

# BERU Sensors — Highly accurate and extremely reliable



Electronic control systems which pick up a wide variety of different parameters with highly accurate sensors are being used increasingly in motor vehicles. BERU sensors are developed in co-operation with the automotive industry and are adapted exactly to the respective application in the vehicle. The emphasis is on functional safety under extreme operating conditions.

The sensors which are represented here are special developments for the automobile industry and its systems suppliers.

## Temperature sensors



### Function:

Temperature sensors are used for the exact measurement of ambient temperatures. BERU High Temperature Sensors (HTS) for applications in diesel particle filters, oxidation catalytic converters, SCR systems, NOx storage cats and turbo chargers provide stability, and structural versatility in a measuring range of minus 40 to plus 950 degrees Celsius.

Areas of application:	Temperature range:
Engine and transmission: fuel, coolant, oil, air	-40 to 160 degrees Celsius
Exhaust gas systems	-40 to 1,000 degrees Celsius
Auxiliary heaters	-40 to 600 degrees Celsius

### Measuring principle:

The sensor measures the temperature with a temperature-dependent resistor, e.g. a hot wire (NTC) or a thin-film platinum measuring resistor. The characteristic is stored in a control unit and therefore allows calculation of the temperature.

### Variants:

- High temperature sensor (HTS)
- Miniaturised sensors