



## Coolant level sensor

### General

Coolant level sensors are fitted into the expansion tank. It checks the minimum level in the tank to prevent an overheated engine through water shortage.

### Function

The coolant level sensor is a magnet which is inside a float. When the minimum coolant level in the expansion tank is reached, the magnet changes the switch position of the reed contact. It sends a signal to the motor management control unit which activates the control light.



### Effects of failure

A faulty coolant level sensor can produce the following effects:

- store a fault code
- control light illuminated
- no illuminated control light if coolant level to low

### Causes of failure:

- internal short circuit
- open circuit
- mechanical damage
- faulty float
- leak case



## Diagnostics

- read out the fault memory
- check the electrical lead for correct fitting and contact
- check the float function
- check the housing for leaks

### **step 1:**

Connect an Ohmmeter between the coolant level sensor plug and the removed ECU plug (circuit diagram needed for pin definition).

Reading: < 1 Ohm

### **step 2:**

Check the connection line from the sensor plug to the disconnected ECU plug. Reading: > 30 M Ohm

### **step 3:**

Check the voltage supply on the sensor plug (ignition switched on).

Reading: approx. 12V