



BRIEF INFORMATION

Modular accelerator Pedal sensors

- › Flexible configuration according to customer requirements
- › Contactless measurement principle
- › Slim and sturdy design
- › Simple mechanical connection
- › Redundant output signals
- › High measurement precision
- › No programming in the vehicle necessary
- › High interference immunity against electrical and magnetic fields

PRODUCT FEATURES

Application

These modular accelerator pedals are especially designed for robust applications like agricultural and construction vehicles. The robust mechanical concept of the system guarantees functional reliability under toughest conditions. Thanks to the contactless system of measurement provided by HELLA's own CIPOS® sensor (see description of construction and function) and its extremely low level of mechanical wear, it is advisable to choose such a sensor system over contact-type accelerator pedals, especially for small, frequently recurring movements.

Design and Function

Agricultural and construction machinery manufacturers benefit from shorter development times and thus lower costs thanks to extremely strong modularity: The central element of the system is the base unit with the integrated HELLA sensor concept CIPOS® (Contactless Inductive Position Sensor), which enables

inductive and contactless position measurement. This ensures not only high precision, but is also wear-free. A sheet metal cursor is routed from the pedal plate with a guide rod via sensor conductor paths on the measuring board. Two galvanically isolated sensors then each generate an output signal. The position information can be provided in classic analog or digital form, and the output signals are programmable and customizable.

Following the modular principle, customers can now select a pedal arm – either upright or suspended, made of plastic or steel. In addition, different connectors and mounting elements are available, making it easy to integrate the accelerator pedal into all vehicle architectures.

TECHNICAL DETAILS

Technical data

Operating voltage range Single-voltage 5 V ± 0.5 V

Rated voltage 12 V

Start / end force customizable
Actuation angle < 20°

Output signals 2x analogue with ASIL B (D)
2x SENT with ASIL B (D)

Sensor accuracy ± 0,5°

Approved ECE R10, FMVSS 302, FMVSS 124

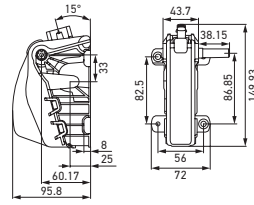
Operating temperature - 40 °C to + 85 °C

Protection class (mechanical) IP 5K4

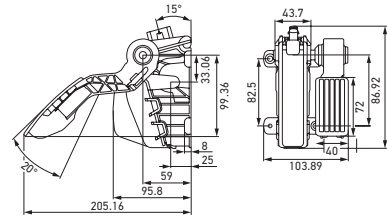
Protection class (electric, with attached mating connector) IP 6K9K

Mating connector Standard: Molex 31402-6110
But also customizable

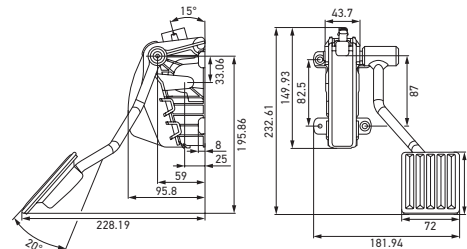
Dimensional sketch (approximate dimensions)



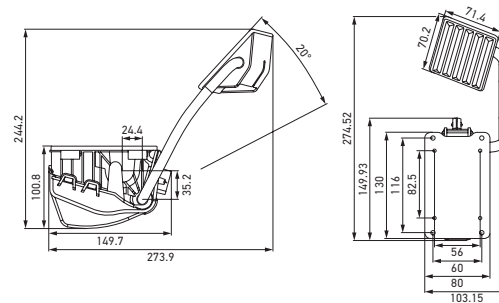
Base



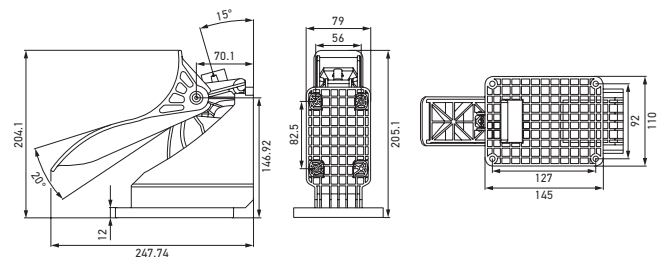
Suspended pedal – plastic lever



Suspended pedal – steel lever




Underfloor pedal



Floormounted pedal

PROGRAM OVERVIEW

Product picture	Description	Part number
	Accelerator pedal, pedal arm axis	On request
	Accelerator pedal, floor-mounted	On request
	Accelerator pedal, suspended, with steel lever arm	On request
	Accelerator pedal, suspended, with plastic lever arm	On request
	Underfoot pedal	On request