

Haptic Azimuth Lever

A top-notch control lever featuring 2 degree-of-freedom haptic feedback with full range of motion. The Azimuth lever is type approved and can be provided with various (redundant) sensor output options for both directions, as well as custom operating ranges. The LED indicators are dimmable and can be fully customised and, upon request, the lever can be branded to your desire.



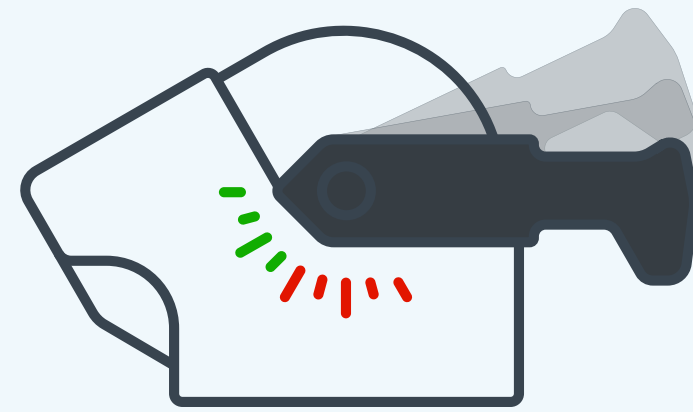
General Specifications	
Travel Throttle Lever	<ul style="list-style-type: none"> • 90° • 120°
Travel Azimuth Lever	360° endless
Electrical Specifications	
Supply Voltage	24V DC
Output Signal (per lever)* / Interface	<ul style="list-style-type: none"> • 0...5V • 0...10V • 4...20mA • MODBUS-RTU** • CANopen**
Environmental Specifications	
IP Rating	IP 52 / IP 56 on request
Operating Temperature	-25°C ... +70°C
Options	
Cover & Layout	<ul style="list-style-type: none"> • Custom Lever Travel • Tiller lever integration • Custom Cover Design • Custom Glass Panel
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

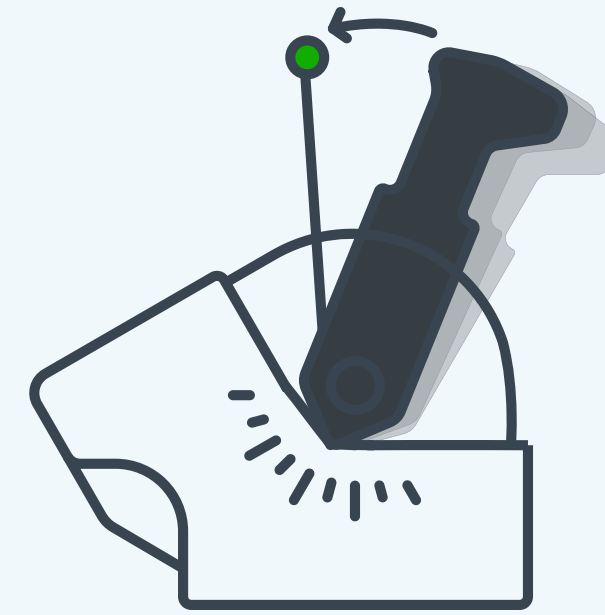
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Examples of haptic feedback functionalities



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.



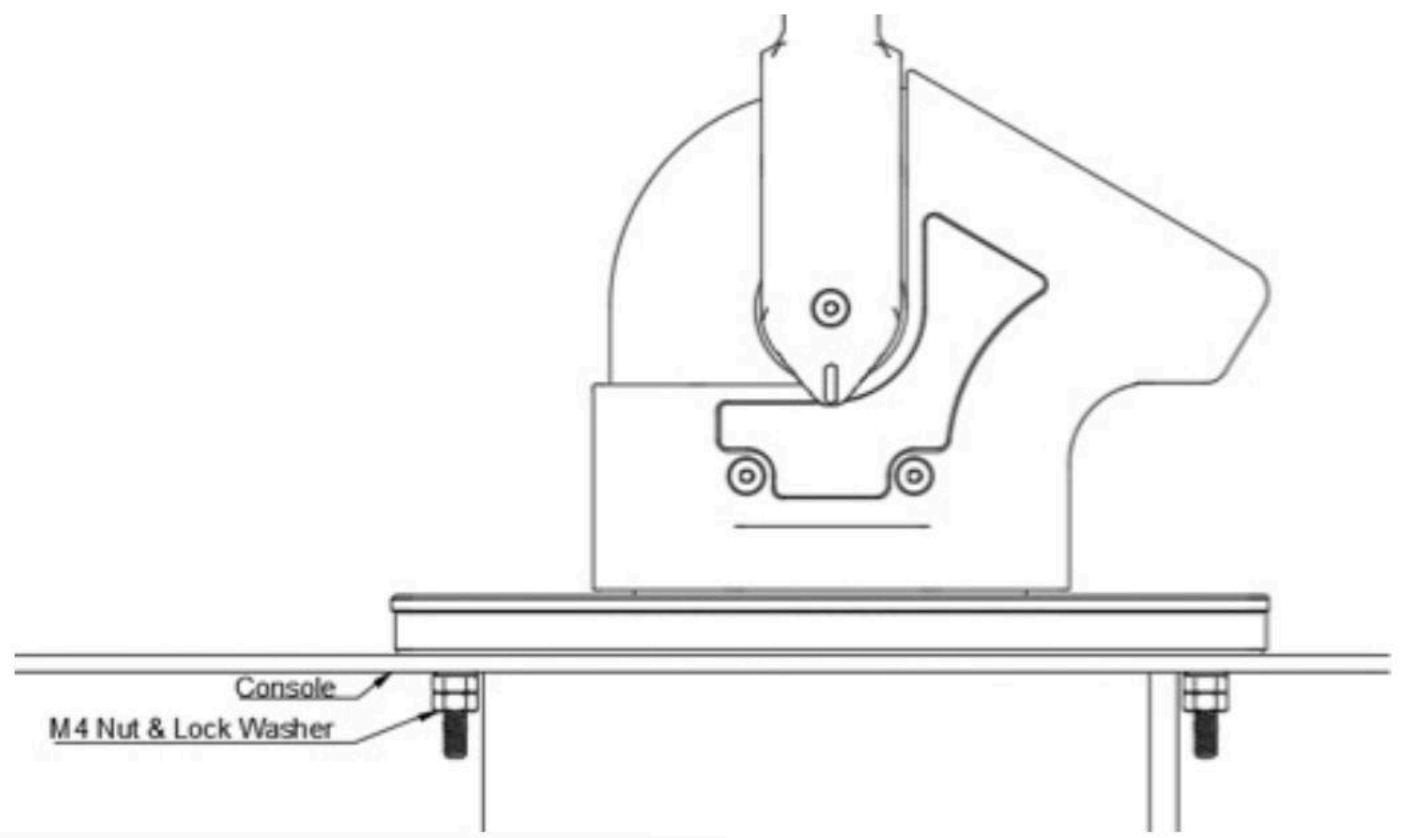
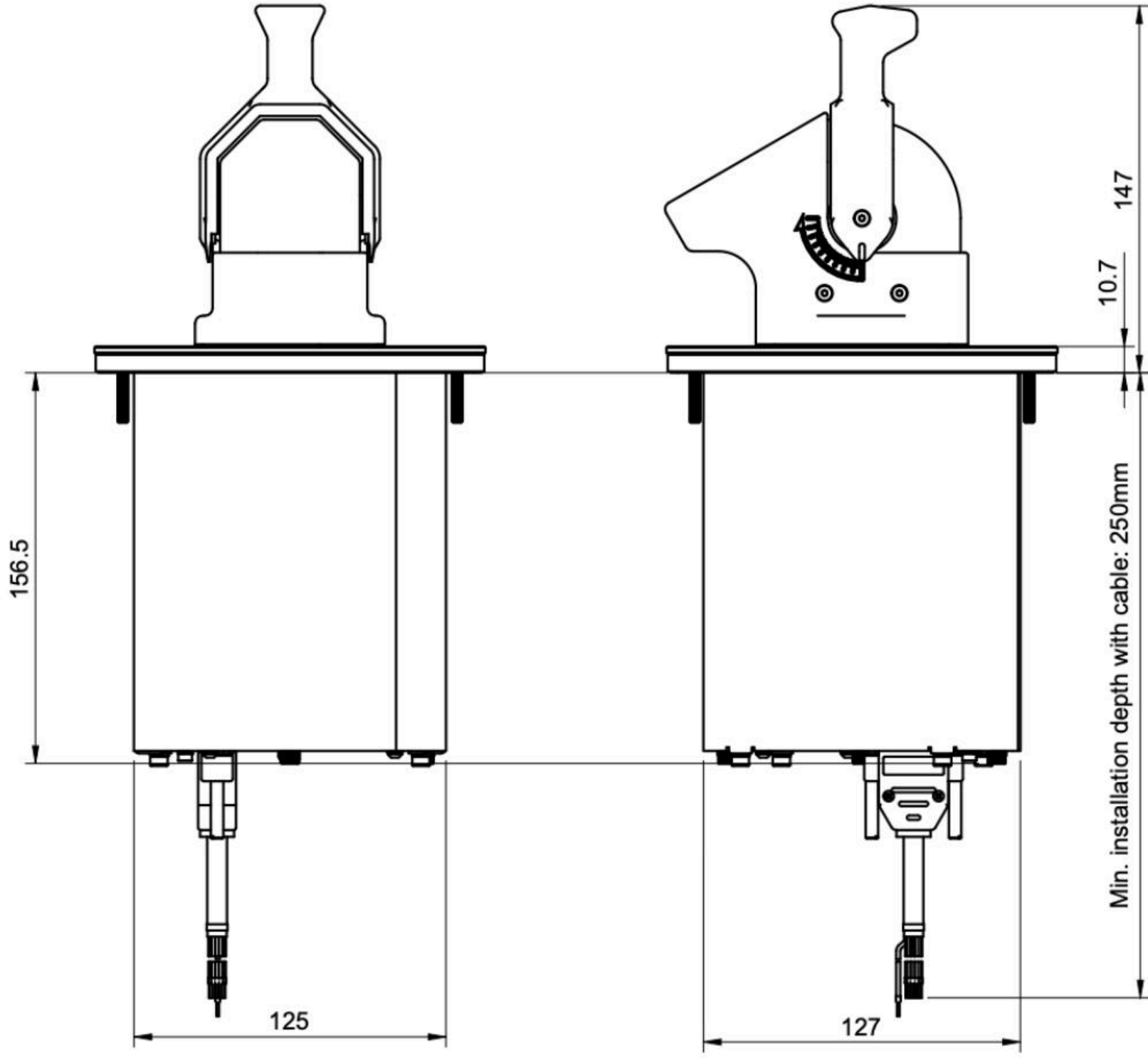
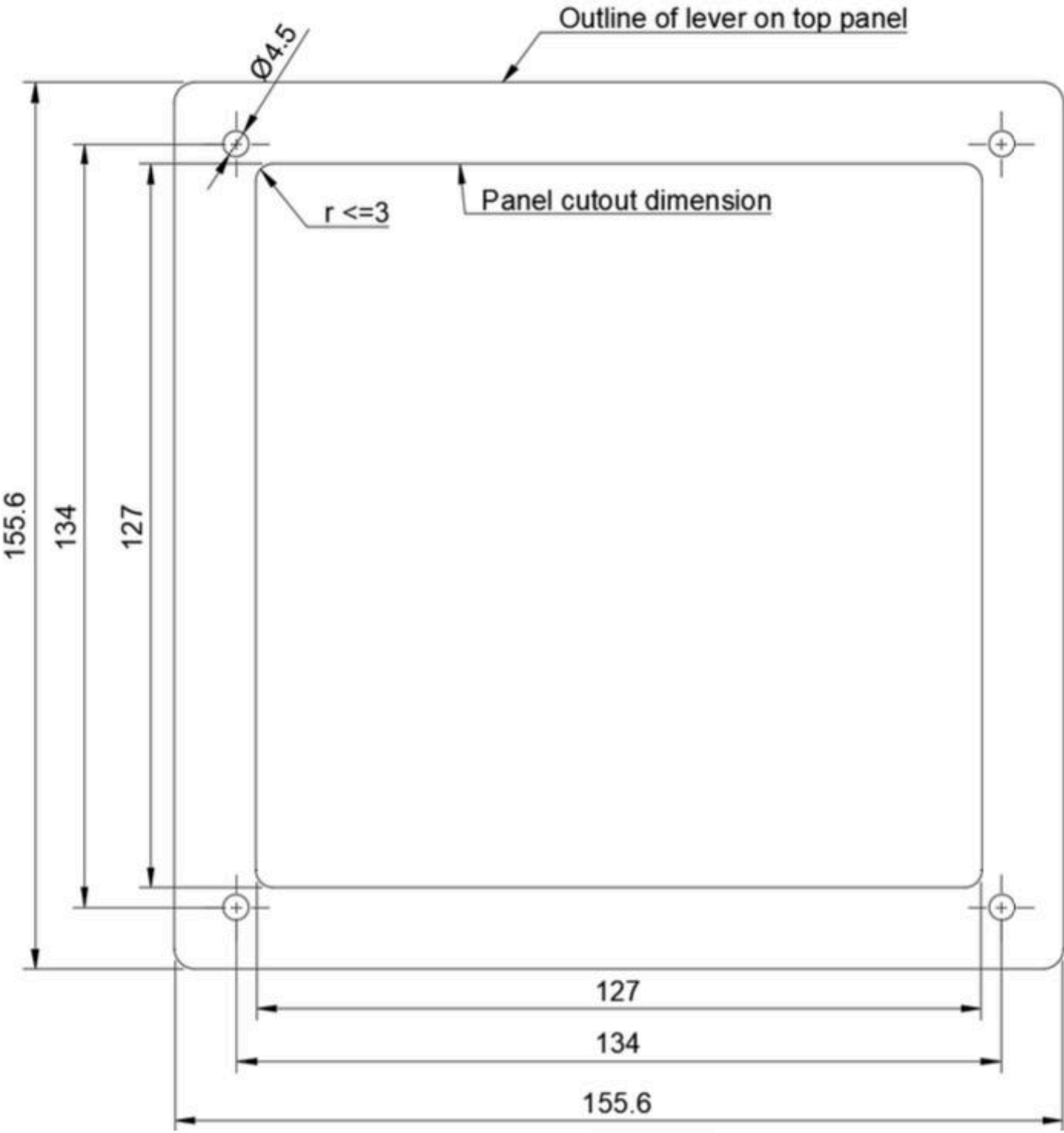
Maximum speeds

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.

Model: 11.00.000.xxx

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Cut-outs & Dimensions



Model: 11.00.000.xxx



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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