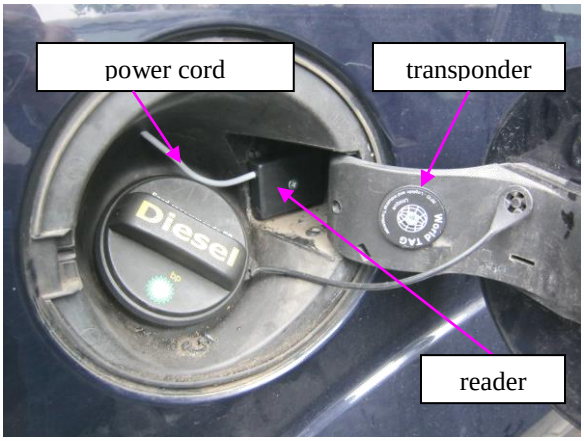
Fuel Filler Flap
RFID Tank Door Sensor

Designated use

The device is used to control the open/closed status of fuel filler flaps in cars. RFID technology guarantees maximum security, reliability and failure-free operation, unlike magnetic or inductive devices.

Structure and operation

The device is composed of an RFID reader, a transponder and electronics platform installed in a metal housing. The reader and transponder are to be mounted in such a way as to allow them to move towards and away from each other.
When the transponder reaches a given distance, the device compares a 128-bit code stored in its memory with the transponder's code. Having confirmed that the codes match, the device will change output status to high. If the transponder is moved out of reader's range (after opening the fuel filler flap), output status will be changed to low.
Unlike magnetic and capacitive reed relays, the device cannot be tricked with magnets, coils or other elements. The reader works only with a programmed transponder.



Advantages:

- Easy to mount
- Reliable technology
- Resistant to magnets and other elements
- Resistant to other transponders

Electronics in housing

Technical specification:

Power	8…16 V
Current draw	35 mA
Working temperature	-25…+80°
Range (air)	0…40 mm
Range (metal)	0..15 mm

APLISENS S.A., 03-192 Warszawa, ul. Morelowa 7, tel. 22 814-07-77
fax. 22 814-07-78, www.aplisens.pl, e-mail: aplisens@aplisens.pl

Assembly instructions

1. Find the right spot to mount the reader and the transponder. Both elements should be located so that the distance between them is no longer than:
   - max 40 mm in air (plastic)
   - max 20mm on metal,

   with the fuel filler flap closed.

2. Use the screws supplied in assembly kit to screw down the reader and the transponder. If there is no possibility to screw down the transponder, it must be glued. Note that all glued surfaces must be degreased.

3. Determine the spot where to put the power cord through into the vehicle's interior. Use existing process holes in the car or make a hole to put the cord through.

4. Disassemble the trunk covering (sound insulation) from the fuel filler's side and mount the housed electronics not further than the reader cord can reach.

5. Connect the cords to a terminal strip protruding from the metal electronics housing (no specific cord colors or connecting order).

6. After mounting all elements and testing them for proper operation, put a seal on screws that hold the transponder and the reader.