

## VAHLE charging contacts

Reliable charging contact solutions are becoming increasingly important thanks to the rapidly expanding market for autonomously driven vehicles and the increased use of new quick charge energy storage devices.

We are just starting out in the age of Industry 4.0, where automatic guided vehicles (AGVs) are playing an increasingly important role when it comes to mobile assembly stations and means of transport. A wide variety of AGVs, each of which must be adapted to their individual tasks, are required due to the large number of applications. VAHLE is able to offer you a large portfolio of specially developed charging contacts.

Thanks to new energy storage devices such as ultracaps, modern transport systems can now be charged within a matter of seconds. This allows the charging process to be integrated into the normal operation of an installation, without having to exclude vehicles that need to be charged.

Any application that entails operational waiting times is suitable for the installation of battery charging stations. The optimum spatial integration of the charging station within the overall installation is important. That is why VAHLE has developed special charging contacts.

In addition to their standard application in AGVs, VAHLE charging contacts have a very broad area of application in the intralogistics, automotive, robotics and theme park sectors.

- Standard current strength of 10–600 A
- Standard transmission voltage of 12–80 V
- Single, double and multi-pole contact solutions
- Drive-on, drive-over and pressure contact designs available
- Optionally upgradeable with pilot contacts
- Very large tolerances can be implemented via linear guidance elements
- Design engineering support during each project phase
- Personalised special designs for customer-specific solutions – even for smaller batch sizes (e.g. structures, dimensions, higher voltages of 230/400 V and current strengths, external applications)

## Stay in contact with us!

[www.vahle.com](http://www.vahle.com)

### VAHLE Group

Since the foundation of the company in 1912, VAHLE has been a family-run business for four generations. For more than 100 years, reliability, quality and innovative spirit have driven our sustainable, entrepreneurial thinking and performance.

The invention of the conductor system has been the foundation of our success. In addition to the traditional business segment of energy transmission, we also offer innovative product solutions for data transmission, control and positioning.

Working in concert, they form a smart VAHLE system guaranteeing the efficiency and effectiveness of your installation.



**VAHLE**

# CHARGING CONTACTS

**FEATURES**



**VAHLE**



# A truly universal solution VAHLE charging contacts

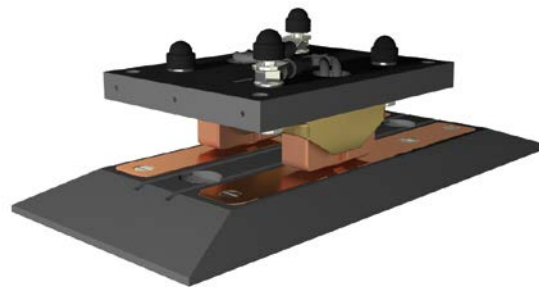
VAHLE charging contacts are designed to carry charging and control currents as well as for data communications. The VAHLE portfolio includes solutions for practically every application area – ranging from small right through to high performance requirements. With more than three decades of experience, VAHLE is a pioneer when it comes to charging contact solutions and is continuously developing its products further in accordance with market requirements.

**VAHLE covers the entire range of requirements from standard solutions right through to special individual projects.**

**Challenge us and benefit from our contacts!**

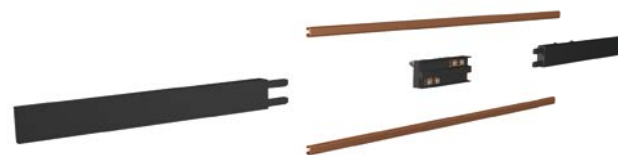
## Strong | Durable

When charging automatic guides vehicles in the intralogistics sector or in modern car parks where cars are manoeuvred into parking bays by parking robots, the charging contacts must be able to cope with a high number of transitions without any problems and guarantee safe charging.



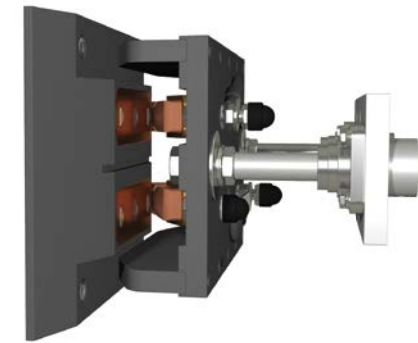
## Modular | Flexible

In the intralogistics sector, holding times are short and the existing space must be used as effectively as possible. It is important that a solution charges quickly and is very compact.



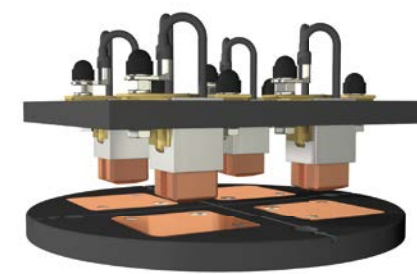
## Robust | Adapted

Regardless of whether the system is driverless or not, charging electric forklifts is always time-consuming. VAHLE charging contacts make the inconvenient step of having to manually connect them to a power supply a thing of the past. The forklift simply drives up or onto the contact to start the charging process.



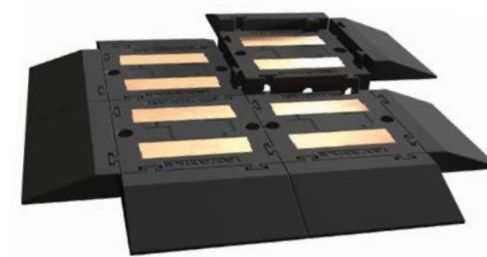
## Universal | Versatile

A lot of theme park rides require a power supply at the entry and exit points to actuate the safety bars. However, automatic, freely moving theme park rides that take visitors through a fantasy world can also easily and safely be supplied with energy via VAHLE charging contacts.

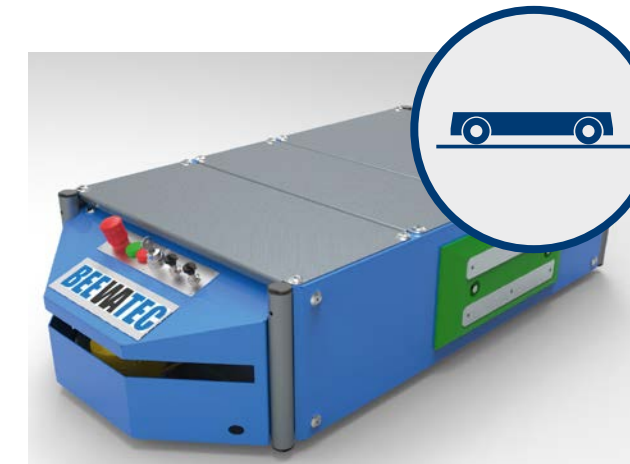


## Compact | Cost-effective

In the age of Industry 4.0, small, self-driving vehicles are becoming increasingly important. They must be able to react flexibly to specific requirements to guarantee a smooth production process. This is where the smallest possible modular energy and data charging contacts provide the perfect solution.



# Application of battery charging systems



**Automatic guided vehicles**



**Forklift charging**



**Car parks**



**Amusement rides**



**Shuttle systems**



**Robotics**