



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: J3 CAN-FÄHIG EINBAU VON UNTEN

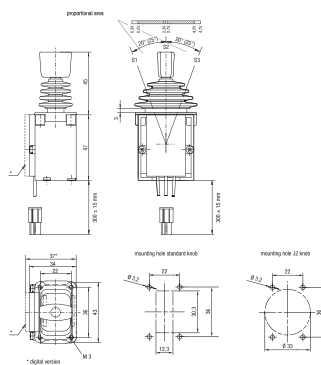
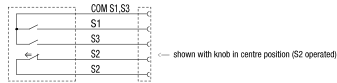


IMAGE 2/4: J3 FRONTALE SICHT

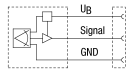


IMAGE 3/4: J3 SCHALTBILD

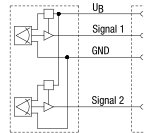
discrete output



analogue



semi-redundant



redundant

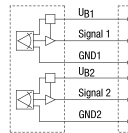
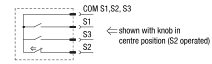


IMAGE 4/4: DISCRETE OUTPUT

discrete output



Stecker / connector / xxx X1

Ansicht / view / xxx „A“

MOLEX Mini-Fit
 Housing 39-01-2040
 Terminal 39-00-0059



Stecker / connector / xxx X1

Pin	Farbe / colour / xxx	Funktion / function / xxx
1	WH 5	COM S1, S2, S3
2	WH 4	S1
3	WH 2	S2
4	WH 1	S3

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	bei 12 V max. 18 mA	max. 15 mA	bei 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

Electrical data

Attribute	J3A1...	J3A6...	J3A7...	J3CJ...	J3CO...	J3D8...
Technology	Hall					Reed
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-Achse: 150 N bei 50 mm / Y-Achse: 100 N bei 50 mm 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					