



Fingertip Joystick J3

CAN-capable, bottom mounted.

The single axis Hall-effect, Fingertip joystick J3, is ideal for use in control panels and armrests of industrial trucks and municipal vehicles, as well as in agricultural and construction machinery thanks to its compact and robust design.

Technical specifications

- Four actuation types: no-detent / detent, with friction brake or centre position interlock
- High reliability and long service life thanks to contactless Hall-effect and reed technology
- Analogue output signal (current/voltage, also redundant) or switching output
- CAN-bus connection (CANopen / SAE J1939)
- Various handle options, available with up to one push button switch
- IP67 protection class of electronics, ideal for harsh environmental conditions
- Deflection $\pm 20^\circ$ or $\pm 25^\circ$

Technical drawing

IMAGE 1/4

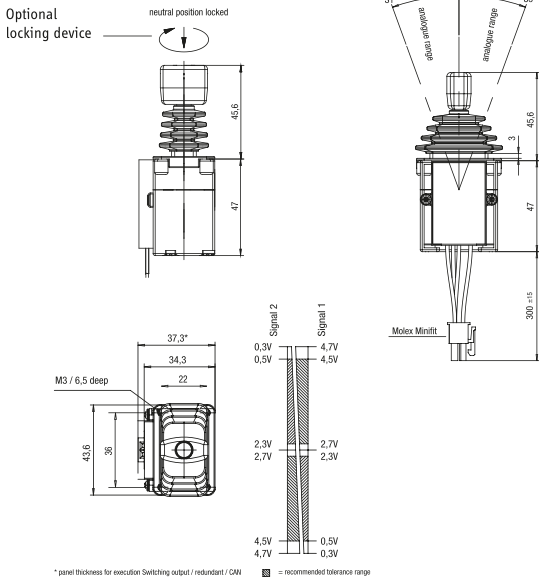


IMAGE 2/4

mounting hole standard handle

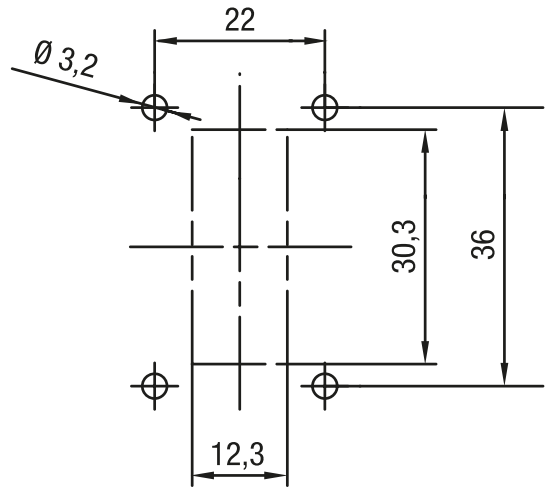


IMAGE 3/4

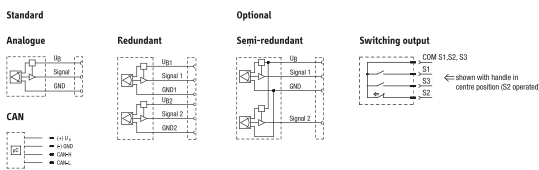
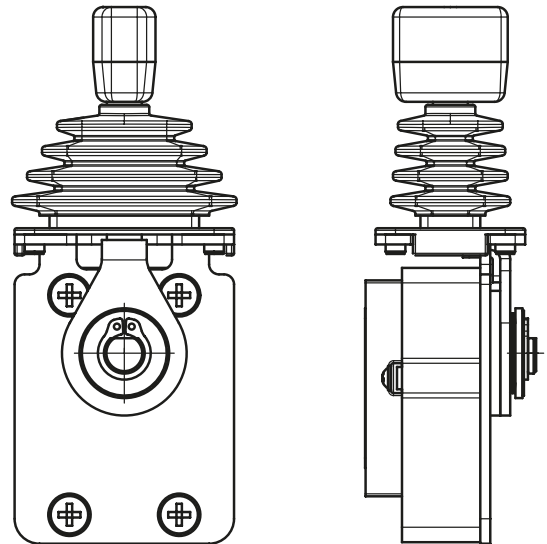


IMAGE 4/4

Optional with friction brake J3..AH...



Product options

IMAGE 1/1

ORDERING KEY

J2						Single axis joystick
						Electronics
A	1					Analogue 4-20 mA DC
A	6					Analogue 0,5-4,5 V DC, ratio-metric
A	7					Analogue 0,5-4,5 V DC
R	1					Redundant 4-20 mA DC
R	6					Redundant 0,5-4,5 V DC, ratio-metric
R	7					Redundant 0,5-4,5 V DC
C	0					CANopen
C	J					CAN J1939
						Function
		A	A			No detent
		A	B			Detent
						Locking device
					0	Centre position cannot be locked mechanically
						Handle version
					A	Standard handle

Optional		
Electronics	Semi-redundant electronics module	
	Electronics module switching output	
	CAN (CANopen/J1939)	Baud rate
		Node ID (CANopen): 0x0
		Source Address (J1939): 0x70...0x79
Mechanics	Actuation type	No detent 25°
		No detent 25°
		Front detent only 20°/25°
		Friction brake, J3 handle on hand-throttle module
	Centre position mechanically lockable	
	Twist lock	
Handle	Handle J2 with up to 1 push button	Various push button configurations s. 145MT...

Electrical data

Attribute	J3A1...	J3A6...	J3A7...	J3CJ...	J3CO...	J3D8...
Max. switching voltage			-			48 V DC
Max. switching current			-			0.3 A
Max. switching power			-			10 W
Max. switching power			-			10 VA
Contact form			-			NO
Polarity reversal protection	yes					
Output signal min.	-	0.5 V DC			-	
Output signal max.	-	4.5 V DC			-	
Output signal min.	4 mA			-		
Output signal max.	20 mA			-		
Output signal	analogue				-	
Output signal - centre position/zero position	-	2.5 V DC			-	
Output signal - centre position/zero position	12 mA			-		
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.	10 V DC	4.5 V DC	10 V DC		9 V DC	-
Operating voltage max.	30 V DC	5.5 V DC	30 V DC		36 V DC	-
Current consumption	at 12 V max. 18 mA	max. 15 mA	at 12 V max. 15 mA		< 120 mA	-
Load resistance min.	-	20000 Ohm			-	
Load resistance at 10V max.	250 Ohm				-	
Load resistance al 30V max.	1250 Ohm				-	
Short-circuit resistance to GND	no	yes	no		yes	no
Short-circuit resistance to supply	no	yes	no		yes	no
Outputs (quantity, type)	1				-	3
Technology	Hall					Reed

Electrical data

Attribute	J3A1...	J3A6...	J3A7...	J3CJ...	J3CO...	J3D8...
Protocol		-		J1939	CANopen	-
Node ID / Source Address		-		0x70	0x11	-
Transmitting cycle		-		100 ms		-
Baud rate		-		250 kBit/s		-
Bus terminating resistor		-		no		-

Mechanical data

Attribute	J3A1...	J3A6...	J3A7...	J3CJ...	J3CO...	J3D8...
Max. lever load with specified lever length	X- and Y-Axis 50mm/150 N					
Deflection	± 20 °					
Actuation type	single axis					
Service life, mechanical (Cycles)	2000000					

Material information

Attribute	J3A1...	J3A6...	J3A7...	J3CJ...	J3CO...	J3D8...
Housing material	PBT					
Shaft material	PBT					
Gaiter material	CR 45					

Environmental conditions

Attribute	J3A1...	J3A6...	J3A7...	J3CJ...	J3CO...	J3D8...
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

Attribute	J3A1...	J3A6...	J3A7...	J3CJ...	J3CO...	J3D8...
Installation	from below					
Mounting type	screwed from above					

Connection

Attribute	J3A1...	J3A6...	J3A7...	J3CJ...	J3CO...	J3D8...
Connector type	Mini-Fit Jr.					
Cable length	0.3 m					