

## Robust Joystick J4 Base

### Robust, top mounted.

The J4 robust joystick is ideal for high-stress and high-frequency use thanks to its robust design. It was designed for use in mobile machinery, such as wheel loaders for operating the bucket functions.

### Technical specifications

- Robust joystick for installation from above
- Space-saving design
- High reliability and long service life thanks to contactless Hall-effect and reed technology
- Available with different output signals: analogue, redundant, CAN bus connection (CANopen/SAEJ1939) or with switching output
- IP67 protection class of electronics, ideal for harsh environmental conditions
- Deflection  $\pm 20^\circ$
- Available with various actuation types: no-detent, detent, with friction brake or centre position interlock, any function can be optimally operated
- Designed for extremely heavy loads (x-/y-axis: 2000 N, z-axis: 700 N at 190 mm lever length each)

## Technical drawing

IMAGE 1/3

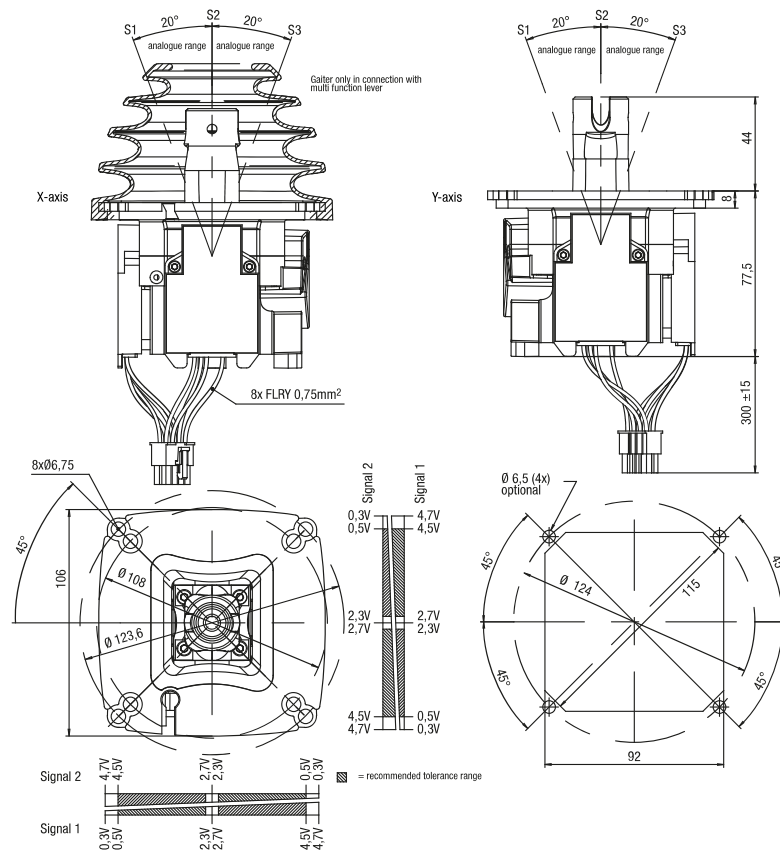
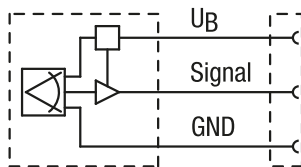


IMAGE 2/3

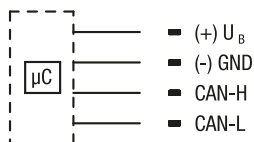
## Standard

### Analogue each X- and Y-axis



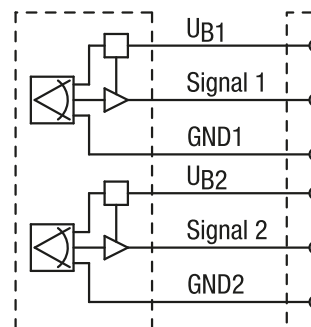
### CAN

CAN

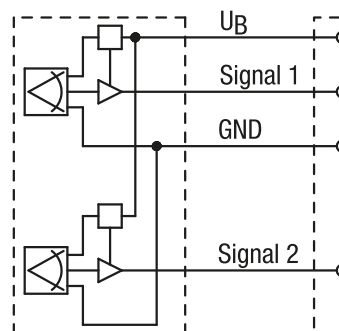


## Optional

### Redundant each X- und Y-axis



### Semi-redundant each X- and Y-axis



### Switching output each X- and Y-axis

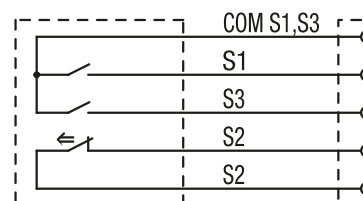
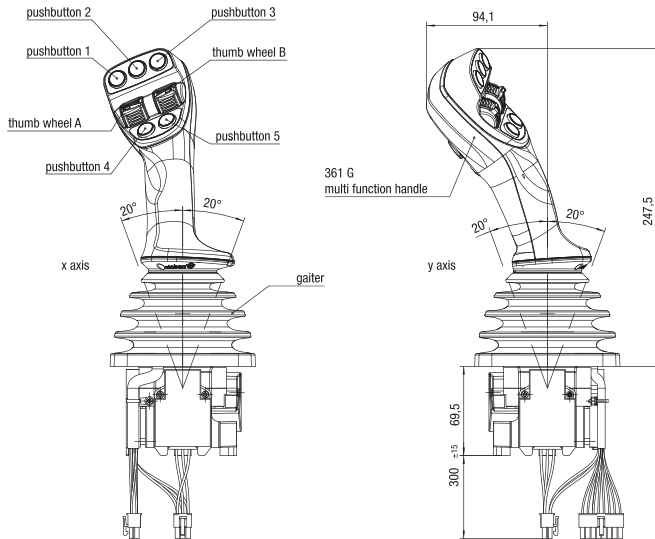
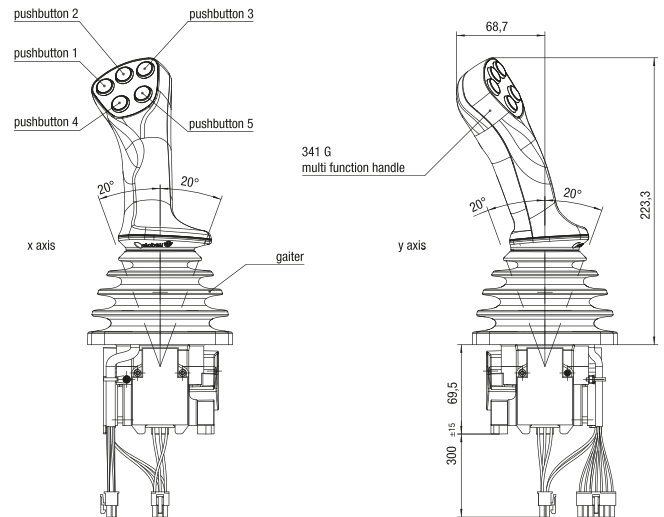


IMAGE 3/3

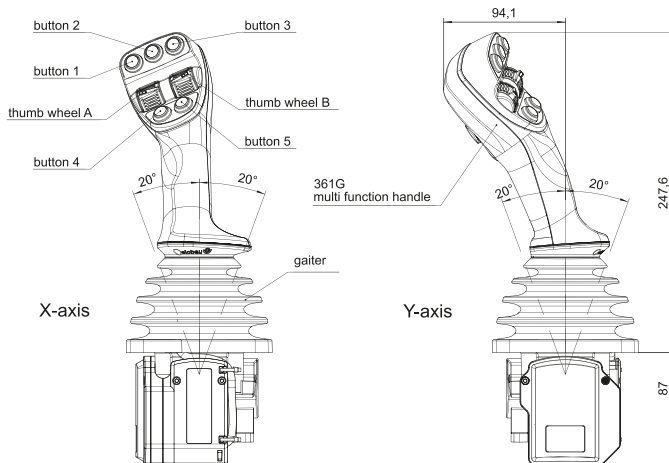
**J4 joystick with Multi-function handle 361G...**



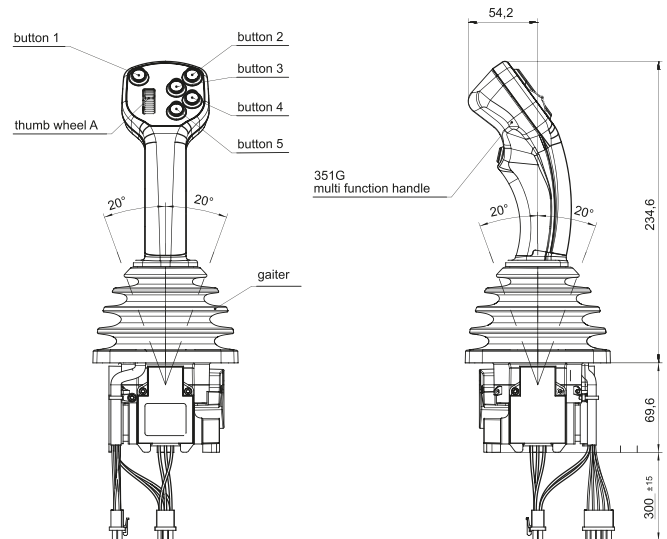
**J4 joystick with Multi-function handle 341G...**



**J4 joystick with CAN electronics und Multi-function handle 361G**



**J4 joystick with Multi-function handle 351G**



## Article characteristics

Attribute	J4A6...	J4C6...CANopen	J4C6...SAE_J1939
Polarity reversal protection	yes	-	-
Output signal min.	0.5 V DC	-	-
Output signal max.	4.5 V DC	-	-
Output signal	analogue	-	-
Output signal - centre position/zero position	2.5 V DC	-	-
EMC immunity (Norm)	DIN EN 13309, DIN EN ISO 14982	-	-
EMC emission (Norm)	DIN EN 13309, DIN EN ISO 14982	-	-
Operating voltage min.	4.5 V DC	9 V DC	-
Operating voltage max.	5.5 V DC	36 V DC	-
Current consumption	max. 15 mA	120 mA	-
Load resistance min.	20000 Ohm	-	-
Short-circuit resistance to GND	yes	-	-
Short-circuit resistance to supply	yes	-	-
Technology	Hall		
Protocol	-	CANopen	J1939
Transmitting cycle	-	100 ms	-
Baud rate	-	250 kBit/s	-
Bus terminating resistor	-	no	-
Max. lever load with specified lever length	190 mm / 2000 N		
Deflection	± 20 °		
Service life, mechanical (Cycles)	2000000		
Protection class, electronic	IP67 DIN EN 60529		
Operating temperature min.	-25 °C		
Max. operating temperature	85 °C		
Min. storage temperature	-40 °C		
Max. storage temperature	85 °C		
Installation	from above		
Mounting type	screwed from above		
Connector type	Mini-Fit Jr.	-	-
Cable type	FLRY		
Cable length	0.3 m	-	-