SVAB A9 Joystick Grip

Let's shape the world together

SVAB A9 grip

The A9 grip is SVAB's most advanced grip and is specially developed to meet a growing need for ergonomics and the ability to control more functions via the excavator's joystick grip.

Ergonomics and design

The A9 represents the next generation of joysticks, boasting the superior ergonomics found in today's L8 grip.

More rollers

The A9 grip now accommodates up to five rollers per grip. One roller is controlled by the index finger, one by the middle finger, and up to three rollers are controlled by the thumb. Extensive research has been done to ensure the correct placement of the rollers for the index finger and middle finger so they can be maneuvered simultaneously in a relaxed and controlled manner.

HAT switch

The A9 grip can also be configured with a newly developed ergonomic five-position HAT switch that can be used to navigate the excavator and/or an external display. With this HAT switch, the operator doesn't need to let go of the grips but can easily navigate and adjust settings in the machine directly from the grips and quickly return to their work.

Hand rest

The A9 grips can easily be equipped with an ergonomic hand rest thanks to a smooth mounting, making it easy to install afterwards while not being in the way in the cabin. The hand rest has a unique ability to be adjusted in height, making it easy to adapt to different hand sizes.

Symbols on buttons

The buttons can now be equipped with different symbols, increasing both efficiency and safety by reducing the risk of the operator pressing the wrong button.

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Heated Grip

This is an optional feature available in the A9 grip, taking the comfort in an excavator to completely new levels. Heating in joystick grips in excavators means improved comfort and efficiency in cold weather conditions.

By keeping the operator's hands warm, the risk of stiffness and impaired sensation is reduced, leading to a better working environment and increased productivity.
The heat promotes better blood circulation and reduces fatigue, allowing the operator to maintain high precision and reaction capability during work. This addition enhances user experience and ensures that the machine can be used effectively even in the most demanding weather conditions.

Haptic Feedback via vibration

Now it's also possible to get Haptic feedback in the joystick grip, improving safety, precision, user comfort and efficiency. This technology provides the operator with physical feedback, such as vibrations, warning of risks and enabling fine-tuned movements for increased precision in work.

It also functions as an intuitive learning tool, especially for new operators, by directly showing the consequences of their actions. By reducing the need for constant visual monitoring, it also decreases visual fatigue and cognitive load, allowing the operator to better focus on the task. The varied interaction contributes to a more engaging work environment and reduces fatigue from long work shifts. By integrating haptic feedback, manufacturers can offer more advanced and user-friendly equipment for today's excavation work.

Easy to configure and personalise

Easy to configure in many different variations with short lead time from request to first order using our online joystick grip configurator at www.svab.se

Technical data

MECHANICAL DATA	
Mass	Up to 380 g
Material	Plastic
Color	Black

ELECTRICAL DATA	
Electrical interface options	Analog/Digital, CAN-bus

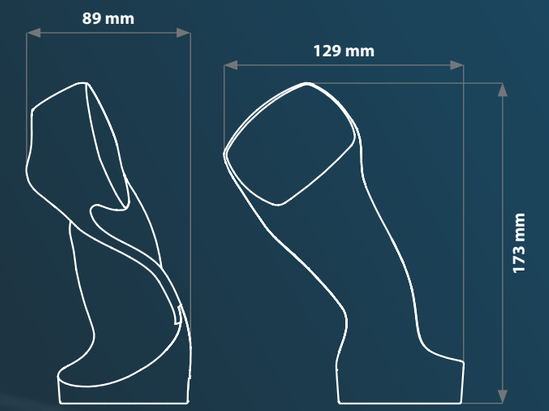
ENVIRONMENTAL DATA	
Operational temperature	-40 °C to +85 °C

CONFIGURATIONS THUMB OPERATED CONTROLS
Up to 1 roller + 4 push buttons/switches
Up to 2 rollers + 2 push buttons/switches
Up to 6 push buttons/switches
Up to 3 rollers

CONFIGURATIONS FINGER OPERATED CONTROLS
Up to 2 rollers + 2 push buttons/switches
Up to 1 roller + 3 push buttons/switches

GRIP HEATING	
Mechanical data	
Heater temperature at grip microprocessor	0ºC <T< +50ºC
Electrical data	
Heating effect	ISO16750-4
Environmental data	
Shock	Free fall acc. to ISO16750-3

Dimensions



HAPTIC FEEDBACK

The haptic driver chip has numerous built in vibration modes. It is also possible to make your own custom vibration modes. As a standard feature we have picked 15 modes that each is available with its own address on the CAN bus.

0	Vibration Off
1-7	Constant vibration with different strengths from 1 weak to 7 strong
8	Momentary: Strong click
9	Momentary: Soft Bump
10	Momentary: Double click
11	Momentary: Tripple click
12	Momentary: Pulsing strong
13	Momentary: 750ms Alert
14	Momentary: Transition click
15	Momentary: Transition Ramp Down

Mechanical data	
Motor type	ERM Ø14 mm
Rated speed	9000+/-500 RPM
Vibration strength	≥2.9G
Expected life	≥115 000 cycles (1 cycle = 2sec ON 1sec OFF)
Electrical data	
Operating voltage	Max 5V
Rated current	Max 200mA
Start current	Max 350mA
Environmental data	
Operating temperature	-30ºC <T< +85ºC
Storage temperature	-40ºC <T< +85ºC

STANDARDS AND COMPLIANCE

Developed in accordance with the Machinery Directive 2006/42/EC ISO10968:2020

	Test according to
Electromagnetic compatibility	ISO13766 Volvo STD 515-0003
Environmental conditions	ISO16750-4
Salt spray test	ISO16750-4
Shock	Free fall acc. to ISO16750-3
Vibration	Test VIII acc. to ISO16750-3
Chemical resistance	ISO16750-5

SVAB Hydraulik AB
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