



## Joystick J3 - controle na ponta dos dedos

### Barramento CAN bus, montado pela parte inferior

Com a tecnologia de sensores de efeito Hall, o joystick J3, graças ao seu design compacto e robusto, é ideal para aplicação em painéis de controle de caminhões móbil, veículos municipais, bem como em máquinas agrícolas e de construção civil.

### Especificação Técnica:

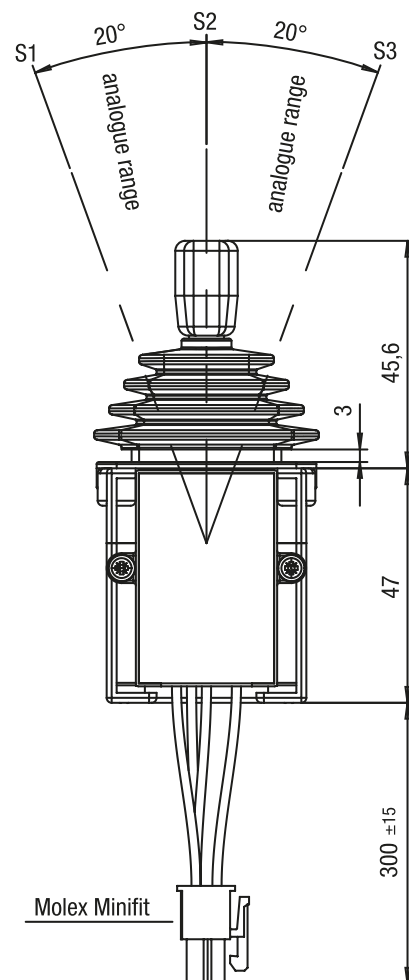
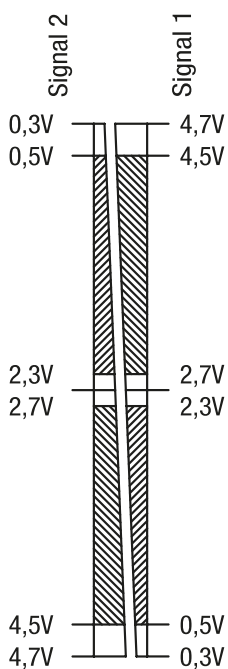
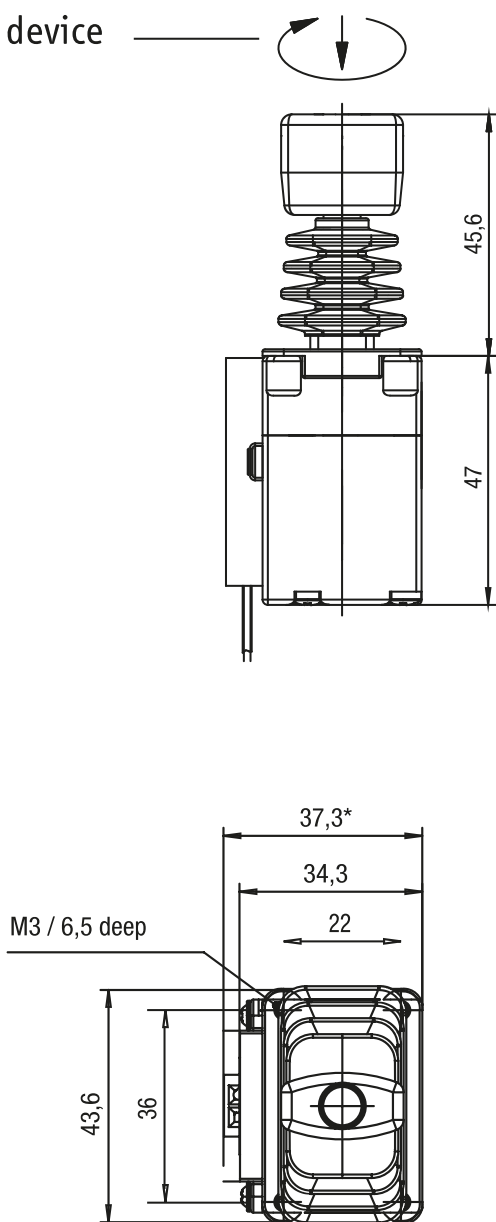
- 4 tipos de atuação: sem detente / com detente, com trava por fricção ou travamento da posição central
- Alta confiabilidade e vida útil devido à tecnologia de sensores de efeito Hall e tecnologia reed
- Disponível com diferentes sinais de saída: analógico, redundante ou saídas digitais
- Conexão CAN bus (CANopen/SAE J 1939)
- Disponível com várias opções de alavanca de atuação, om com até um botão de acionamento com sinal de saída digital
- Classe de proteção IP67, ideal para uso em ambientes com condições severas
- Ângulo de atuação  $\pm 20^\circ$  ou  $\pm 25^\circ$

## Desenho técnico

IMAGE 1/4

Optional  
locking device

neutral position locked



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

 = recommended tolerance range

IMAGE 2/4

## mounting hole standard handle

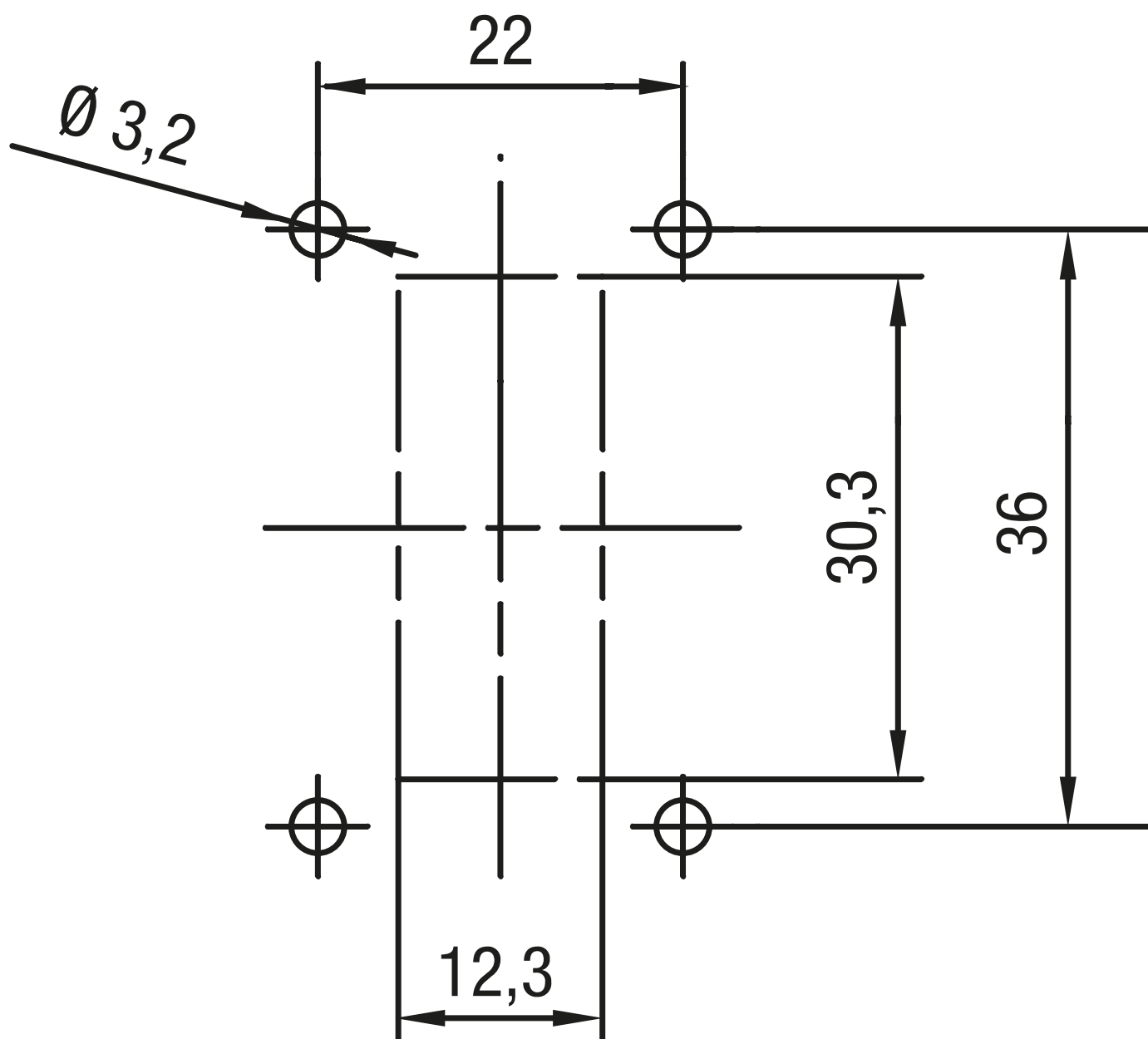
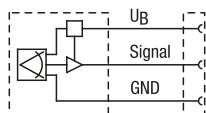


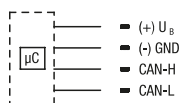
IMAGE 3/4

## Standard

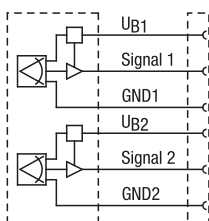
### Analogue



### CAN

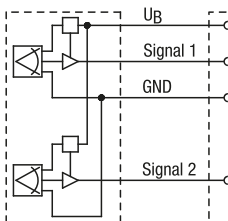


### Redundant

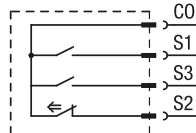


## Optional

### Semi-redundant



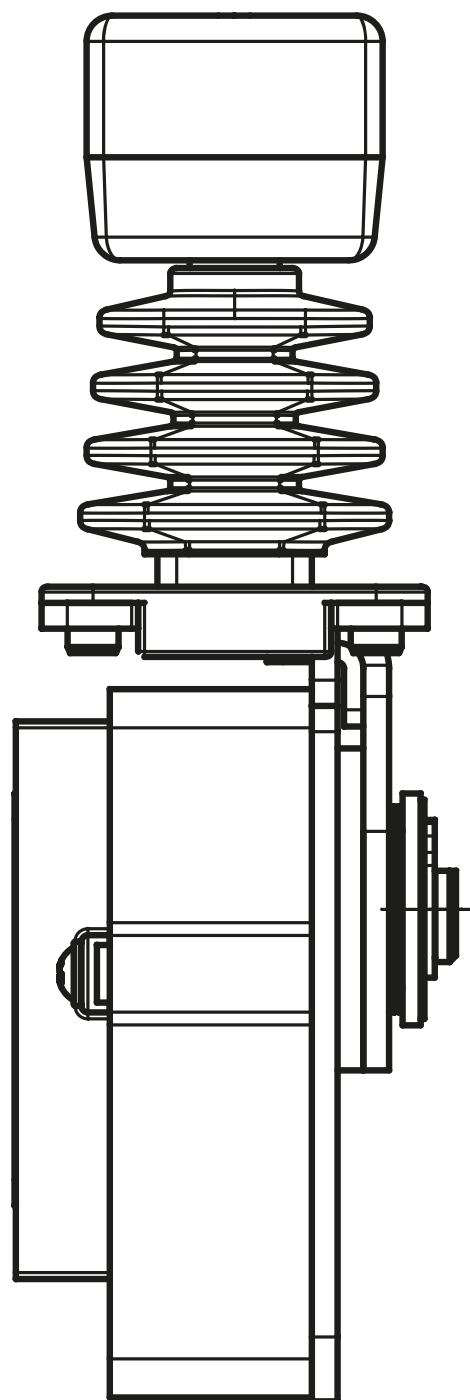
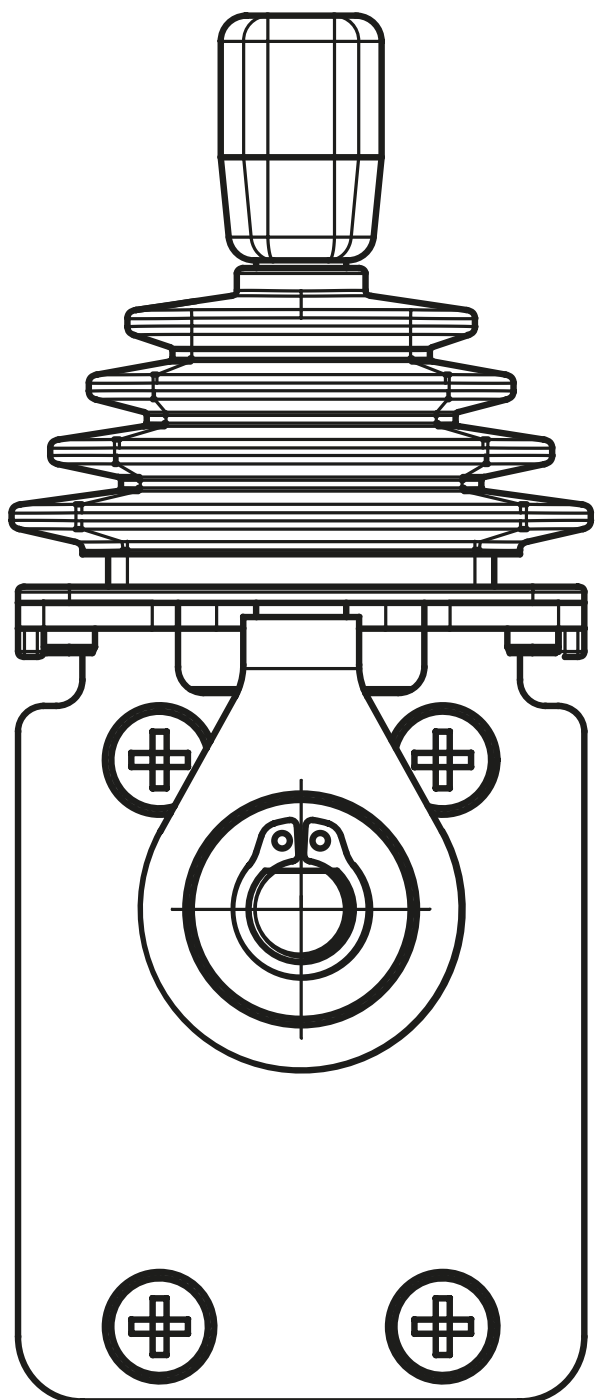
### Switching output



← shown with handle in  
centre position (S2 operated)

IMAGE 4/4

## Optional with friction brake J3..AH...



## Product options

IMAGE 1/1

### ORDERING KEY

J3							Single axis joystick
							<b>Electronics</b>
	A	1					Analogue 4-20 mA DC
	A	6					Analogue 0.5-4.5 V DC, ratiometric
	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, ratiometric
	R	7					Redundant 0.5-4.5 V DC
	C	0					CANopen
	C	J					CAN J1939
							<b>Function</b>
			A	A			No detent
			A	B			Detent
							<b>Locking device</b>
					0		Centre position cannot be locked mechanically
							<b>Handle version</b>
						A	Standard handle

Optional		
<b>Electronics</b>	Semi-redundant electronics module	
	Electronics module switching output	
	CAN (CANopen/J1939)	Baud rate
		Node ID (CANopen): tbd.
		Source Address (J1939): 0x70...0x79
<b>Mechanics</b>	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	
<b>Handle</b>	Handle J2 with up to 1 push button	Various push button configurations s. 145MT...

## Características do artigo

Attribute	J3A6...	J3CJ...	J3C0...
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		
Outputs (quantity, type)	1	-	
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	X- and Y-Axis 50mm/150 N		
Deflection	± 20 °		
Actuation type	single axis		
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 below		

#### Características do artigo

Attribute	J3A6...	J3CJ...	J3C0...
Mounting type	screwed from above		
Connector type	Mini-Fit Jr.		
Cable length	0.3 m		