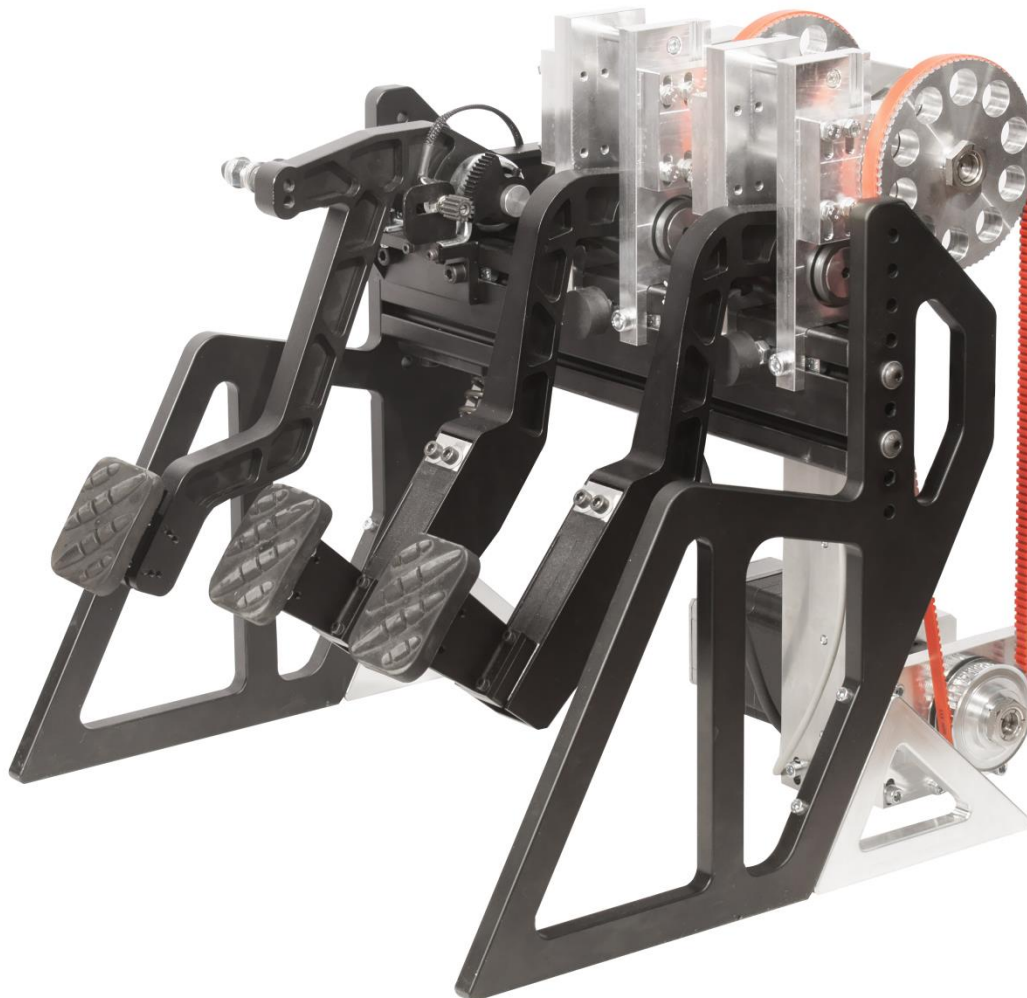


# Specification

## SENSO-Pedals Pro

Version 2.3.0



## Technical Data

	Value	Unit
Dimensions ( <i>H x W x L</i> )	483 x 455 x 472	mm
Supply Voltage	230	VAC
Supply Current	5	A
Bus System	CAN (1 Mbaud)	
Weight	29 (without Target, Motor Controller and Power Supply)	kg
Maximum Force	800	N
Pedal Length	316.5	mm
Maximum Pedal Velocity	1.4	ms <sup>-1</sup>
Warranty	1	year

## Pedal Travel Mode

- Free parameterization of spring characteristic even during runtime, using up to 20 (position-force) breakpoints
- Free selection of pedal travel range (within mechanical operating range)
- Simulated mechanical end stops at begin and end of pedal travel range
- Separate damping values between breakpoints for realistic haptic feeling (within prescribed range in order to assure stable dynamics)

Adjustable parameters brake		
Parameter	Range	Unit
Max Stiffness (End Stop)	180	Nmm <sup>-1</sup>
Damping	0 – 100	%
Max Pedal Travel	86.2	mm

Adjustable parameters accelerator		
Parameter	Range	Unit
Max Stiffness (End Stop)	180	Nmm <sup>-1</sup>
Damping	0 – 100	%
Max Pedal Travel	85.8	mm

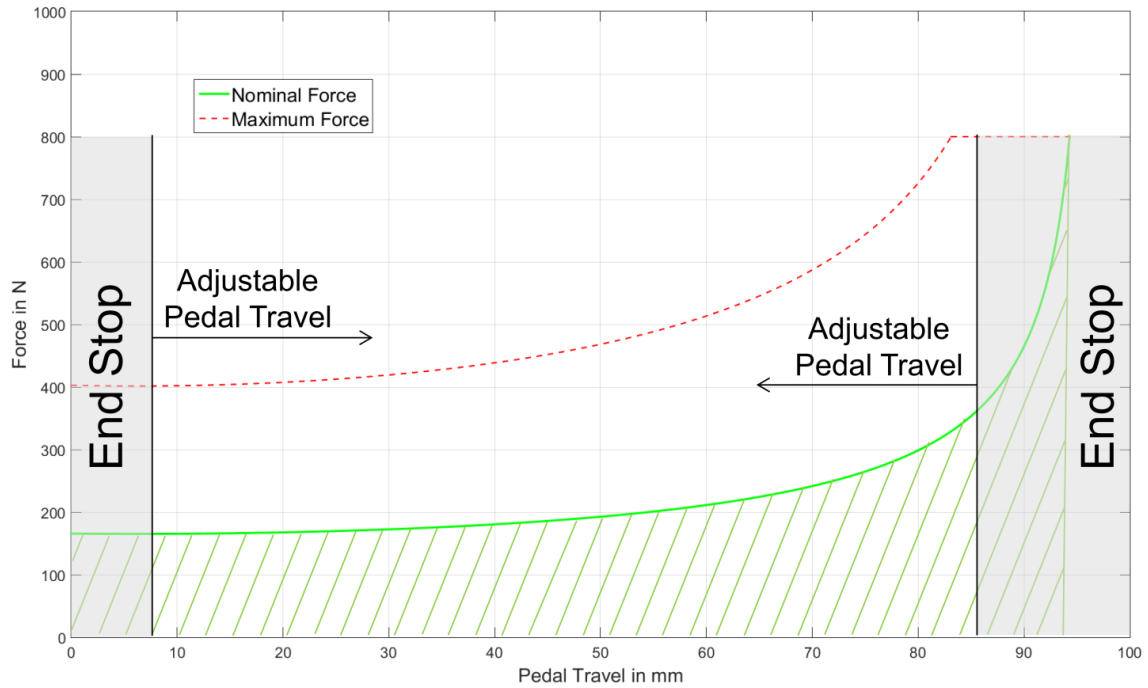
## Superposition of Haptic Signals

- Superposition of periodic signals, e.g. in order to simulate ABS
- Signal types: sinus, rectangular
- Variation of amplitude, frequency

Haptic signals		
Parameter	Range	Unit
Signal Type	sinus, rectangular	
Frequency	0.1 – 15	Hz
Amplitude	0 – 100	%

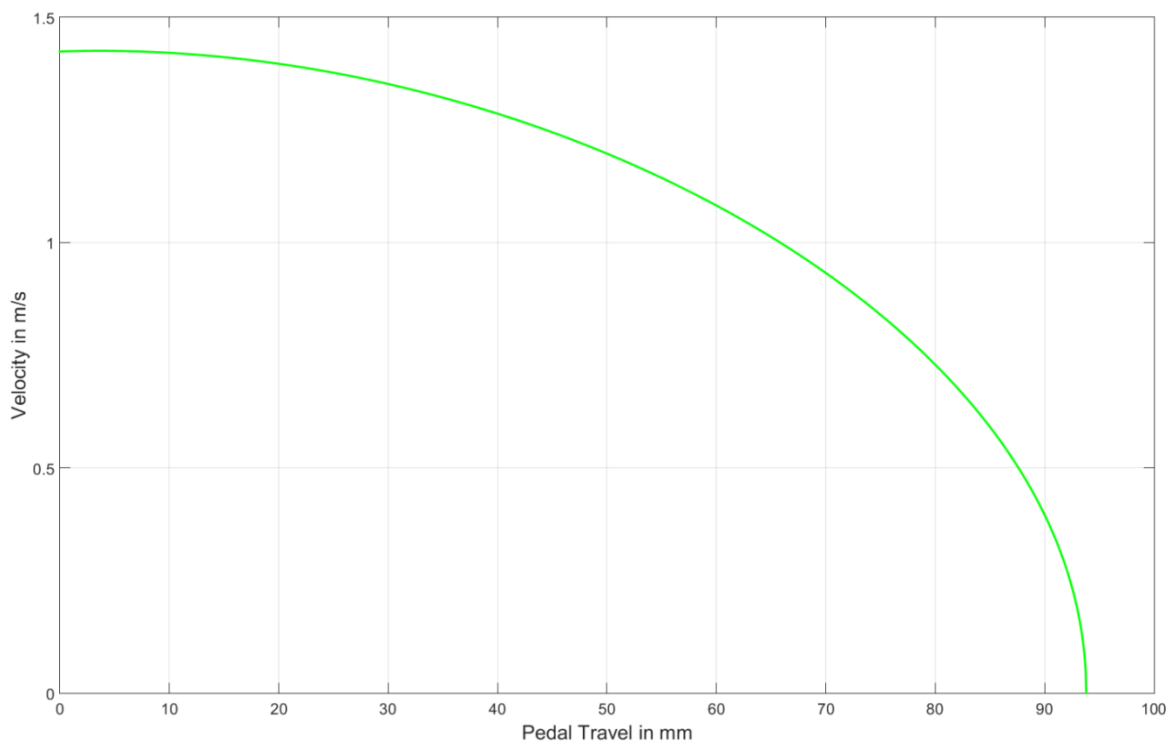
# Maximum Force

The maximum force is 800 N, however it is dependent on the pedal position.



# Maximum Velocity

The maximum velocity is approx. 1.4 m/s, however, it is dependent on the pedal position (due to variable cam disk transmission)



# Graphical User Interface

For a quicker start-up a graphical user interface (GUI) is provided by SENSODRIVE. In order to use it, the CAN connection of the real-time target must be connected to the host via the PCAN-USB interface (optionally available). Furthermore, the PCAN-USB-package must be installed on the host. It is freely available on the website of PEAK System. The operating system of the host computer should be Windows (Vista or newer). The GUI provides a subset of the functionalities that can be accessed by the CAN interface.

- Definition of spring characteristic by up to 20 break points
- Change of number of breakpoints and force/position parameters during runtime
- Change of damping between breakpoints during runtime
- Change of end stop position, stiffness and damping during runtime
- Intuitive manipulation of parameters by clicking
- Simulation of ABS possible and parametrizable (Amplitude, Frequency and Position)

