TT Electronics Offers New Sensor for Transportation Electronic Power Steering

*Magnetorque® Plus provides compact solution for torque and position sensing*

Fullerton, CA, 26 March 2014: TT Electronics’ Sensing and Control division has expanded its series of sensors for electronic power steering (EPS) applications. The new Magnetorque® Plus combines TT Electronics’ proven non-contacting torque sensor with a multi-turn position sensor in a single compact package. The integrated and fully calibrated design is significant in providing engineers with an integrated solution for measuring torque and steering wheel angle.

TT Electronics’ new Magnetorque® Plus is designed to support the increasing demand for EPS systems across several sectors in the transportation market. Studies have shown that EPS systems contribute to a 3% to 4% reduction in fuel consumption, driving their use in passenger cars, off road, utility and recreational vehicles. Designed with a modular approach, Magnetorque® Plus sensors can be customised for unique requirements in different applications.

“The Magnetorque® Plus is a result of collaboration with customers to support the requirements for a complete torque and position sensing solution. TT Electronics’ integrated approach is smaller, lighter and more cost effective than alternatives using two separate sensors, while the fully calibrated solution simplifies the route to EPS system design,” said TH Swee, Global Product Line Director within TT Electronics’ Sensing and Control division.

The Magnetorque® Plus torque and position sensing functions are based on Hall Effect technology allowing a truly non-contact design that maximises mechanical durability to support a minimum lifetime of 1 million shaft rotations without degradation of electrical outputs. Dual torque outputs allow accurate diagnostic calculations and availability of custom output slopes.
Unlike most steering sensors on the market, the Magnetorque® Plus offers multi-turn capability, which provides the absolute position of the steering wheel at any time. Instant output at “power-on” provides several benefits, including enhanced accuracy and no standby current. The position output provides absolute multi-turn position information up to ±900° of rotation.

The Magnetorque® Plus is fully calibrated and compensated to offer an easy assembly to the steering shaft with a simple interface to system controllers. Magnetorque® sensors can be re-programmed for offset to accommodate adjustments to the system’s mechanical tolerances, allowing customers to optimise system tolerance for simpler assembly and greater control.

The Magnetorque Plus sensor is available now with pricing dependent on volume.

For further information contact: sensors@ttelectronics.com

About TT Electronics plc

TT Electronics is an innovative global electronics company supplying the world’s leading manufacturers in the transportation, industrial, aerospace, defence and medical markets.

We make things happen by developing new technologies in Sensing and Control, Components and Integrated Manufacturing Services. We are able to achieve this based on an explicit understanding of our customers’ needs and by forming strategic relationships with OEMs around the world. Our technical and manufacturing facilities at key locations also mean we can stay close to the people that matter with a truly global reach.

from our corporate website: www.ttelectronics.com