

Industrial Joystick Linear 1-axis Controller

MJ-1L



Features

- light weight
- robust construction
- compact
- excellent lifetime
- conductive plastic

Applications

- platform lifts
- remote controls
- forklift trucks
- mobile hydraulic
- boat handling

Option

- protective cover

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Electrical Characteristics

Resistance range	5 k Ω *)
Resistance tolerance	± 20 %
Electrical angle	$> \pm 28^\circ$ *)
Independent linearity	± 2 %
Centre detect switch	$\pm 2,5^\circ\text{C}$ (50 % + 0,5 % of operating voltage)
Directional contact	$\pm 5^\circ$
Power rating	0,2 W at 40 $^\circ$
Operating voltage (VCC)	max. 30 V _{DC}
Output	10 - 90 % ± 1 % of operating voltage 0 - 100 % ± 1 % of operating voltage
Wiper current	< 10 μA
Wiper impedance	> 1 M Ω
Max. wiper current	3 m A in failure mode
Conductive resistance variation (CRV)	< 400 Ω (switch)
Insulation resistance	1 G Ω at 500 V _{DC}
Dielectric withstanding voltage	2000 V

Mechanical Characteristics

Life time	> 5 Mio. cycles
Displacement angle	$< \pm 30^\circ$
Seal condition	IP66 (IEN 60529, incl. sealing)
Operating force	4,5 N typical *)
Impact force	max. 50 N
Weight	35 g

Environmental Characteristics

Storage temperature	- 40 $^\circ\text{C}$... + 85 $^\circ\text{C}$ *)
Operating temperature	- 25 $^\circ\text{C}$... + 70 $^\circ\text{C}$ *)
Climatic class	25/085/56
Vibration ; Shock	10 G ; 50 G

Material

Housing	thermoplastic
Bearing	plastics
Electrical connector	see drawing / electrical connection
Mounting	see drawing / electrical connection

Specifications subject to change without notice
*) Other values on request

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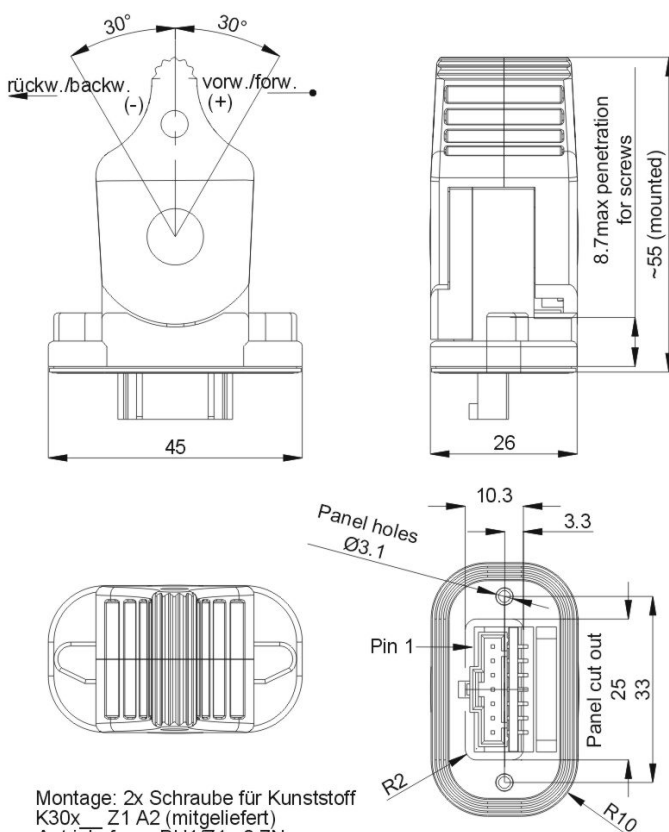
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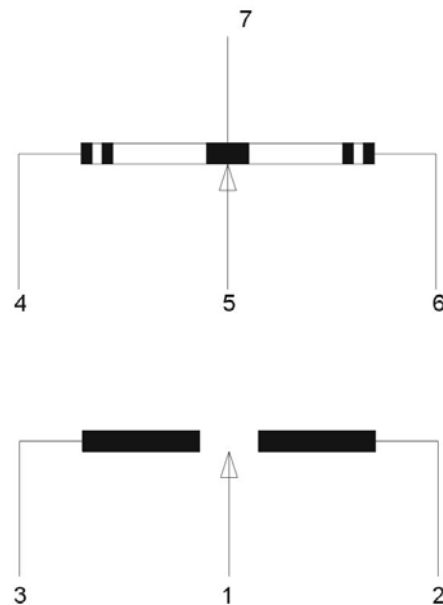
Drawing



Montage: 2x Schraube für Kunststoff
K30x__ Z1 A2 (mitgeliefert)
Antriebsform: PH1/Z1 ~0,7Nm
Plattenstärke bis 3,50mm: K30x10 Z408000031
Plattenstärke ab 4,0-6,0mm: K30x12 Z408000018

For assembly: Use 2x self tapping screws
K30x__ Z1 A2 (provided)
Bit to be used: PH1/Z1 ~0,7Nm
for Panel thickness up to 3,50mm: K30x10 Z408000031
for Panel thickness as of 4,0mm: K30x12 Z408000018

Connector pin assignment



Pin 1: Gemeinsamer Ri.schalter-Anschluss/Common terminal-switches
Pin 2: N/O Richtungsschalter vorwärts/switch lever forward (+)
Pin 3: N/O Richtungsschalter rückwärts/switch lever backward (-)
Pin 4: Negative od. Nullpot.-Verspannung/Negat. or zero volt. supply
Pin 5: Ausgangsspannungssignal/Output voltage signal
Pin 6: Positive Versorgungsspannung/Positive voltage supply
Pin 7: Mittenanzapfung/Center tap

Anschluß/Connector:
Stiftleiste/Male header Molex 70553-0111

Anschlusstecker mit Verriegelung
/ Connector latching: 7pol. Molex
Kabel/Cable 500mm ws/white LiYv 0,14mm² VDE0812
[separat bestellen/order separately: Z301000507

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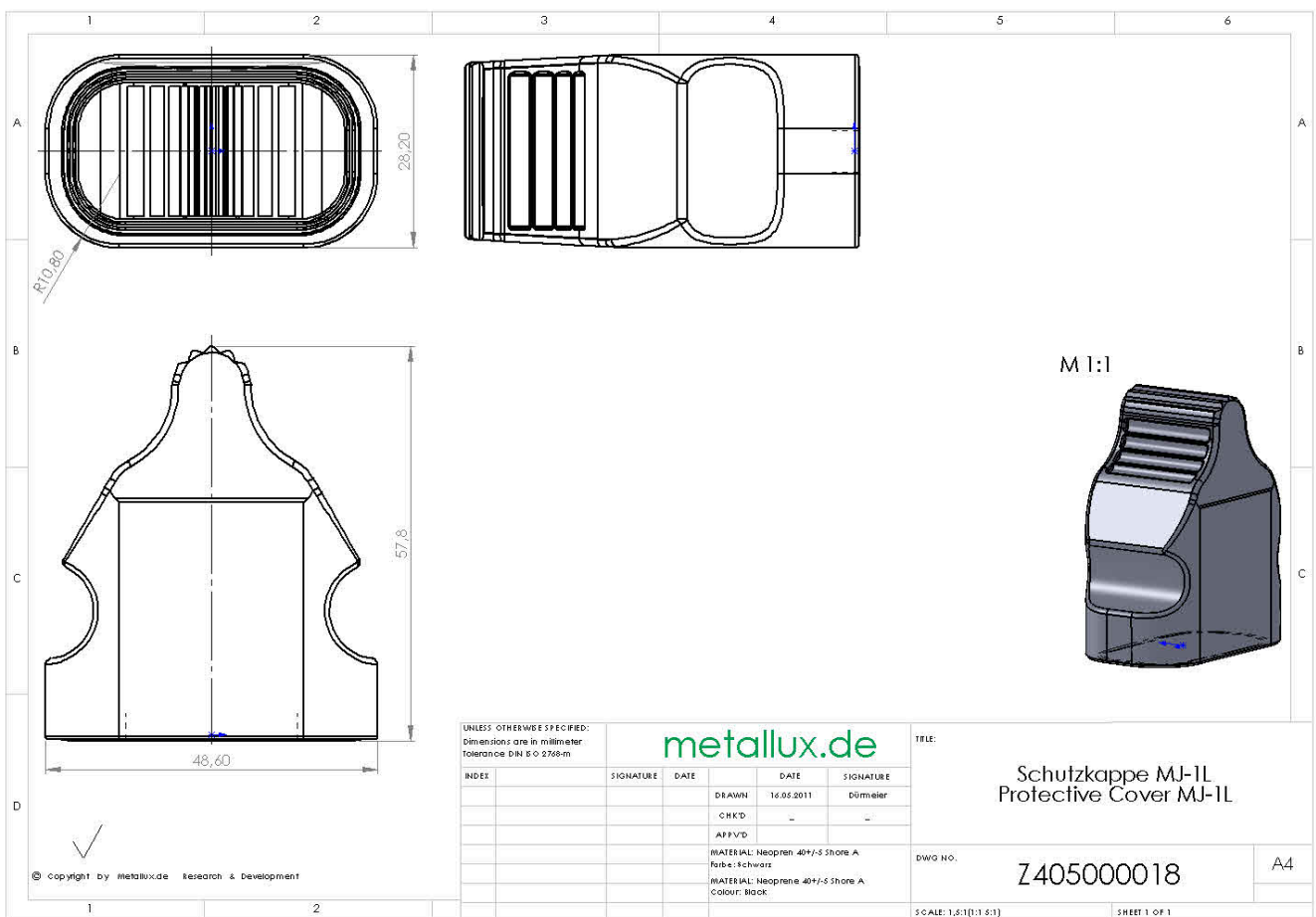
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Drawing Protective Cover



How to order

Type

MJ-1L 5K MC 1-0-1 10 - 90 %
E060200030

Options:

MJ-1L 5K MC 1-0-1 0 - 100 %
E 060200130

Other lever height
Protective cover Z 405000018