



## Compact Joystick J2 with Standard Handle

For applications that require finesse in adverse working conditions. With up to 3 micro push button switches and space-saving bottom mounting. The compact standard handle has proven its suitability for demanding, dusty environments. It is straight with a symmetrical design so that it can be operated with either the left or the right hand.

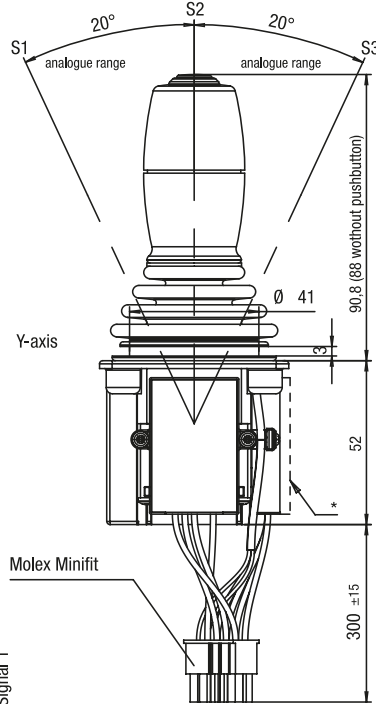
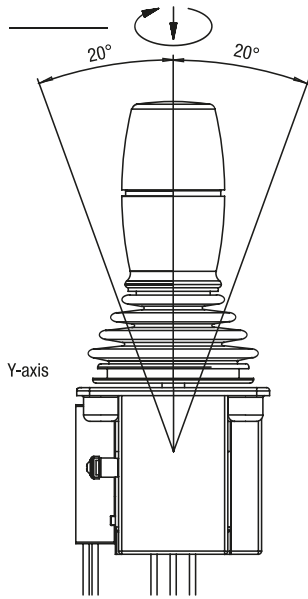
When it comes to the floating position of the hydraulics, the joystick has detent points in the end positions both for movement forwards and to the right in order to keep the standard handle in the respective position.

- Space-saving design
- High reliability and long service life thanks to contactless Hall-effect and reed technology
- Different output signals are possible: analogue, redundant, CAN bus connection (CANopen / SAE J1939) or with switching output
- Protection class IP67, making it ideal for adverse conditions
- Deflection  $\pm 20^\circ$
- Available with various actuation types such as no detent / detent
- If required, back-printed and abrasion-resistant push button switches are selectable. Backlight and function light possible

Technical drawing

IMAGE 1/4: NEW OPTIONAL HANDLE 321G

Optional locking device



\* panel thickness for execution Switching output / redundant / CAN

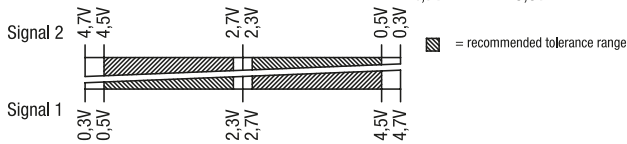
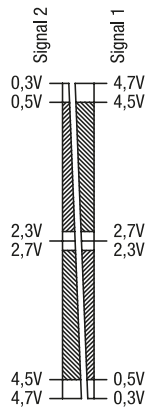
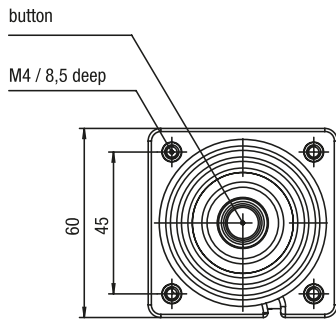


IMAGE 2/4

# Installation opening for standard handle

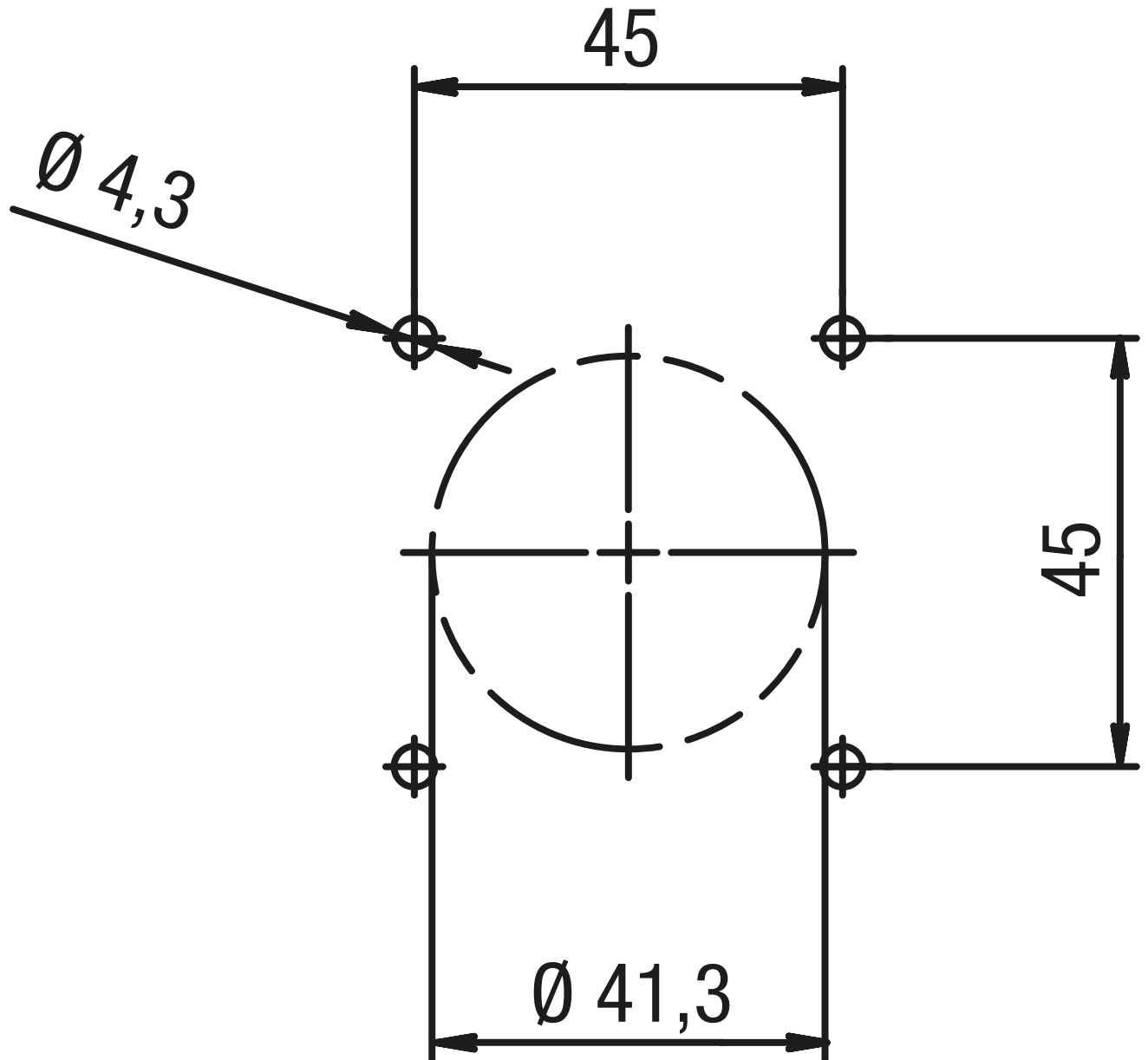
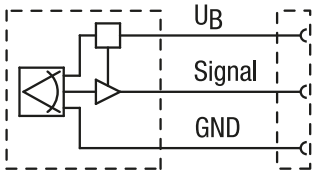


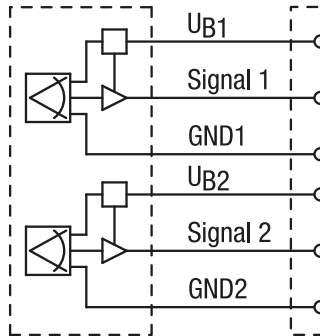
IMAGE 3/4

### Standard

#### Analogue each X- and Y-axis

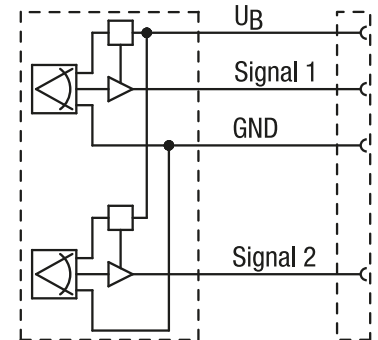


#### Redundant each X- und Y-axis



### Optional

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



### CAN

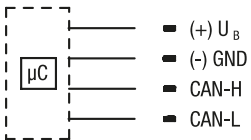
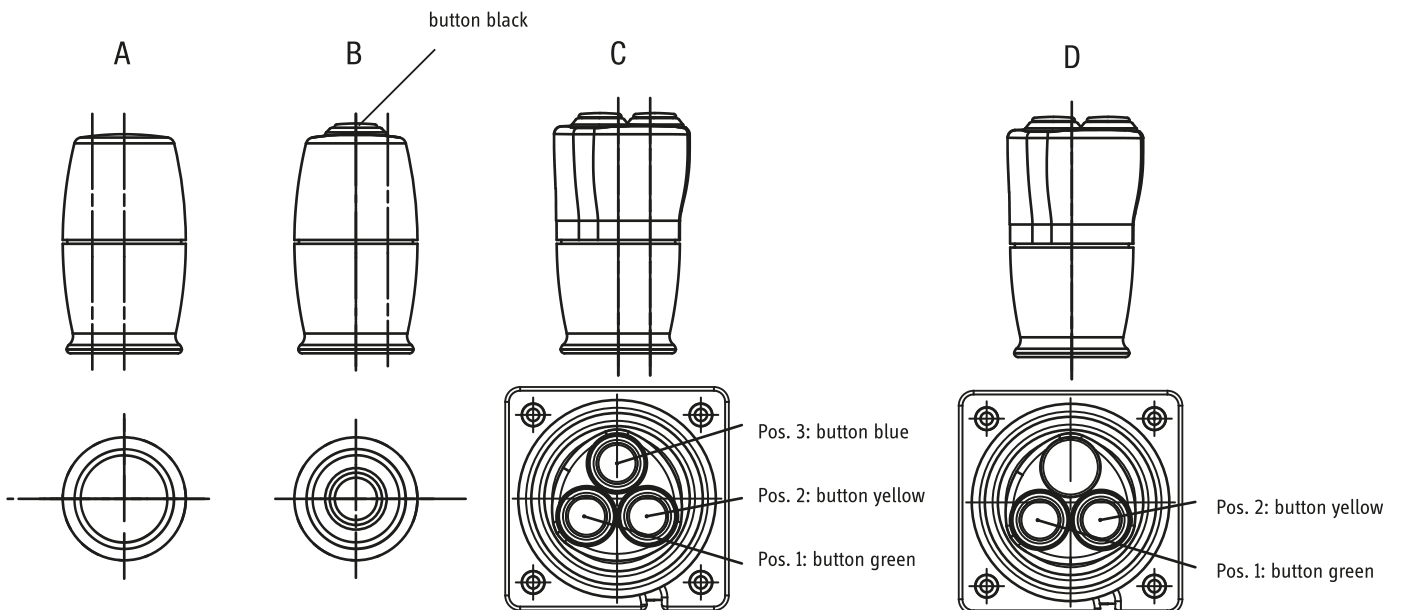


IMAGE 4/4

### Standard handle version



### Article characteristics

Attribute	J2A6...	J2CJ	J2C0...
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, ISO 13766, DIN EN 12895		
EMC emission (Norm)	DIN EN 13309, DIN EN ISO 14982, ISO 13766, DIN EN 12895		
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	-	J1939	CANopen
Node ID / Source Address	-	0x70	0x11
Transmitting cycle	-	100 ms	
Baud rate	-	250 kBit/s	
Bus terminating resistor	-	no	
Max. lever load with specified lever length	70 mm/250 N		
Deflection	± 20 °		
Actuation type	multi axis		
Service life, mechanical (Cycles)	1000000		
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 below		
Mounting type	screwed from above		
Connector type	Mini-Fit Jr.		

Attribute	J2A6...	J2CJ	J2C0...
Cable length	0.3 m		