

Bourns® Automotive Products Focus

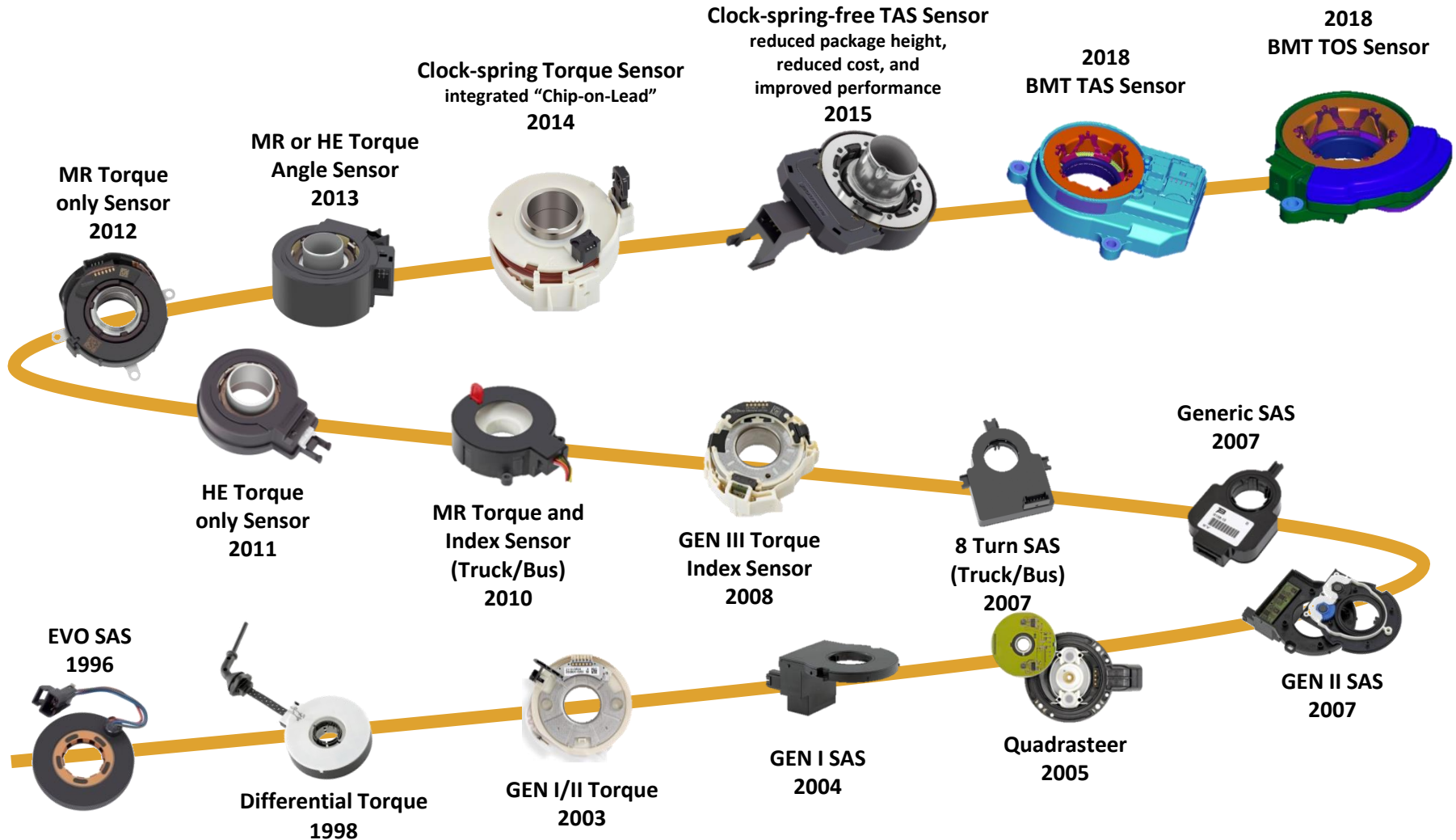
Steering and Stability Control Sensors

BOURNS® *Automotive Division*

Steering and Stability Control



Product Evolution Steering Sensors



Steering Angle Sensors for Passenger Cars and Commercial Vehicles



Application:

Steering Angle Sensors provide the steering angle/steering position and the steering/angular speed for systems like ESP, AFS, AFLS and park assist. Features AMR or GMR sensing technology, true-power-on, and is a multiturn product (up to ± 4 turns). ASIL compliant, utilizes CAN output (SENT in development) or raw signal output. Standalone versions are available for steering columns or CEAs (column electrical assemblies); clockspring module mounted/integrated, low profile housing for clockspring snap-on.

Differential Non-Contacting Angle Sensor



Available with Index Measurement

Hall based switch and magnet provide index function



Application:

A differential non-contacting angle sensor is used as the torque sensor in electric power steering, active steering and park assist. A combo sensor steering-torque is a differential non-contacting angle sensor combined with a steering angle sensor.

Motor Position Sensor (Electric Power Assisted Steering = EPAS)



Application:

Features EPAS motor position, electronic differential position, electronic integrated transfer case, electronically actuated clutch, compliant steer position feedback. The non-contacting angle sensor in the EPS motor cap has been supplied since 2006. Used in conjunction with the torque sensor to provide steering angle.

Chassis Level Sensor for Passenger Cars and Commercial Vehicles



Application:

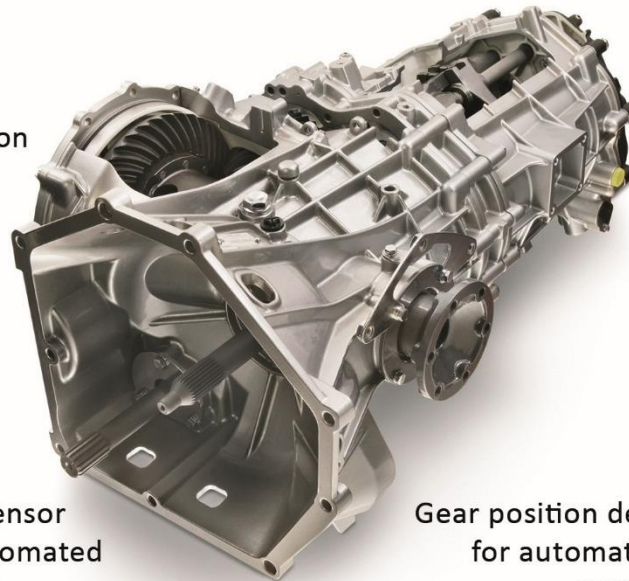
Dynamic headlamp level adjustment, AFLS headlamp adjustment, air suspension positional feedback, continuous electronic damping control, tilting vehicle applications for invalid access, lifting axle position detection, vehicle and trailer load ride height position; non-contacting (wear-free, MR or x-axis-hall) technology.

Linear Sensors

Linear Sensing Applications – Non-Contacting Technology

Transmission sensor
for neutral gear position detection
start/stop applications
(digital or analog 1D/2D)

Neutral and reverse gear detection
(start/stop and reverse
light activation)
(digital or analog)



Lever position sensor
for automated
transmission gearbox

Park position detection sensor
for automated and semi-automated
gearbox applications
(digital or analog 2D)

Gear position detection sensor up to 50 mm
for automated and semi-automated
gearbox applications
(digital or analog 1D)