

DIGITAL 1- AND 2-AXIS INDUSTRIAL JOYSTICK MJ-3K



Digital versions of the Metallux MJ-3K joysticks were designed for optimal control of crane systems. They are also available with mechanical detents for a distinct feedback and ease of control for the operator. Galvanically isolated direction contacts provide the necessary operational reliability and meet the requirements of the Machinery Directive. Their light weight and long service life encourage high productivity not only on construction and building sites but also on factory floors.

FEATURES

- Long service life
- Robust design
- Compact
- Conductive plastic technology

APPLICATIONS

- Aerial work platforms
- Radio remote control
- Forklift trucks
- Hydraulics



ELECTRICAL SPECIFICATIONS

Switching current	5 mA at 5 V *
Versions	Digital 1- to 4-stage (1-0-1 to 4-0-4), optional: 5-0-5, 4-bit gray code / GC4B
Deflection angle, el.	4 x 6,5°, optional: 5 x 5,2°
Zero position switch per axis	< ± 3° open
Load capacity/axis	0,2 W at 40°
Operating voltage (VCC)	Max. 30 VDC
Insulation resistance	1 GΩ bei 500 VDC
Dielectric strength	2000 V

MECHANICAL SPECIFICATIONS

Service life	> 3 million cycles
Deflection angle, mech.	± 26°

Specifications are subject to change without notice.
* Other values on request.

Operating force	5 N typically
Gate shape	Square, soft cross guide
Wiper zero position	± 1°
Impact strength	200 N
User control	Handle with Gaiter

AMBIENT CONDITIONS

Storage temperature	-40°C ... +85°C
Operating temperature	-25°C ... +70°C
Protection class	IP 65

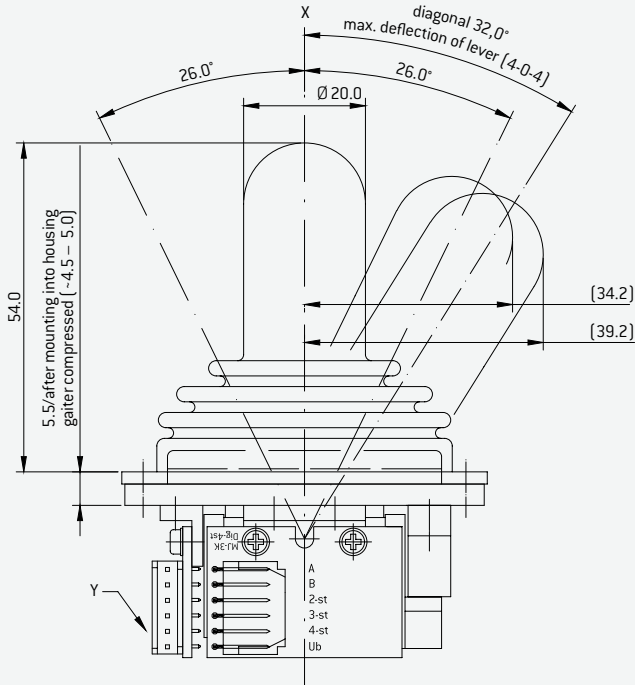
MATERIALS

Base	Aluminium
Bearing	Stainless steel/plastic
Electrical connection	12-pin Hirose plug, 6-pin Dubox plug
Mounting	Screws M3

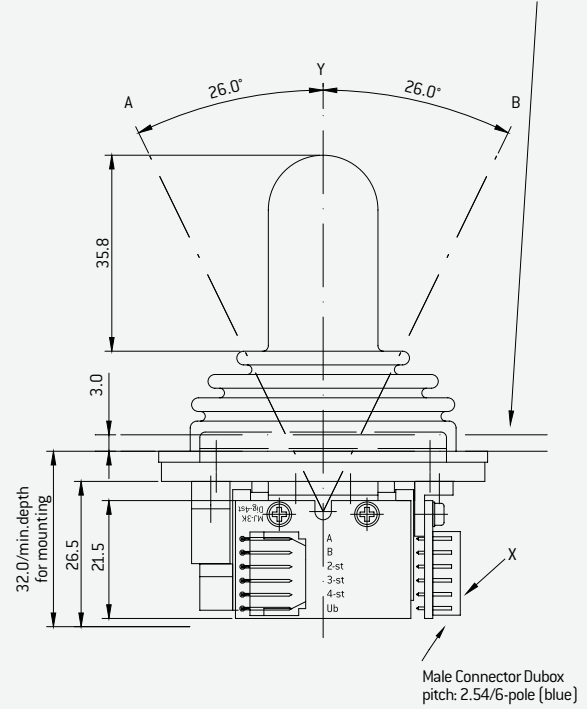
MJ-3K CP (CONDUCTIVE PLASTIC) DIGITAL

Type	MJ-3K 55 CP x:0 y:4-0-4 Dubox 6-pin	Type	MJ-3K 65 CP x:0 y:4-0-4 Dubox 6-pin
Item number	E060200514 (1-axis)	Item number	E060200508 (1-axis)
Type	MJ-3K 55 CP xy:4-0-4 Dubox 6-pin	Type	MJ-3K 65 CP xy:4-0-4 Dubox 6-pin
Item number	E060200428 (2-axis)	Item number	E060200468 (2-axis)
Type	MJ-3K 55 CP x:0 y:4-0-4 Hirose	Connection cable	MJ-3K 65 CP xy:4-0-4 DS Dubox 6-pin
Item number	E0602xxxxx (1-axis)	Item number	E060200430 (2-axis)
Type	MJ-3K 55 CP xy:4-0-4 Hirose	Connection cable	Hirose 12-pin (ws) LiYv 0.14mm ² 500mm
Item number	E060200411 (2-axis)	Item number	Z301000512
Type	MJ-3K 55 CP xy:4-0-4 DS Dubox 6-pin	Connection cable	Dubox 6-pin LiYv 0.14mm ² 500mm
Item number	E060200025	Item number	Z301000500

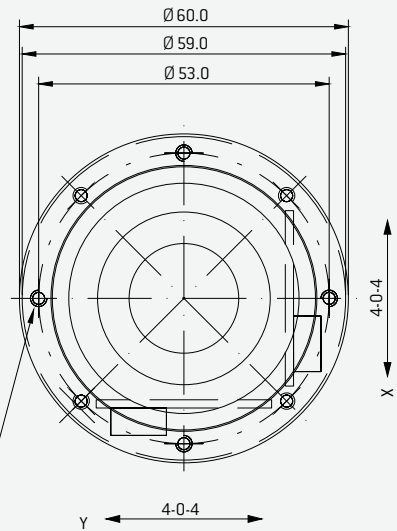
DRAWINGS FOR MJ-3K 55 DIGITAL



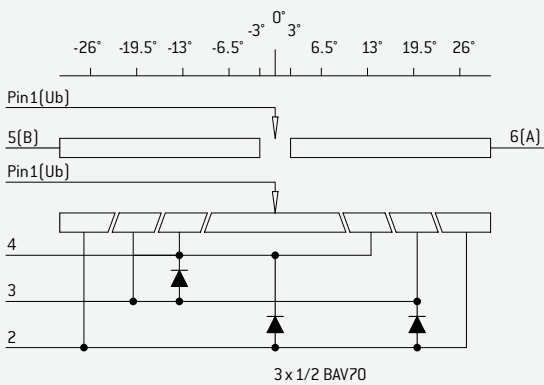
Assembly into Housing from Inside / Screw Head outside of housing
If thickness of mounting panel is 3mm: Use Screw M3x10mm / Center Hole D=49.0



Male Connector Dubox pitch: 2.54/6-pole (blue)



CONNECTOR PIN ASSIGNMENT / DIAGRAM 4-0-4



Contact Resistance Switch < 1k0hm
Life CP/PCB > 3 Mio Cycles
Anti-interference condensator (100pF) for switch contacts 4-0-4

	-26°	-19.5°	-13°	-6.5°	0°	6.5°	13°	19.5°	-26°
PIN 5	x	x	x	x					
PIN 6						x	x	x	x
PIN 4	x	x	x				x	x	x
PIN 3	x	x						x	x
PIN 2	x								x

x = electrical Connection/Combination