Engine management

Camshaft position sensor

BOSCH
Invented for life

PRODUCT BENEFITS

- High measurement accuracy and large temperature range
- Robust design for long lifetime
- High EMC/ESD protection
- Wide air gap range
- Flexible design
- Non-contacting measurement
- Compact design and low weight
- Twist insensitive mounting (TIM)

1. Electrical interface (connector)
2. Measuring unit
3. Mounting flange

economical

Helps reduce fuel consumption and hence CO_2 emissions

quick starting capability

due to TPO function (true power on)

TASK

The electronic engine management enables precise, central control of all functions relevant for engine operation. This control is based on ongoing, exact information from the drivetrain. This information is provided by sensors. The engine control unit uses the camshaft speed sensor to record the position of the camshaft. The sensor's high precision enables exact injection/ignition timing and a precise variable camshaft phasing, which increases power and supports emission reduction at the same time.

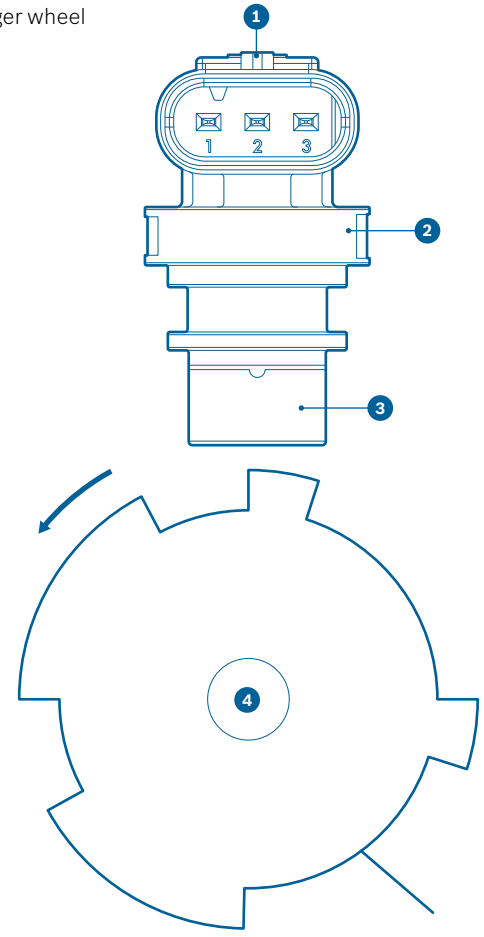
FUNCTION

The camshaft position sensor is designed as a non-contacting Hall sensor. Due to the true power on function (TPO) the sensor is quick start capable: It provides a position information immediately after engine start.

TECHNICAL CHARACTERISTICS

Functional principle	single-Hall technology
Starting function	true power on (TPO)
Installation	twist insensitive mounting (TIM)
Temperature range	–40 °C to +150 °C (max. 250 hours at +160 °C)
Air gap	0.2 – 1.8 mm

1. Electrical interface (connector)
2. Mounting flange
3. Measuring unit
4. Trigger wheel



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