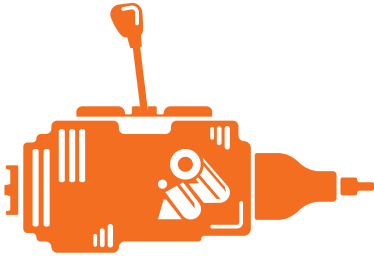
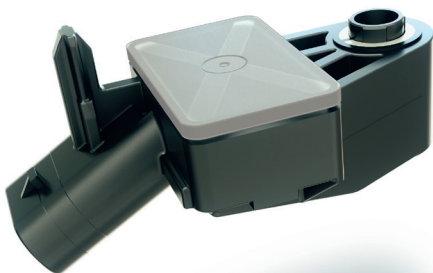


POSITION SENSOR



TRANSMISSION EFFICIENCY

Optimize the equation comfort /
pleasure / consumption



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Application description

This sensor is specially designed to be able to measure linear as well as rotary displacements.

It is a flexible measurement platform suitable for various applications:

- ▲ In manual transmissions for clutch management: It is used to monitor position of the clutch master cylinder (CMC) or the clutch slave cylinder (CSC).
 - ▲ In manual transmission for gearshifter position: To detect neutral gear sensor (NGS), or all gear position sensor (AGS).
 - ▲ In Dual clutch transmission (DCT): It monitor the fork position for ever more responsive, accurate and reliable gears changes.
 - ▲ In Automatic transmission (AT): It detects the selected mode of the transmission (transmission range sensor, TRS - Internal mode switch, IMS - Inhibitor switch INHSW).
- This multi-purpose sensor can be used as position sensor for many functions in the powertrain, chassis or cockpit area which required accurate and stray field immune position measurement.
- ▲ Intake manifold actuator position sensor.
 - ▲ Automatic transmission actuator position sensor.
 - ▲ Chassis actuator sensor.
 - ▲ Variable compression ratio actuator position sensor.
 - ▲ Vehicle level sensor (VLS).
 - ▲ Steering position sensor.
 - ▲ Seat position sensors

Technical characteristics

- ▲ Rotary and Linear Absolute Position Sensor
- ▲ Programmable output transfer function linearization functionality that provides high output accuracy and linearity
- ▲ Range selection and offset programming by either EFI or customer
- ▲ Selectable output mode: Analog / PWM / SENT
- ▲ Open/short on-board diagnostics and voltage protections
- ▲ Temperature-stable, mechanical stress immune
- ▲ 12 bit resolution
- ▲ Wide ambient operating temperature range: -40°C to 150°C
- ▲ Sensor tested for vibrations over 1000Hz during DV
- ▲ Standard package for EFI Automotive worldwide process.

SENSE - BUILD - DRIVE



POSITION SENSOR

	Minimum	Typ.	Maximum	Units
Technology	Hall type (3 wires)			
Supply voltage	4.5	5	5.5	V
Voltage	24V			V
Reverse voltage	12V			V
Current supply		13.5	15	mA
Number of signals	1			
PWM frequency	1000			Hz
PWM accuracy	±50			Hz
Voltage value for LOW	0			V
Voltage value for HIGH	At supply voltage = 5V			V
PWM range	10		90	%
Resolution	12			bit
Power-on time	< 5.8			ms
Output load	1	10		KOhm
Clamping level	10		90	
Step response time		1		ms
Rise and fall time – 2kOhm pull up			40	µs