Here's a practical guide to **fuse sizes for campervan circuits**, based on common devices and wire sizes. Fuses are essential for **protecting your wires**, not your devices. So, you size the fuse based on the **wire's current capacity**, not just the appliance draw.

🔧 General Fuse Sizing Rule

Fuse rating = Less than or equal to the ampacity of the cable.

🪛 Campervan Fuse Size Chart

Device/Appliance	Typical Current Draw	Recommended Wire Size	Suggested Fuse Size
LED lighting (strip)	1–2 A	1.0–1.5 mm² / 18–16 AWG	3–5 A blade fuse
USB charger	2–5 A	1.5 mm² / 16 AWG	5 A blade fuse
12V fridge	4–8 A	2.5 mm² / 14 AWG	10 A fuse
Water pump	5–10 A	2.5–4 mm² / 14–12 AWG	10–15 A fuse
Diesel heater	8–12 A startup, 1–2 A run	2.5–4 mm² / 14–12 AWG	10–15 A fuse
Fan	3–6 A	2.5 mm² / 14 AWG	5–10 A fuse
Inverter (300–600W)	30–60 A	10–16 mm² / 8–6 AWG	40–60 A MIDI fuse
Inverter (1000W+)	80–150 A	25–50 mm² / 4–0 AWG	100–150 A MEGA fuse
Solar charge controller	Based on solar input	Match cable size	Match max current + 25%
Battery-to-fuse block	Depends on total draw	Match total load capacity	Add up branch fuses

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✅ Tips for Fuse Selection

- **Never** fuse higher than the wire can safely carry. Use ampacity charts if unsure.
- Place fuses as **close to the battery** as possible.
- Use **blade fuses** for low-current circuits (≤30A), **MIDI** or **MEGA fuses** for high-current (inverters, batteries).
- Consider **resettable breakers** for convenience on large loads.