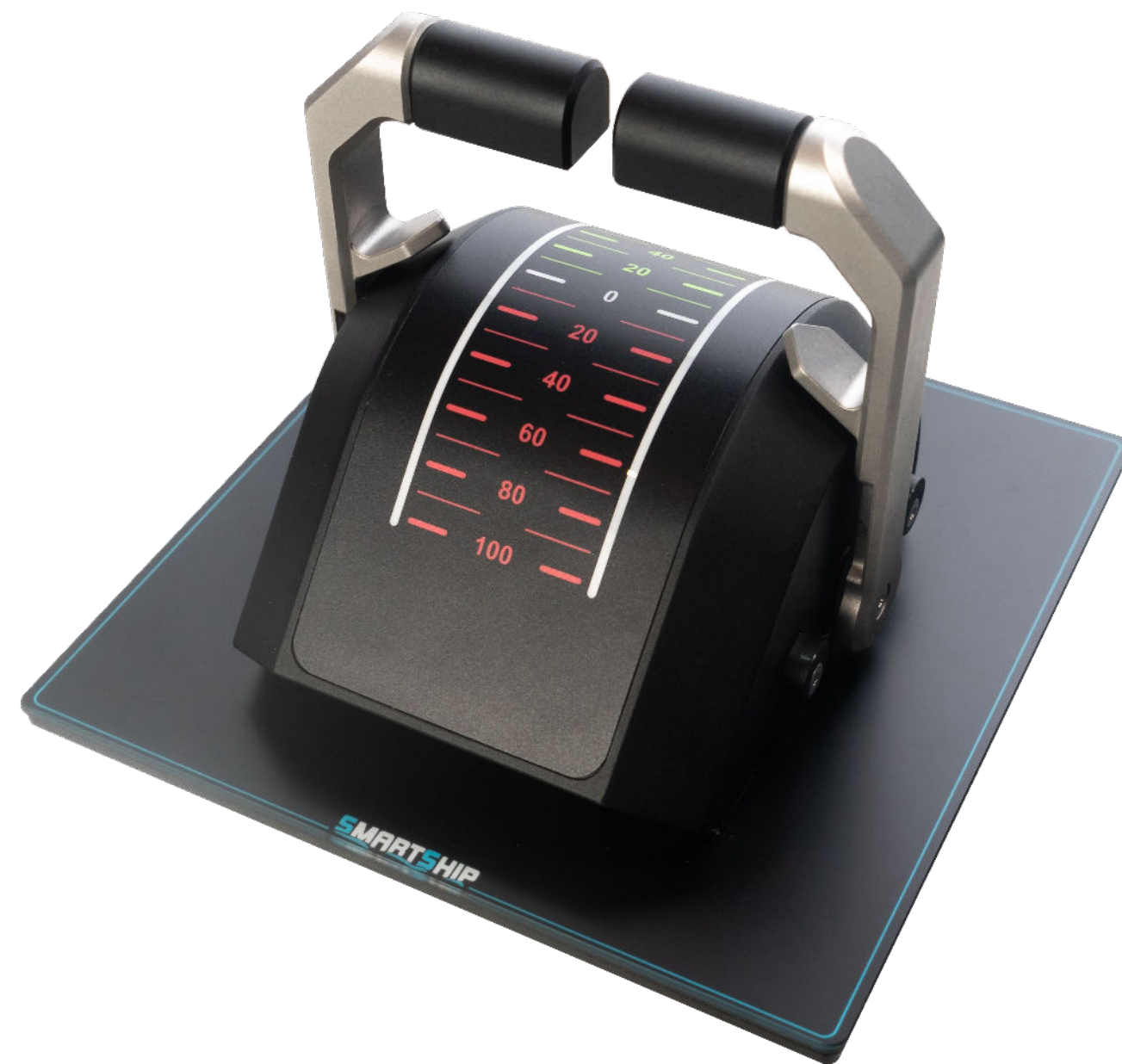


Haptic Throttle Lever

The most versatile lever for throttling operations in the market: This lever is fully type-approved and can be used on bridge and open deck due to the IP56 rating. A Standard or Bow Thruster layout can be provided for single or dual thruster operation, with custom branding (upon request), as well as various (redundant) sensor outputs.



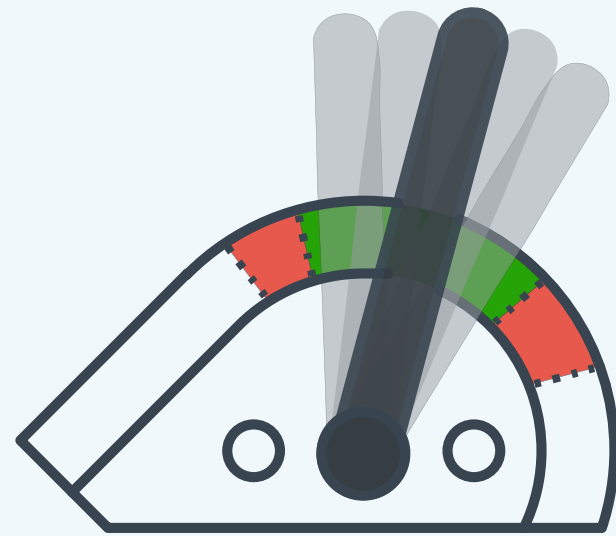
General Specifications	
Travel Throttle Lever	+/- 60°
Electrical Specifications	
Supply Voltage	24V DC
Output Signal (per lever)* / Interface	<ul style="list-style-type: none"> • 0...5V • 0...10V • 4...20mA Linear/V-shape • Up to 4x microswitch • MODBUS-RTU** • CANopen**
Environmental Specifications	
IP Rating	IP 56
Operating Temperature	-25°C ... +70°C
Options	
Cover & Layout	<ul style="list-style-type: none"> • Single or Double Shaft operation • Bow Thruster operation (Single and Double Shaft) • Custom Glass Panel • Custom Branding
Feedback functions	<ul style="list-style-type: none"> • Personalised detents & friction • Other functions to request

* All signals can be provided with redundant outputs

** Specifications provided on request

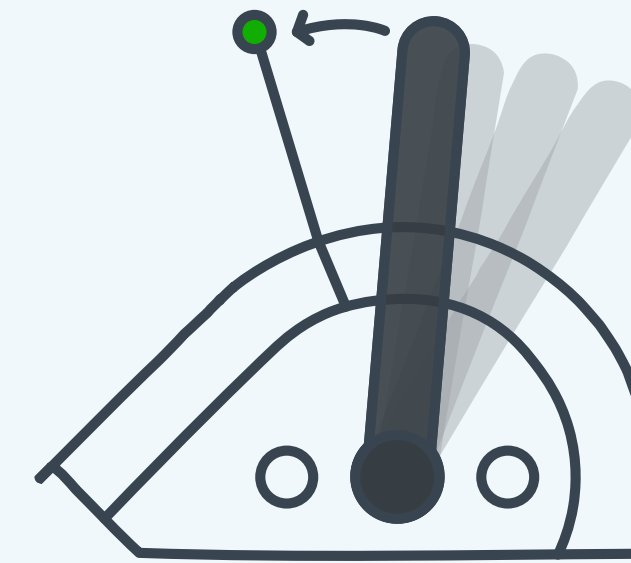
Haptic Throttle Lever

Examples of haptic feedback functionalities



Power management

Communicate a warning to the operator before starting another generator e.g. - by making the operator feel an increased friction or detent just before switching on the extra generator. This also allows the operator to set a maximum fuel/energy consumption.



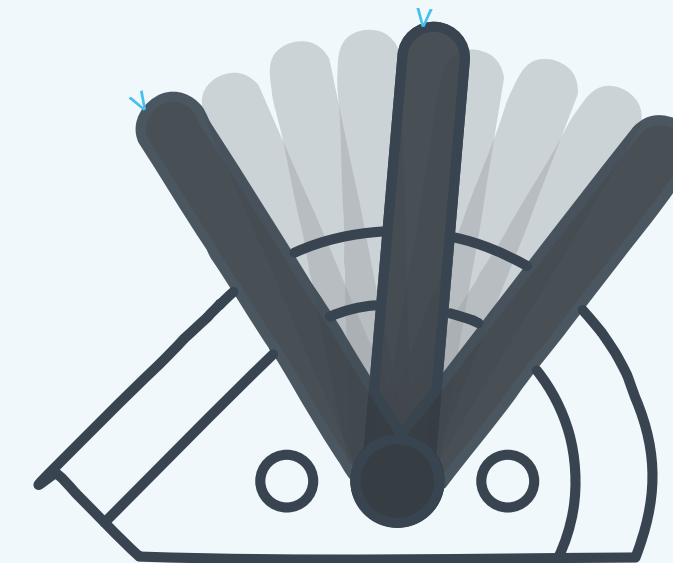
Throttle setpoint

Communicate an ideal/sustainable acceleration speed to the operator through an increased friction/spring whenever the operator is moving the throttle lever too fast - the friction/spring will disappear whenever the operator matches the actual pre-defined ramp-up speed.



Proximity warnings

Communicate a warning vibration to the operator whenever the vessel is nearing the shore at a speed above a pre-defined threshold.

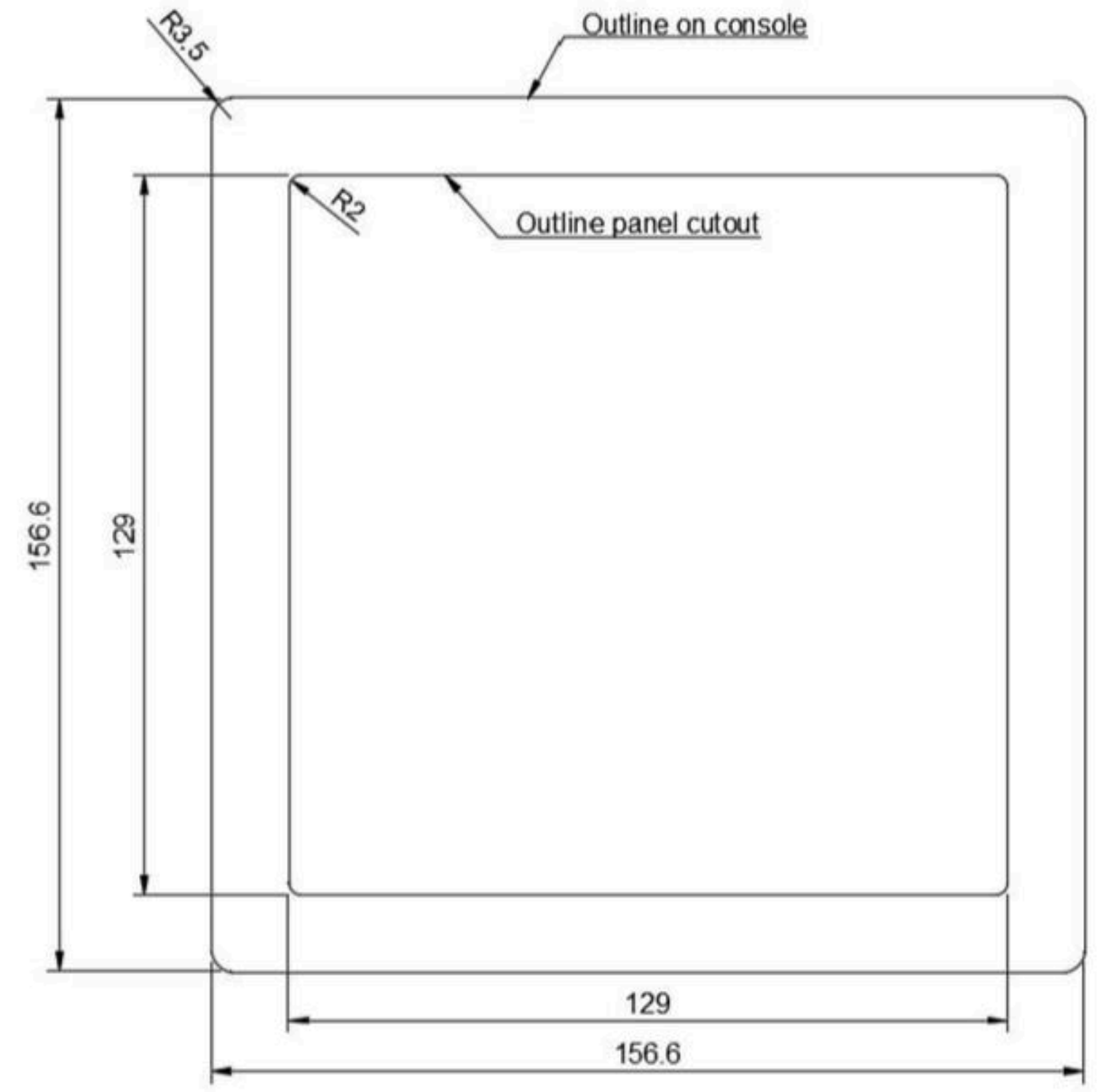
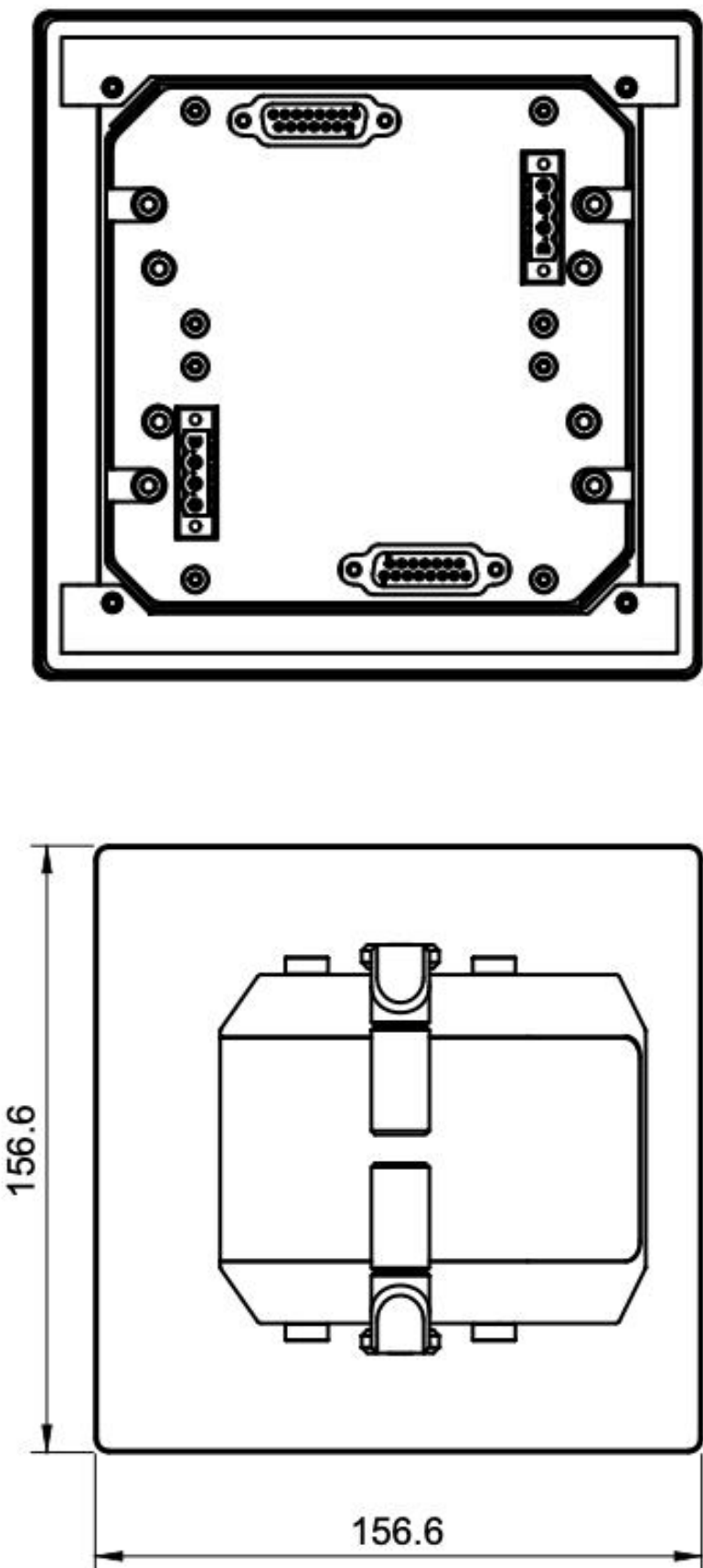
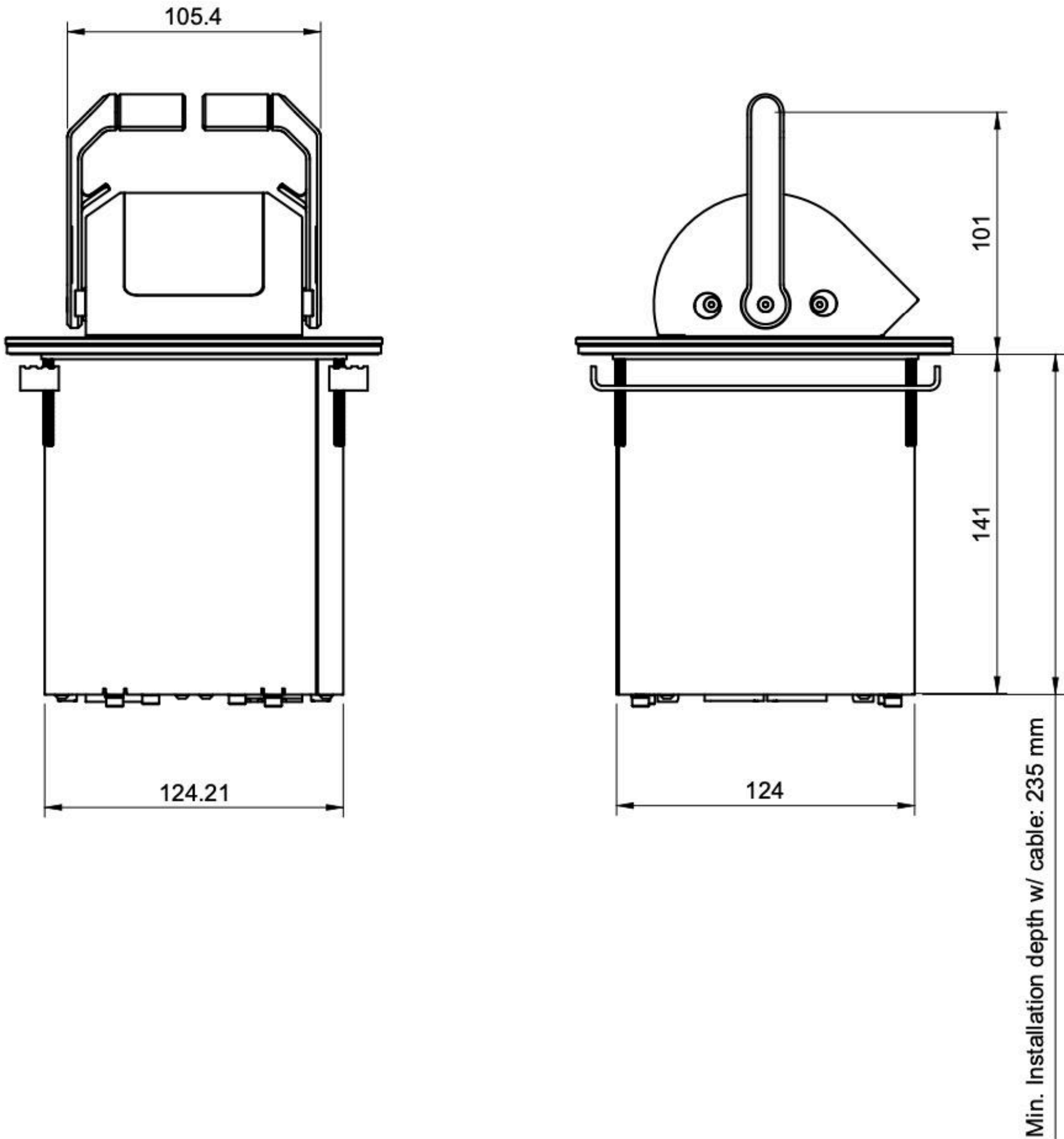


Maximum speeds

Communicate a warning vibration whenever sailing too fast through a certain GPS-zone or indicate a threshold by way of a spring whenever accelerating to a too high speed in that certain GPS-zone.

Haptic Throttle Lever

Cut-outs & Dimensions



Contact

Please reach out to us for more information or a demo of our products through:

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Visit our website for more information on our technology and projects.

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