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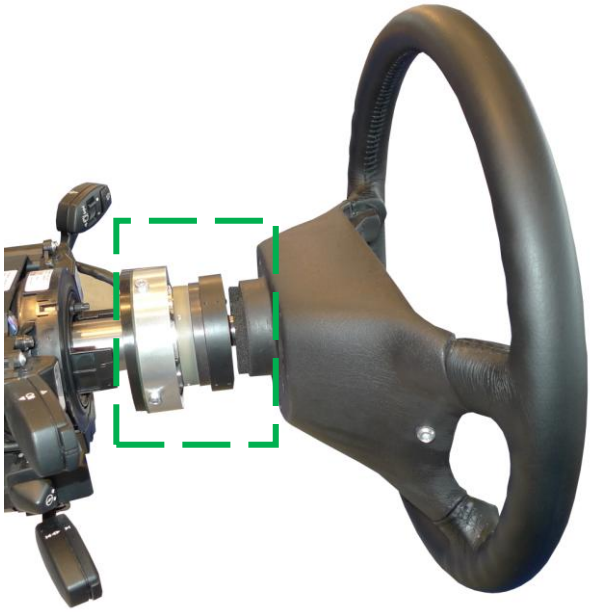
Steering Effort Sensor KMT-CLS

Measurements at the original steering wheel of automobiles and trucks

Small, flexible and high-precision:
The new steering effort sensor KMT-CLS

- ***Steering torque range ±100 Nm or ±200 Nm***
- ***Steering angle range ±1340°***
- ***Rotational velocity range ±1000°/sec***
- ***CAN and analog output***
- ***Optimum signal resolution 0,04 Nm, 0,04°***
- ***Changeable adaption for any car and truck manufacturer***
- ***All features of multi-function steering wheels can be used with the CLS mounted (including airbag)***
- ***Power supplied by the control unit***

The new steering effort sensor **KMT-CLS** is designed for applications in any car or commercial vehicle steering system. The KMT-CLS sensor is available with a torque range of ±100Nm and ±200Nm, the range for the steering angle is ±1340°. At the CAN output in addition the rotational steering velocity (±1000°/s) is available. The control unit simultaneously provides a free configurable CAN output for the data transmission off all values and two analog outputs for steering angle and torque. In addition torque and angle can be metered on two displays of the control unit. The zero balance of steering angle and torque is also initiated at the control unit. All features of multi-function steering wheels can be maintained because there is no change on the original steering wheel necessary. Up to six electrical signals can be conveyed through the KMT-CLS. The power for the whole system is supplied from the control unit and can be provided in a range from 9V to 36V.



KMT-CLS Sensor in a standard application, located between steering wheel and steering column

Technical Data

Sensor	
Steering Torque	
Measuring Principle	Temperature compensated strain gage application
Measurement Range	±100 Nm or ±200 Nm (choose when ordering)
Accuracy	0,2 % FS
Bandwidth	0 ... 800 Hz
Steering Angle	
Measuring Principle	Incremental Angle Encoder
Measurement Range	CAN: ±1.340° analog: ±1.000°
Accuracy	CAN: 0,04° analog: 0,65°
Bandwidth	0 … 800 Hz
Rotational Velocity	
Measuring Principle	Calculated from the angle (available only at CAN bus)
Measurement Range	CAN: ±1.000°/s
Bandwidth	0 … 800 Hz
General Data	
Overload	>100% of the nominal steering torque
Mech. breaking torque	> 500 Nm (mechanical protection at breakage)
Adaption	Special adaption sets for any car or truck manufactures available
External-Ø	max. 100 mm
Height	65 mm without adapter
Required place	ca. 96 mm, depends on the situation
Weight	1,4 kg
Working temperature	-20 ... +80 °C
Control Unit	
Power supply	9 ...36 V DC
CAN-Output	Free configurable CAN output for the data transmission
Analog output	Torque: ±10 V (= ±100 Nm or ±200 Nm) Angle: ±10 V (= ±1000°)
Auto zero	With push-button for torque and angle at the panel