CRANKSHAFT SENSOR



ITS FUNCTION



The crankshaft position sensor is an **essential electronic component of** the engine management system. It accurately measures the angular **position and rotational speed of the crankshaft**, enabling the electronic control unit (ECU) to adjust the engine's operating parameters.

It also plays a role in **engine synchronisation**, ensuring the correct operation of systems linked to the engine cycle, such as ignition and fuel injection.

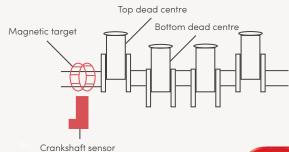
GOOD TO KNOW

The crankshaft sensor is generally fitted close to:

- The engine flywheel (in the clutch housing): this position allows direct detection of the teeth or marks on the flywheel.
- The crankshaft pulley: located at the front of the engine, it picks up information via a toothed wheel fixed to the pulley.
- On the engine block: positioned to detect marks on the crankshaft or on a ring gear linked to the crankshaft.



ILLUSTRATION







TECHNOLOGIES

Crankshaft sensors can use **several technologies**, each with its own advantages and specific applications: the Hall effect, variable reluctance (VRS), magnetoresistance or optics.

The Hall-effect sensor - the most common technology on the market - is an accurate and durable system, capable of operating at high speeds.