



## ACCELERATOR PEDAL SENSOR (APS)

For more than seventeen years HELLA, market leader for Accelerator Pedal Sensors (APS), has been developing integrated electronic accelerator pedal sensors. HELLA was the first component manufacturer to develop and produce accelerator pedal sensors of this kind.

The APS is part of the vehicle's drive train and delivers the intention to increase or decrease speed to the engine's electronics by measuring the pedal position.

### DESCRIPTION

APS systems can be used in conventional vehicles as well as hybrid and electric vehicles. The sensor determines the position of the accelerator pedal and generates the corresponding pedal reaction (→ return force).

HELLA distinguishes between two sensor position measurement technologies: HELLA's highly accurate and robust Contactless Inductive Position Sensor (CIPOS®) technology and the traditional potentiometer technology. Independent of the sensor technology, the APS is designed so the pedal, the generation of the pedal force, and the sensor are integrated within one modular concept. Thereby the design and the haptic of the pedal are adaptable according to the customer's requirements.

## APPLICATIONS

Accelerator pedal sensors are offered for suspended and floor mounted pedals:



<b>Pedal type:</b>	Suspended
<b>Technology:</b>	Potentiometer
<b>Sensor size:</b>	46 mm wide
<b>Pedal weight:</b>	230 g



<b>Pedal type:</b>	Suspended
<b>Technology:</b>	CIPOS®
<b>Sensor size:</b>	38 mm wide
<b>Pedal weight:</b>	220 g



<b>Pedal type:</b>	Floor mounted
<b>Technology:</b>	CIPOS®
<b>Sensor size:</b>	45 mm wide
<b>Pedal weight:</b>	240 g

## FEATURES

- HELLA CIPOS® sensor technology or potentiometer technology
- Redundant signal proportional to pedal position
- Force dependent hysteresis with redundant return force
- Analog and/or digital output signal
- Optional kick-down

## ADVANTAGES

- Precise position control with HELLA CIPOS® technology (accuracy of  $\pm 2\%$ ) or potentiometer
- Comprehensive tests ensure a high and sustainable level of quality
- Customer specific design, small packaging and adaptable haptics
- High reliability due to robust design
- Worldwide production locations and technical support

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