

# High Speed Position Sensors

## Sensing Solutions for Electric Vehicles

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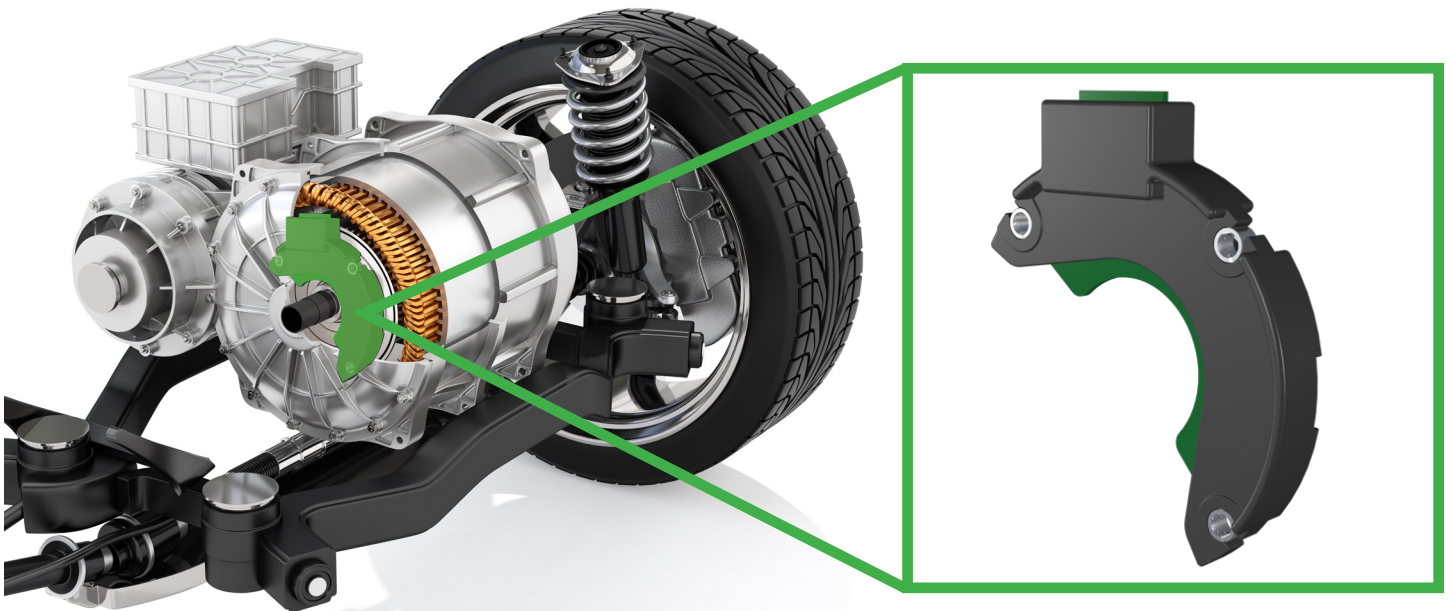
When designing electric vehicles, efficiency is key to reaching new technological advances. The more efficiently an EV uses energy, the further it can travel without stopping to charge, which leads to time savings, lower electrical costs, and the ability to power more technology throughout the vehicle.

Our mission is to control and protect your most valuable asset, the EV motor. Accurate motor sensing is key to building the future of EV, and high-speed position sensors allow us to collect information on vehicle propulsion and speed to understand how well the motor is performing.

### APPLICATION

CTS sensors have an accuracy level of <1% at speeds <240,000 eRPMs. Designed using inductive technology, our position sensors can be customized for unique customer application needs. Our team partners with customers to design sensors that are guaranteed to fit specific motor shaft requirements, saving customers from spending time and resources to search for an off-the-shelf product that may not be the best fit.

Our latest custom sensors provide a reliable, integrated solution that will continuously perform in any vehicle utilizing an electric motor. A variety of mounting options are available, including end-of-shaft.



A variety of mounting options are available for motors.

### AUTOMOTIVE EXPERTISE

CTS Corporation began expanding into the automotive market in the early 1970's, when the U.S. government first issued requirements for controlling automotive emissions. To meet the new demand for throttle positioning sensing and exhaust gas recirculation controls, we developed custom under-the-hood and chassis position sensors. Over the last forty years, CTS has grown into a variety of transportation markets, including commercial and off-road vehicles, heavy equipment, and motorcycles.

Today, we are a leading provider of sensing solutions, smart actuators, and pedals. Our sensors are found throughout

vehicles designed by the world's top manufacturers to monitor speed, throttle position, electrical current, and a variety of other safety and efficiency-related areas. With the emergence of electric vehicles (EVs) and consumer demands for smart features, CTS began designing solutions to fit the needs of this rapidly evolving market, including DC and AC current sensors. Our technology is also behind many interior sensors, to detect seat belt tension and seat track position.

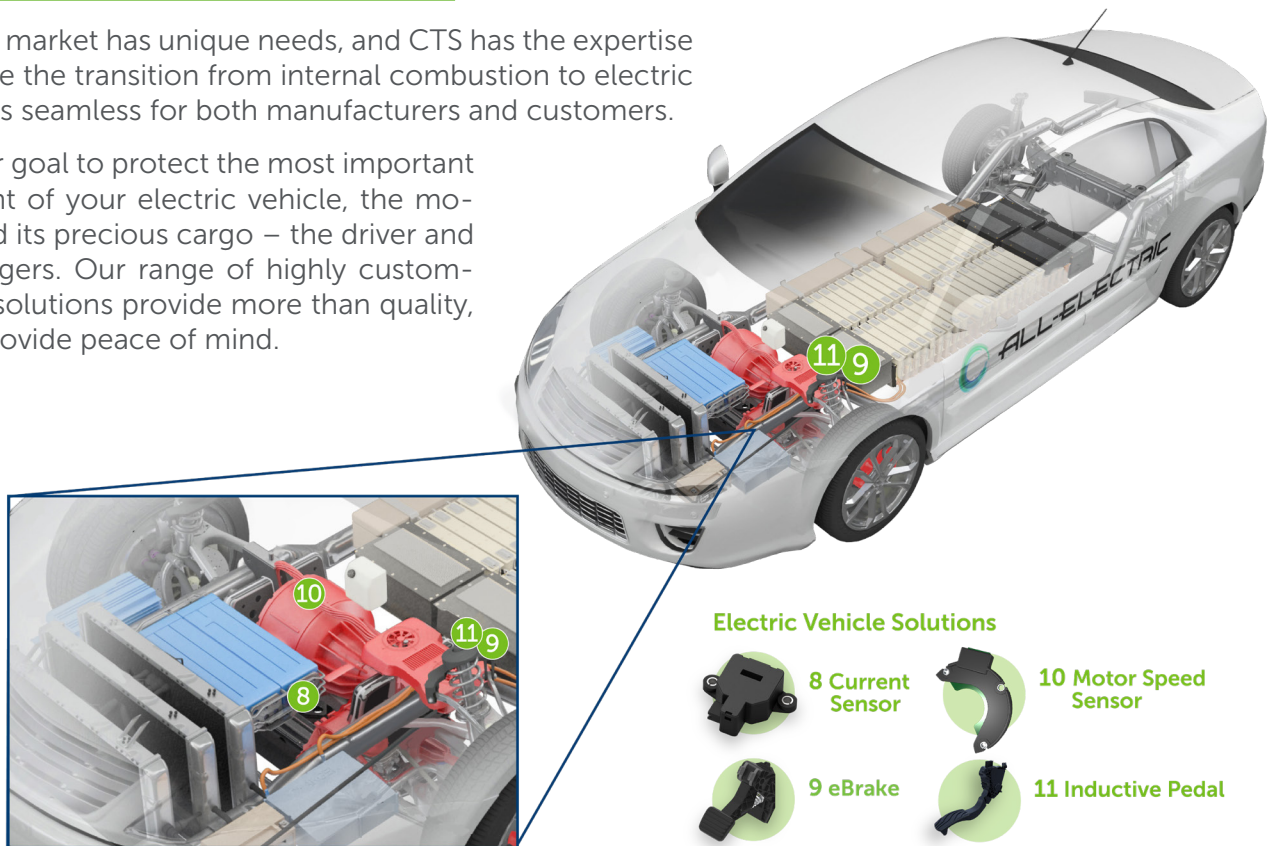
## ABOUT CTS

Founded in 1896, CTS Corporation (NYSE: CTS) is a leading designer and manufacturer of sensors, actuators, and electronic components. A solution provider to OEMs in the aerospace, communications, defense, industrial, information technology, medical, and transportation markets, CTS provides advanced technology, exceptional customer service and superior value to industry partners. Located in the Americas, Europe, and Asia, we aim to deliver innovative sensing, connectivity and motion solutions for the creation and advancement of products and services around the world.

## CTS ELECTRIC VEHICLE SOLUTIONS

The EV market has unique needs, and CTS has the expertise to make the transition from internal combustion to electric vehicles seamless for both manufacturers and customers.

It is our goal to protect the most important element of your electric vehicle, the motor, and its precious cargo – the driver and passengers. Our range of highly customizable solutions provide more than quality, they provide peace of mind.



## CONTACT INFORMATION

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