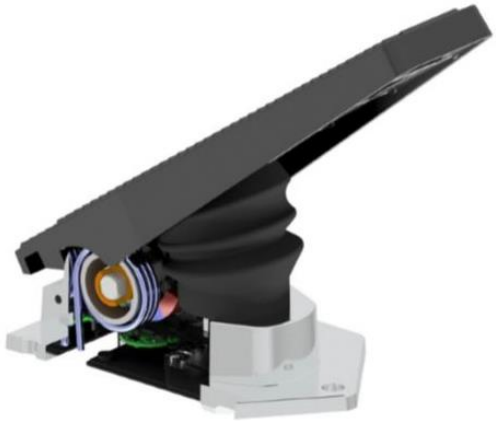
ELEN
industrial vehicles sensors

Electronic Pedals
MYTHOS Series

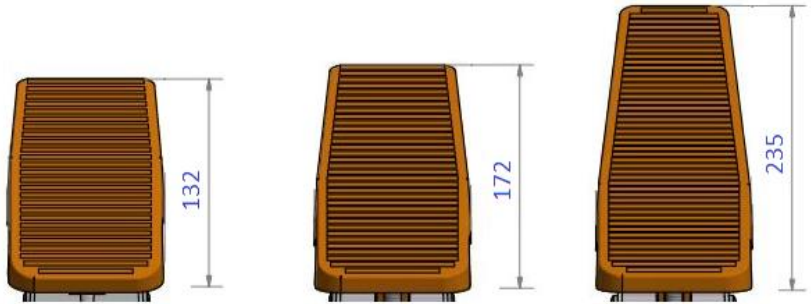
Hard work is our job

Hall-Effect Electronic Pedal – MYTHOS Series

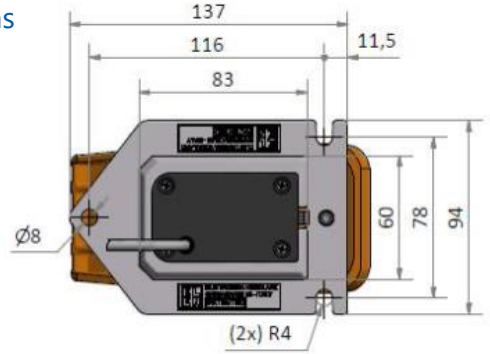


DISTINCTIVE FEATURES

- Heavy duty floor-mounted pedal
- Suitable for demanding applications
- Robust die-cast aluminium structure
- Three footboard lenghts available
- Footboard in black or RAL2004 orange colour available
- Stroke angle: 30° or 20°
- Protection degree: IP 67



Dimensions



Hall-Effect Electronic Pedals – Overall features

GENERAL DESCRIPTION

Elen's electronic accelerator pedals combine design, precision and solidity. The position of the platform is detected by a contactless Hall effect sensor which is integrated in the structure, and provides a slope proportional signal.

Elen's electronic pedals combine mechanical robustness and measurement reliability.

BEST USES

- Accelerator pedal for electronically controlled diesel engines subjected to emission standards from Stage IIIB on.
- Accelerator pedal for electrically-driven vehicles
- Inching pedal for work vehicles with hydrostatic transmission
- Compliance of control devices with functional safety standards
- Implementation of electronic drive-by-wire devices
- Use of a reliable device in harsh environments
- Technological upgrade of control pedals
- Cost saving and space optimization for replacement of pedal solutions with separate sensor
- Plug and play solution with integrated electronics

Hall-Effect Electronic Pedals – Overall features

HALL EFFECT TECHNOLOGY

An hall-effect sensor, integrated in the housing of the pedal, detects the field strength of a magnet integral with the footboard. It guarantees a reliable signal and immune to premature failures due to mechanical wear.

INTEGRATED ARCHITECTURE

The magnet - integral with the footboard - and the electronic board - integral with the housing - are positioned in the optimal position to reduce overall dimensions and remove moving connecting parts as well as redundant mechanical components.

INDEPENDENT CIRCUITS

Double output versions are obtained by integrating on the same electronic support two sensors with completely independent and galvanically isolated circuits, in compliance with functional safety standards.

PROGRAMMABLE ELECTRONIC BOARD

The programmable electronic board allows to set up the output signal values and the trigger threshold for the switch signal without hardware interventions and manual calibrations. It guarantees the highest level of reliability, precision and versatility.

MULTIFUNCTION BOARD

The output signal and the running consent signal circuits are integrated on a single contactless electronic board without any need for elements subject to wear, like microswitches and other mechanical connections.

RESIN-COATED BOARD COMPARTMENT

It ensures absolute impermeability to water/dust/corrosive agents infiltrations and makes the electronic board compartment a completely sealed subassembly of the product structure.

RETURN TO STARTING POSITION

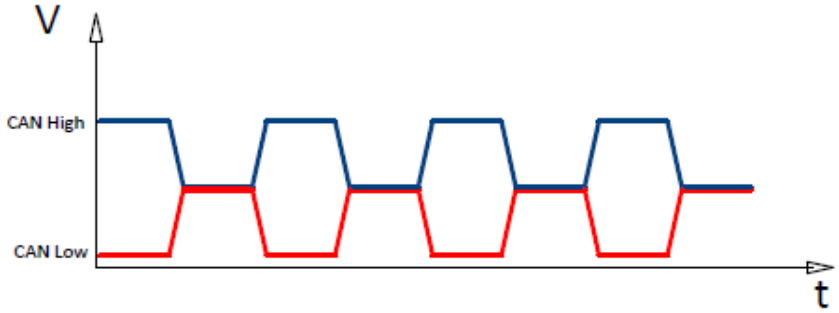
It is implemented to maintain the minimum overall dimensions and at the same time to guarantee the redundancy of the springs, a suitable operating load as well as a high life cycle.

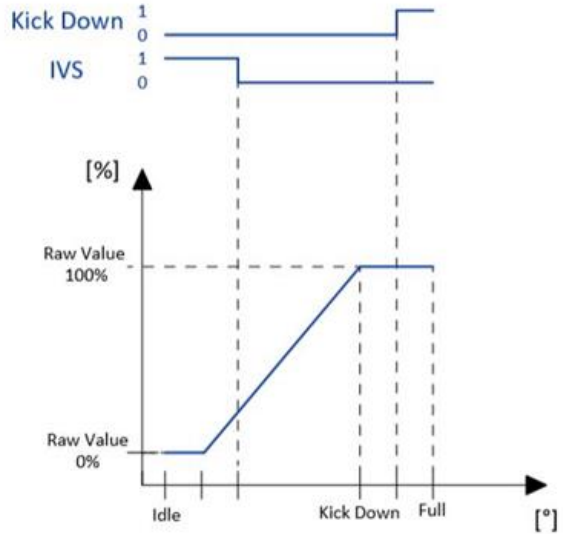
Hall-Effect Electronic Pedals – CAN J1939 Output

CAN J1939

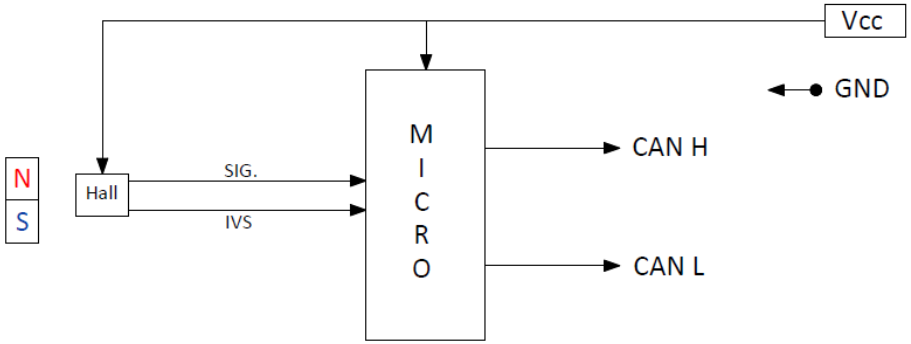
NEW

Output Signal





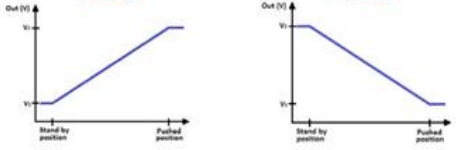
Functional Scheme



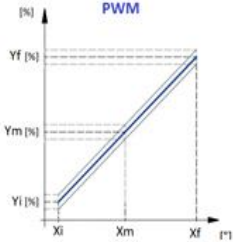
Hall-Effect Electronic Pedals – Other output configurations

SINGLE SIGNAL

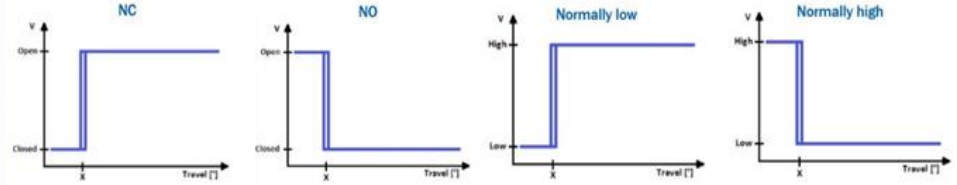
Analogic



PWM

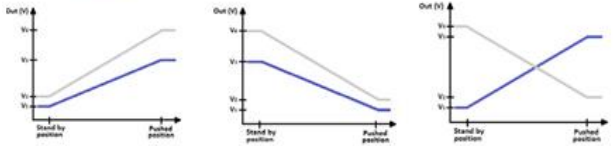


IVS (Idle Validation Switch)

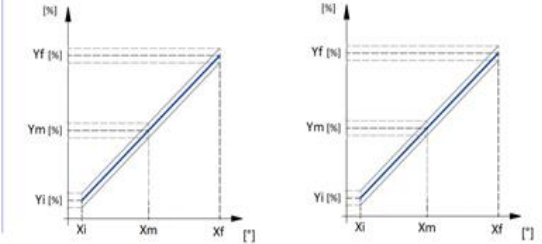


DOUBLE SIGNAL

Analogic



PWM



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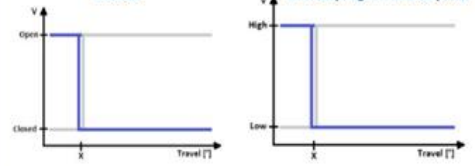

General features of ELEN products

1. ELEN S.r.l. designs and manufactures hall-effect electronic sensors and input devices **specifically intended for industrial vehicle sectors and agricultural machinery** .

2. Besides a standard products offer, it provides with the most specific and **innovative solutions** for any application, giving particular focus on the most recent R&D developments and promptly meeting the new market needs.

3. The company know-how, the market analysis, the **strong and direct customer relationship** allow to introduce cutting edge solutions in accordance with **sector's standards and regulations**, offering a products portfolio that distinguishes ELEN from its competitors.