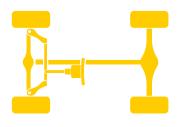
## VEHICLE HEIGHT Sensor



### VEHICLE DYNAMICS

Improving vehicle dynamics control for comfort and safety



# TECHNOLOGY

EFI AUTOMOTIVE 77, Allée des Grandes Combes ZI OUEST BEYNOST F - 01708 MIRIBEL CEDEX FRANCE T. +33 0(4) 72 01 34 34 - F. +33 0(4) 72 01 34 50 WWW.EFIAUTOMOTIVE.COM

#### **Application description**

The vehicle level sensors is used in different automotive control system, monitoring by European regulation:

- Headlight levelling control:
  - This system guaranty that the vehicle doesn't dazzle others users on the road.
  - It also guaranty that the lighting range is always maintained.
- Active suspension control:
  - Comfort and safety : maintain chassis stability and vehicle height constant.
  - Safety and fun to drive : adapt suspension performances to road and drive conditions, and allow the driver to select modes (sport, comfort).
- Load monitoring:
  - For safety purpose the system monitor the vehicle load and balancing.

The sensor body is fixed on the chassis, and a rotational lever is attached on the wheel arm of the vehicle with a rod. This lever angle depends (and then the angle information provided by the sensor) on the angle of the wheel arm.

### **Technical characteristics**

- High sealing feature:
  - Fully over molded design
  - Optimized design for harsh environment (under chassis)
  - Resist to splashed water, gravelling, dust ingression, stones shocks
- Lean design for cost optimization
- Specific rod concept for adjusted and uneven plug and unplug effort
- Flexible product portfolio: customized chassis bracket design, rod length and angle
- High accuracy measurement
- Flexible output protocol
- Possible measurement redundancy, or output doubling for high level safety goals

SENSE - BUILD - DRIVE

Temperature range: -40°C / 160°C

