

DC fuses

To protect the DC wiring wiring from overloading, fuses need to be used as overloaded cables or wires can cause fire and hazardous situations.

Overloaded wiring can be caused by faulty equipment or by simply too much equipment connected to the same wiring. Ingres of water in the navigation lamps is an example of a possible overload.

There are many fuses available and the most common for smaller loads is the ATO/ATC (car type) fuse. This fuse can protect wiring up to 2.5-4 mm². Although these fuses are available with a rating of more than 30 amps, this will not be recommended as the heat production will be high and a premature failure of the fuse might be expected.

For higher loads or loads that are continuously powered, so called ANL or plate fuses will often be installed. These fuses are commonly used for currents of approx. 20 to 100-125 amps, but higher ratings are available.

For more professional or high power installations, like for example winches or bowtrusters, often the NH (knife type) or T-fuse will be installed. Although these fuses are sometimes, due to their physical size, not easy to install, they are very reliable. They are commonly used for currents of 50 amps and more.



ATO fuse.



ATC fuse.



ANL fuse.



NH fuses (knife type).



T-fuse.

Example:

wire size	max. current	fuse required	preferred type
0.75 mm ²	12 A	10 A	ATO/ATC (car type)
1 mm ²	18 A	15 A	ATO/ATC (car type)
1.5 mm ²	21 A	20 A	ATO/ATC (car type)
2.5 mm ²	30 A	30 A	ATO/ATC (car type)
4 mm ²	40 A	40 A	ANL Blade type
6 mm ²	50 A	50 A	ANL Blade type
10 mm ²	70 A	80 A	ANL Blade type
16 mm ²	100 A	100 A	NH (knife type) or T-fuse
25 mm ²	140 A	125 A	NH (knife type) or T-fuse
35 mm ²	185 A	160 A	NH (knife type) or T-fuse
50 mm ²	230 A	224 A	NH (knife type) or T-fuse
70 mm ²	285 A	25 A	NH (knife type) or T-fuse
95 mm ²	330 A	315 A	NH (knife type) or T-fuse
120 mm ²	400 A	400 A	NH (knife type) or T-fuse
150 mm ²	430 A	425 A	NH (knife type) or T-fuse
240 mm ²	710 A	630 A	NH (knife type) or T-fuse

Please note that fuse and cable ratings are subject to local regulations, consult your supplier for more detailed advice and installation.