LEONI Hivocar® Cool Fast charging with optimised weight and installation space

The increasing demands for charging power at fast charging stations impact the design of the cables in the vehicle. Faster charging means higher current. While standard cables would overheat under this higher load, LEONI Hivocar® Cool can withstand significantly more charging power.



The high-voltage cables with high cooling performance are used in temperature-critical contact areas, such as the vehicle charging socket. The coolant supply and the high-voltage cable are combined into a single product. This 2-in-1 combination saves at least 75% of the total weight and 30% of the cable diameter compared to standard-high-voltage cables. The advantage is significantly higher current-carrying capacity compared to uncooled standard-high-voltage cables at the same temperature rise.





LEONI Hivocar® Cool

Cooled high voltage cables for the use in high voltage harnesses

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Hivocar® Cool compared to standard high-voltage cables

High charging power increases the cross-section and cable weight of standard high-voltage cables exponentially. The coolant in the cable can significantly maximise the current carrying capacity without increasing the copper content in the cable. This reduces the CO₂ footprint with the same flexibility and easy installation in the vehicle. The existing cooling system in the vehicles can be used for the coolant.

Hivocar® Cool compared to busbars

Compared to the use of rigid busbars, cooled high-voltage cable solutions are more resistant to vibrations due to their flexibility.

LEONI Hivocar® Cool cable portfolio

The cable design is based on many years of LEONI expertise. The validation is in accordance with ISO 19642. Our cables are available in shielded and unshielded versions.

Cross- section nom. 16 mm ²	Cross- section nom. 25 mm ²	Cross- section nom. 35 mm ²	Cross- section nom. 50 mm ²	Cross- section nom. 70 mm²	Cross- section nom. 95 mm²	Cross- section nom. 120 mm ²	Cross- section nom. 150mm ²
	Ca	n be loaded with 77	5 Imax current witho	ut the external tempe	erature of the cable r	ising above 150°C	
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	Current carrying capacity similar to LEONI Hivocar® 95 - 120 mm²	Current carrying capacity similar to LEONI Hivocar® 2 x 50 mm ²	Current carrying capacity similar to LEONI Hivocar® 2 x 70 mm ²	Current carrying capacity similar to LEONI Hivocar® 2 x 95 mm ²	Current carrying capacity similar to LEONI Hivocar® 2 x 120 mm ²		