



DATASHEET

# SVAB ELECTRONIC JOYSTICK BASE

Robust, safe and ergonomic electronic joystick base for modern electro-hydraulic excavators

DOC-0003297 Rev A



# SVAB ELECTRONIC JOYSTICK BASE

The eJB is a robust and safe electronic joystick base designed for remote control of electro hydraulics via CAN. The joystick base mimics the mechanics, ergonomics and feel of a hydraulic joystick and has a design that is proven to be robust. The design of the mechanics and electronics is redundant to provide a high level of safety. Our highly configurable SVAB joystick grips are easily connected to the joystick base which allows a passthrough for the grip CAN frames.

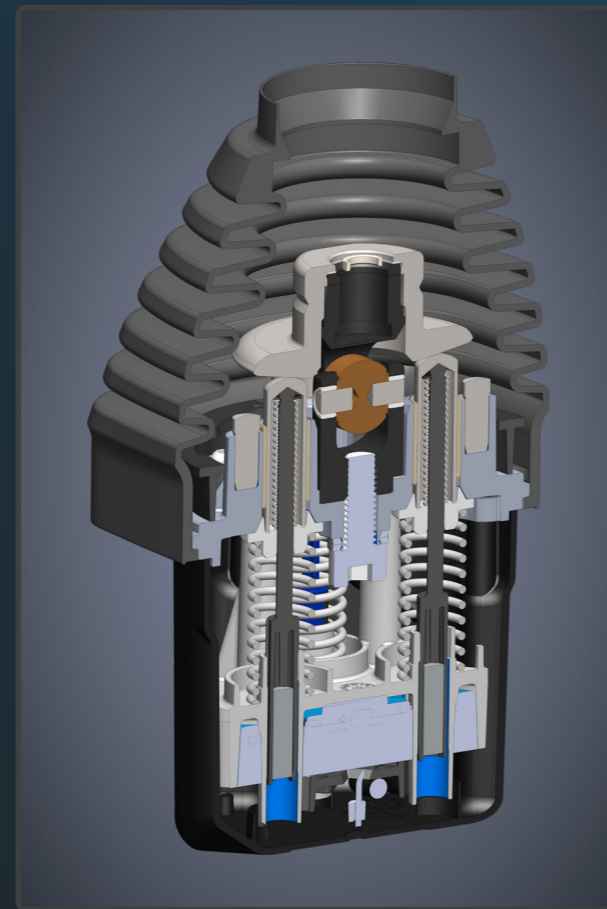
## Functional principle

The joystick movement is activating the rods, making the magnet move up or down. For each axis there are double sensors that read the position of the magnets.

This design of the mechanics and electronics are redundant to provide a high level of safety. The operating force is determined by the force of the active spring, which can be adapted to the application. The axis stroke can be individually chosen between 18° and 23°.

Our grips are easily connected to the eJB which provides a single cable connection for the complete joystick to the machine.

- Reliable and robust mechanism similar to a hydraulic joysticks base
- Provides the feeling of a hydraulic joystick
- Customizable operation force and stroke
- Single cable connection
- SIL2 and PLd compliant



## TECHNICAL DATA

### ELECTRICAL

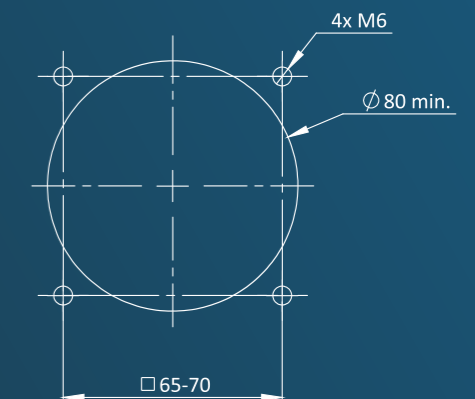
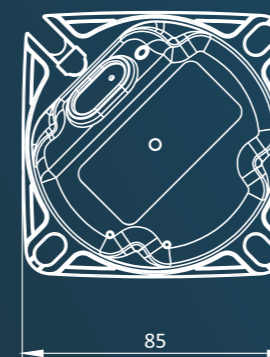
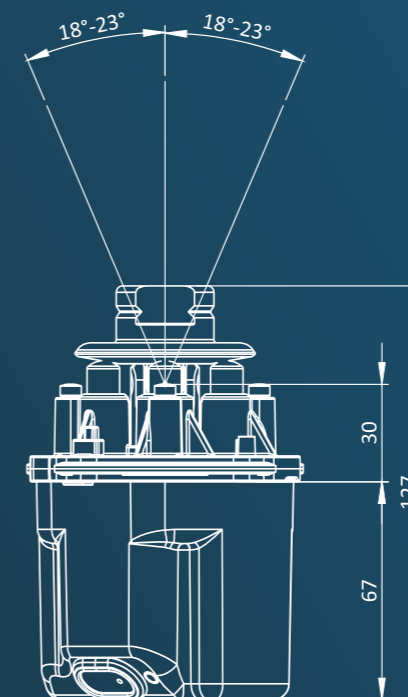
CAN bus connectors	1 or 2* (*dual CAN as option for a fully redundant CAN bus)
CAN bus protocol	CANopen or CAN J1939
CAN bus supply voltage	6V to 36V
Digital inputs	5
Analog inputs	2
Power output	1 (5V, max 90 mA)

### MECHANICAL

Installation size	85 x 85 x 127 mm
Weight (base without grip)	Approximately 780 g
Mounting screw connection	4x M6 screws
Mechanical life	≥ 6 million cycles
Lever stroke	±18 to 23° according to customer specification
Operating force	Light, medium, hard or extra hard, according to customer specification

### ENVIRONMENTAL

Operating temperature range	-40°C to +85°C
Protection class electronic	IP67
Protection class mechanical	IP5X
Fire resistance	UL94-HB



Recommended mounting opening



**SVAB Hydraulik AB**

<http://svab.se>