high-pass filter set at approximately 50 Hz is recommended to protect the driver below its usable range. Typical operating bandwidth is 60-100 Hz, making it suitable for integration with a mid-bass or full-range system.

This design is particularly effective in sealed enclosure systems used in hi-fi subwoofer systems, home theater, in-wall installations, automotive, and under-seat applications, where low-frequency extension and compact form factor are prioritized over high acoustic efficiency.

Recommended enclosure volumes are simulated results. For best enclosure volumes and tuning, we recommend secondary simulation and careful evaluation. Several rounds of samples and fine-tuning may be required for optimal results.

Enclosure Recommendations

Recommended enclosure alignments (bass reflex):

- 20 liters tuned to 34 Hz: high output, strong mid-bass, reduced excursion; -3 dB approx. 31 Hz, HP filter 26 Hz
- 25 liters tuned to 32 Hz: balanced response, general-purpose (recommended); -3 dB approx. 29 Hz, HP filter 22 Hz
- 30 liters tuned to 28 Hz: extended low-frequency, requires HP filter protection; -3 dB approx. 24 Hz, HP filter 20 Hz

Frequently Asked Questions

What enclosure is recommended for the Twiggy12?



What applications is the Twiggy12 suited for?



What are the power and sensitivity specs of the Twiggy12?



Independent Reviews



Voice Coil / AudioXpress · Mar 2026



Test Bench: The Twiggy 12
Shallow-Mount 12" Subwoof...

*"A well-crafted driver with good
sealed box performance — an..."*

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