DENSO

New Product Bulletin
Issue Date: September 2017

Engine Management Systems

Camshaft and Crankshaft Position Sensors

DENSO announces the launch of a new range of Camshaft & Crankshaft Position Sensors available in September 2017

> 10 Sensors
> 10 OE part number cross references
> Crankshaft Position Sensors: 129 unique applications covering 2 million vehicles with 8 P/Ns
> Camshaft Position Sensors: 119 unique applications covering 3.5 million vehicles with 5 P/Ns
> Range introduction with extensive application coverage from Toyota and Lexus
> Availability: September 2017

Crankshaft Position Sensor

DENSO PN	MAKE	APPLICATIONS	OE CROSS REFERENCE
DCPS-0101	TOYOTA	COROLLA, CELICA	90919-05007
DCPS-0102	TOYOTA	AVENSIS, COROLLA, CARINA E, CELICA	90919-05011
DCPS-0104	TOYOTA	HIACE, HILUX, 4RUNNER	90919-05016
DCPS-0105	TOYOTA	LAND CRUISER, 4RUNNER	90919-05020
DCPS-0106	TOYOTA / LEXUS	SUPRA, IS, GS	90919-05023
DCPS-0108	TOYOTA	COROLLA, CELICA	90919-05048
DCPS-0109	TOYOTA / LEXUS	AURIS, CAMRY, COROLLA, HILUX, IQ, LAND CRUISER, URBAN CRUISER, VERSO-S, YARIS, ES, GS, IS, RC, RX	90919-05060
DCPS-0110	TOYOTA / LEXUS	AURIS, AVENSIS, RAV4, VERSO, IS, GS, RC, RX	90919-05061

Camshaft Position Sensor

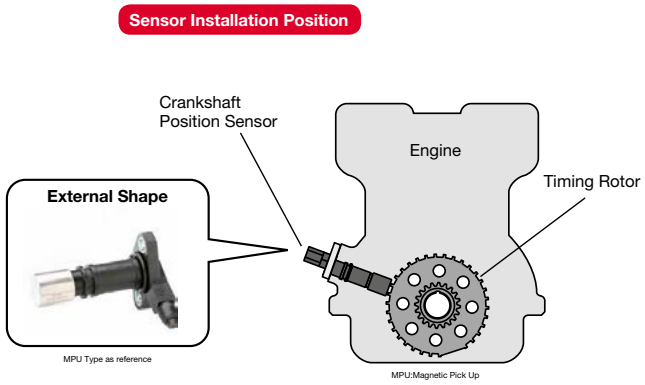
DENSO PN	MAKE	APPLICATIONS	OE CROSS REFERENCE
DCPS-0101	TOYOTA / LEXUS	COROLLA, CELICA, SUPRA, IS, GS	90919-05007
DCPS-0103	TOYOTA	CAMRY	90919-05013
DCPS-0107	TOYOTA	AVENSIS, IQ, PRIUS, YARIS, YARIS VERSO	90919-05024
DCPS-0109	TOYOTA / LEXUS	AURIS, AVENSIS, CAMRY, COROLLA, LAND CRUISER, PRIUS, RAV4, VERSO, YARIS, CT, ES, GS, GX, IS, LS, LX, NX, RC, RX	90919-05060
DCPS-0110	LEXUS	IS, GS, LS, RC	90919-05061

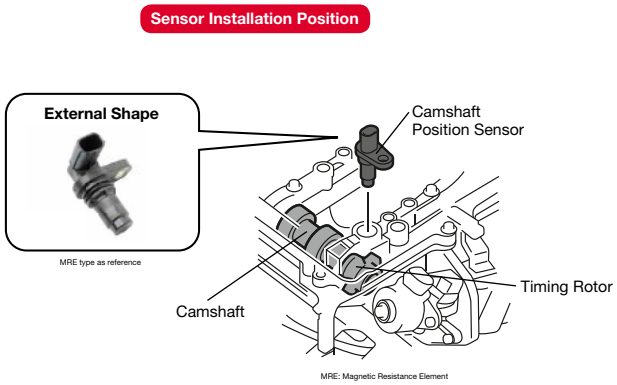
Technical information

How they work

The camshaft position sensor detects camshaft rotation, and is mounted near the cylinder head so that the sensor is opposite the timing rotor attached to the engine camshaft. The engine ECU detects the camshaft angle, and performs cylinder recognition based on the signals detected by the camshaft position sensor.

The crankshaft position sensor is attached to the engine block facing the timing rotor on the engine crankshaft. The sensor detects signals used by the engine ECU to calculate the crankshaft position and the engine rotational speed.





The information received from Camshaft and Crankshaft Sensors is used by the engine ECU to control injection timing and ignition timing. In case of sensor failure, the engine stalls or may not even be able to start.

Features and benefits

MPU Sensor

Widely used and highly precise electro Magnetic Pick Up camshaft and crankshaft position sensors

> **Variety of designs:** Direct connection type and lead wire type available to meet different engine specifications and installation conditions

> **Highly reliable:** Sensors with a different number of windings available for different rotor sizes and using an O-Ring arrangement and collar swaging

> **Durability:** Sensor body made of resin and a metal collar that are thin but strong, enabling a smaller air gap with the timing rotor

MRE Sensor

Compact and high-performance camshaft and crankshaft position sensors to meet the needs for cleaner vehicle emissions and higher fuel efficiency (reduced CO2 emissions)

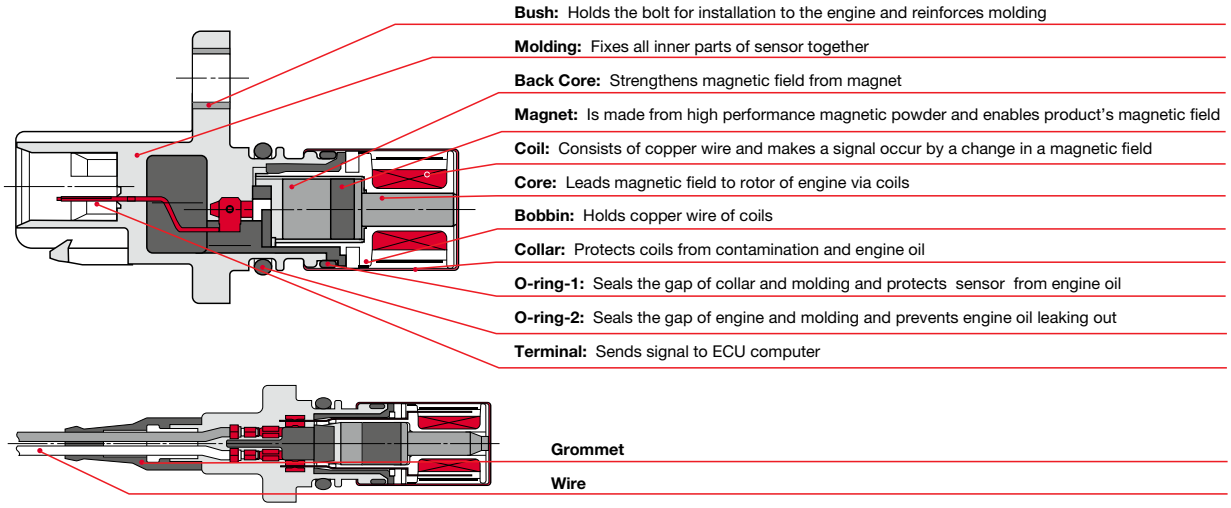
> **Smaller size:** Due to integration of a detection element and a processing circuit on one chip

> **Higher position detection accuracy:** By using a highly sensitive Magneto Resistive Element with a high signal-to-noise ratio

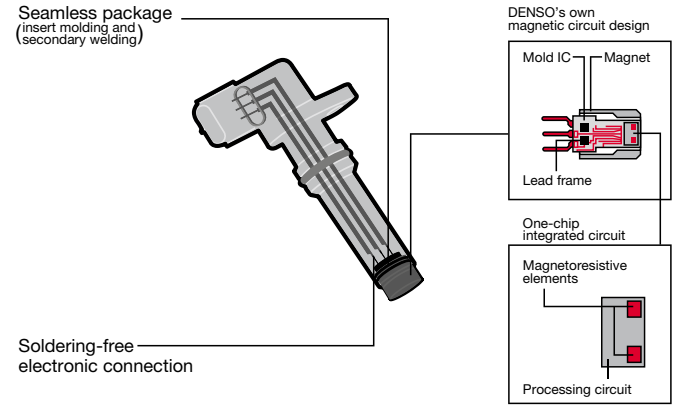
> **Higher reliability:** Ideal for use at high temperatures by utilizing a single-layer thin, metal film magnetoresistive element. Additionally, seamless packaging and soldering-free electric connection create an extremely reliable structure

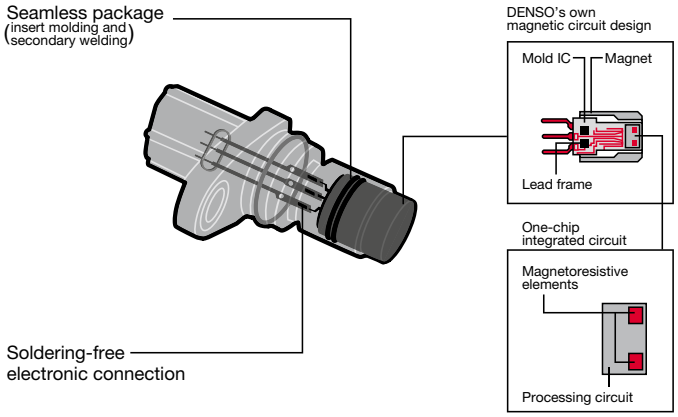
Characteristics

MPU Type (inductive)



MRE Type (Semiconductor)





DENSO EUROPE B.V.
Hogeweyselaan 165 | 1382 JL Weesp | The Netherlands
Tel. +31 (0)294 - 493 493 | Fax. +31 (0)294 - 417 122

www.denso-am.eu

Driven by Quality