

**The Quality Connection** 

## **LEONI**



## Weight optimization

In terms of weight optimization LEONI is developing different technologies for various commercial vehicle applications. In addition to copper wires with smaller cross-sections and alternative conductors, LEONI provides a range of cables made of aluminium for the power segment.

#### **Key features**

Aluminium technology

 Noticeable weight reduction, same electrical conductivity, higher diameter (cross-sections between 10 mm² and 110 mm² and larger)

#### Alternative conductors

Copper cross-section of 0.75 mm<sup>2</sup> can be replaced by a smaller alternative conductor with cross-sections such as 0.50 mm<sup>2</sup> or 0.35 mm<sup>2</sup>.



## Technology & innovation

LEONI offers approved expertise especially in applications that are critical to safety and reliability. This expertise extends to the development of plug-in and screw-in connections, sensor mountings along with other metal and plastic parts used in conjunction with a wide variety of cable configurations. With respect to the field of technology & innovation, LEONI offers tailor-made solutions using thermoplastic and thermosetting materials. Furthermore LEONI develops and produces overmolded sensors for example temperature and pressure detection.

#### **Key features**

- Electrical connections with full environmental protection
- Elimination of internal vibration to avoid any system damage or malfunction
- Easier assembling and fastening
- Protection against mechanical stress



## Electromechanical components

LEONI has expanded its portfolio of mechanical components to match the specific requirements of the commercial vehicle industry.

In order to achieve the optimum product design for all customers LEONI is continously implementing the lastet technologies combined with in-depth knowledge of engineers. The product range extends from fuse and relay boxes, pre-fuse devices to junction boxes.

#### **Key features**

- Wide range of power distribution units for commercial vehicles
- Sub-components as LEONI fuses and terminals, integrated jumpstart devices and relays for printed circuit boards
- Hybrid design to merge different current and signal conducting components & technologies
- Integrated electronics with option for integrated power management



## Foaming technology

More than 20 years of experience in foaming technology make LEONI the leader in preformed harness technology. LEONI encases the conventional harness with a polyurethane foam that is approved by most of the customers. The material withstands the usual chemicals in the vehicle and is very durable and reliable.

#### **Key features**

- Exact fit for quick and efficient installation
- Fixed position of connectors, no mix-up possible
- Full protection of wires against environmental influences such as dirt, vibration, moisture, and temperature
- Integrated mounting / fastening elements
- Space saving
- Easier fitting in tight areas



# Customized solutions – special vehicles

The product range spans from central electrical systems, cable harnesses / systems, special cables over control systems to special connection components.

#### **Key features**

Power port (a vehicle side plug-in connector for charging)

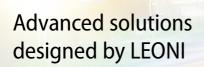
- Assures a secure latching and self-opening of the power port cap and ring
- Modular system with several clip-in components (charging indicator)

Cylinder head connector (overmolded cable feedthrough from the housing to multi-pole connector)

- Oil-proof and temperature resistant within a temperature range from -40 °C to 170 °C
- Small number of parts, low assembly complexity, reduced risk of failures, double oil-tight safety

Electric-electronic Control Unit (ECU)

- Main unit for various control systems
- Includes a diagnostic plug to connect a laptop to the vehicle's bus system



LEONI is an experienced and proven partner, focused on the design & development and serial production of wiring systems and associated components.

## Wiring systems for commercial vehicles

In order to address the market requirements for today's commercial vehicles, LEONI offers a wide range of innovative and durable solutions for weight and cost optimization.

LEONI provides customized wiring systems and components as aluminium applications, overmolded sensors, power distribution units and preformed harnesses.



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