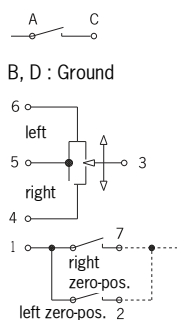


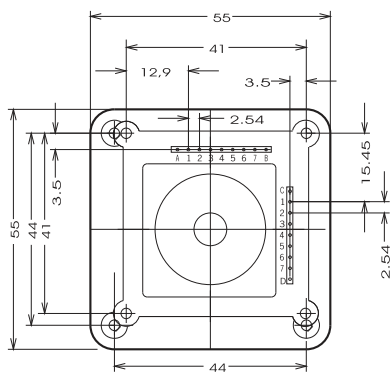
Nr.: 1.004.9030



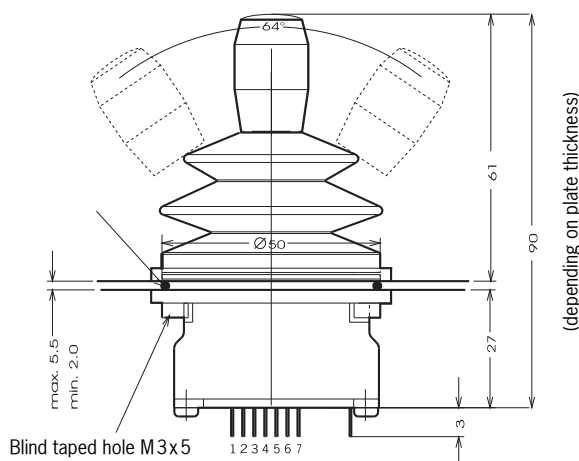
- Small, handy, compact and robust
- Type of protection: IP65
- Mounted on elastomer joint
- Double seal – continues to be waterproof and dust-tight even if boot is damaged
- Safety assured with separate directional switches in each direction
- Standard potentiometer control – electrical step control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



Wiring diagram



View from below



Blind tapped hole M3x5

Available Gates

Standard gate MSA2
3.135.1000

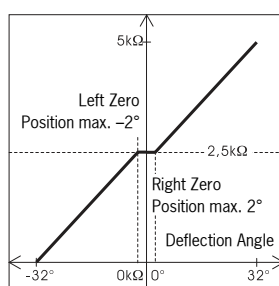
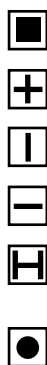
Cross gate MSA2
3.135.1001

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

Technical data

Electrical data

Total track resistance	5 kΩ
Tolerance	10 %
Centre tap angle	± 2°
Midpoint tap	standard
Max. power dissipation	5 mW
Max. admissible current drain/grinder	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 kΩ
Max. power dissipation	5 mW
Please use pull up or pull down resistors (10 – 22 kΩ) for termination	

Operating conditions

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

Options

Ball joint (not double sealed)