

# HAND JOYSTICK MJ-H11 BASE

**MJ-H11 is the perfect base for a midsize joystick. It is as compact as a finger joystick and as stable as a hand joystick. Its installation depth is minimal. Modern, low-wear Hall sensor technology ensures a long service life.**

**A customized handle can be mounted on this base, making it flexible for a wide variety of applications.**

## Advantages

- Hall technology
- Compact and robust design
- Low installation depth

## Application examples

- Industrial trucks, forklifts and aerial work platforms
- Agricultural, forest and construction machinery
- Municipal vehicles
- Cranes, excavators



Electrical data	
Sensor technology	Hall
Supply voltage	Hall: 5 VDC CAN: 8 – 24 VDC
Total current consumption	Hall: Typ. 15 – 20 mA CAN: 30 – 60 mA
Load resistance	>2 kΩ
Resolution	8 bit
Interfaces	0.5 - 4.5 V ratiometric Redundant or reverse redundant SPI PWM CANopen SAE J1939 Others on request

CAN Specification*	
CAN bus protocol	CANopen or SAE J1939
Baudrate	250, 500, 1000 Kbit/s
Total current consumption base	Typ. 20 – 35 mA
Digital inputs	7
Analog inputs	2
Functional Safety acc. to	ISO 19014 PLd ready

\*The wide range of possible configurations and communication protocols/mapping cannot be fully represented here. Please contact us with your specific requirements.

Mechanical Data	
Number of axes	2
Dimensions	See drawings
Weight	approx. 130 g
Break out force	~ 6 N
Vertical load	< 500 N
Horizontal load	< 200 N
Deflection angle	± 20°
Mounting	Screwed from below or above
Mechanical options	Return to center
Limiter	Square, soft guided feel
Service life B10	10 million cycles

Environmental Data	
Operating temperature	-25° C up to +70° C
Storage temperature	-40° C up to +85° C
Protection level acc. to IEC 60529	IP 69 between sealing areas
EMC Emission**	DIN EN 61000-6-3 80 – 6,000 MHz 3 V/m 80% AM 1 kHz Criterion A
EMC Immunity**	DIN EN 61000-4-3 30 – 6000 Hz
ESD**	DIN EN 61000-4-2

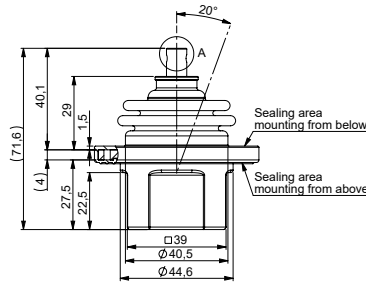
\*\*Other requirements on request

Electrical connection	
	Cable
	Others on request

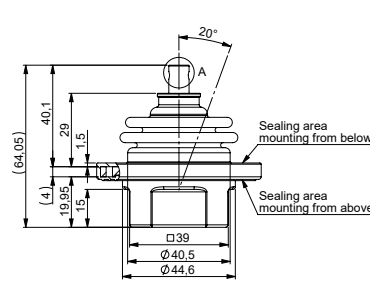
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## Dimensions

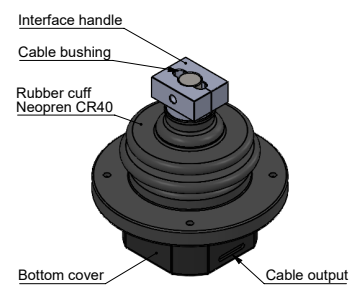
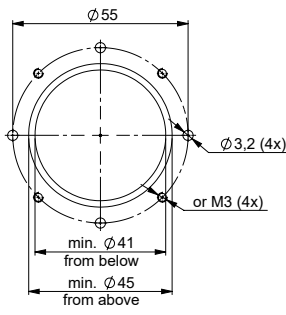
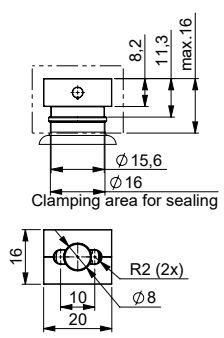
### CAN



### Analog

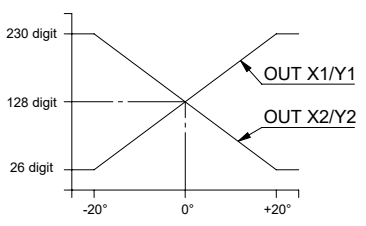


## Interface for handle / Mounting

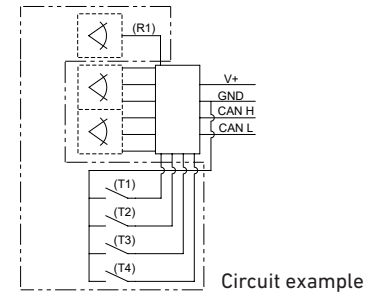


## Electrical connection/Circuit diagram

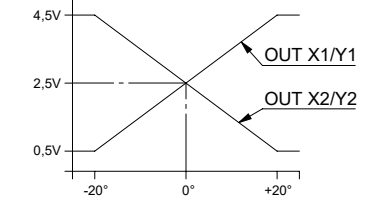
### CAN



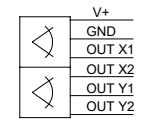
Output Cable	Function
BN	+8-32V
WT	GND
YE	CAN H
GN	CAN L



### Analog



Electrical wiring	
Out 11	Y1
Out 21	Y2
Out 12	X1
Out 22	X2
+V	
GND	



Metallux cannot picture the customer's operating and application conditions and the customer's existing environmental influences. We therefore recommend that you carry out your own investigations into the planned use of the products under the actual operating conditions. We continuously improve our products and also update our data sheets regularly. In this respect, there may be changes in the specification. These changes will apply to orders received by us from the time of the update, unless otherwise agreed. Our products comply with Directive 2011/65/EU (RoHS) including Directive 2015/863/EU and Regulation (EC) No. 1907/2006 (REACH).