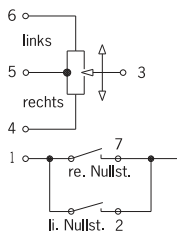


No.: 1.004.9000
with elastomer joint

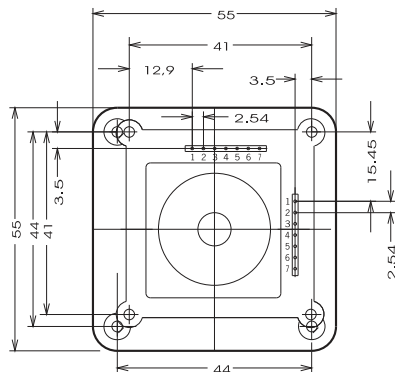
No.: 1.004.9001
with ball joint



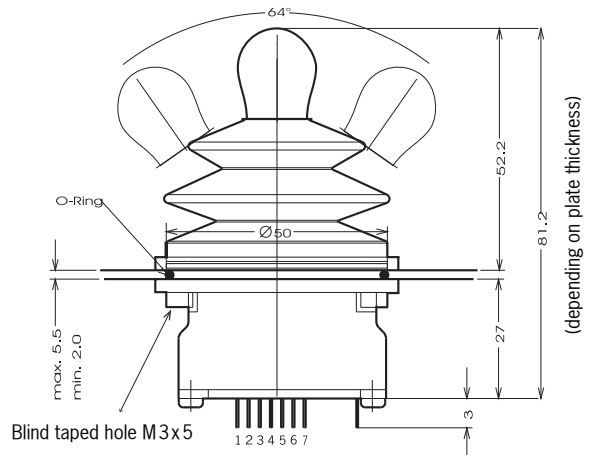
- Small, handy, compact and robust
- Type of protection: IP65
- Exact switching steps
- Mounted on elastomer joint – available with ball joint if required
- Double seal – continues to be waterproof and dust-tight even if boot is damaged
- Safety assured with separate directional switches in each direction
- Standard potentiometer control – electrical step control available on request
- Ergonomic control knob – suitable for installation in restricted spaces
- Industrial joystick for machines, robots, orthopedic equipment, etc.



Wiring diagram



View from below



Blind taped hole M3x5

Available mantissae

(Grids):

Proportional

- 10/10, 10/20, 10/30, 10/60
- 20/10, 20/20
- 30/10, 30/30, 30/40, 30/60
- 40/30, 40/40, 40/50
- 50/40
- 60/10, 60/30, 60/60

Available Gates

Standard gate MSA2
3.135.1000

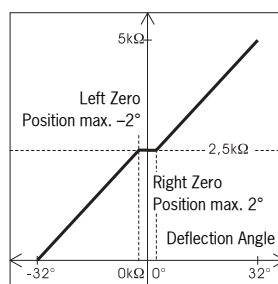
Cross gate MSA2
3.135.1001

Single gate MS
3.135.1002

Single gate MS
3.135.1002

H-gate MSA2
3.135.1003

Circular-gate
Limit stop 25°
3.135.1004



Master switch graph

Control knob, ball:
3.930.1006



Technical data

Electrical data

- Total track resistance 5 k Ω
- Tolerance 10 %
- Centre tap angle $\pm 2^\circ$
- Midpoint tap standard
- Max. power dissipation 5 mW
- Max. admissible current 0,1 mA

Mechanical data

- Angle of movement 32° in all directions
- Expected life (operations) > 1 million
- Operating force 15 N max.
- Stop resistance 200 N
- Weight 100 g

Directional switch

- Contact resistance < 2 k Ω
- Max. power dissipation max. 5 mW
- Please use pull up or pull down resistors (10 – 22 k Ω) for termination

Operating conditions

- Type of protection IP 65
- Temperature range - 20°C to +70°C

Options

- Ball joint (not double sealed)