

CONDUCTIVE PLASTIC POTENTIOMETER POL 120



The Metallux single-turn potentiometer POL 120, with its robust design, is one of the smallest conductive plastic potentiometers ($\varnothing 13$ mm) and features a long lifetime, a wire outlet and good linearity. The servo flange makes precision installation possible.

FEATURES

- Servo flange acc. to international standards
- Long lifetime

- Good linearity
- Size $\varnothing 13$ mm

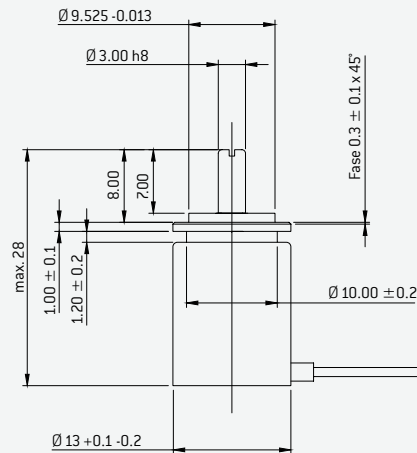
APPLICATIONS

- Valve controls
- Joysticks

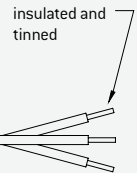
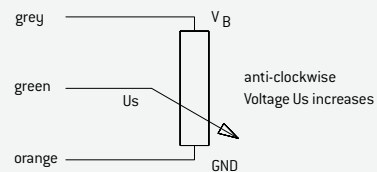
- Steering angle measurement
- Servo systems

SPECIAL FEATURES

- Diameter: 13 mm
- Lifetime: 3 million cycles
- Connection: Cable wires



Potentiometer connector assignments



ELECTRICAL SPECIFICATIONS

Resistance range [R _n]	10 kΩ *
Resistance tolerance	± 20 %
Electrical angle	308° *
Independent linearity	± 2.5 %
Resolution	Analogue, almost infinite
Load capacity	0.5 W at 70°C
Maximum wiper current	5 mA in case of malfunction
Typical supply voltage	3 – 30 VDC
Wiper load	> 100 x R _n
Insulation resistance	10 GΩ at 500 VDC
Dielectric strength	1000 VAC

Mechanical and electrical characteristics are customizable. Specifications are subject to change without notice. * Others on request.

MECHANICAL SPECIFICATIONS

Lifetime	3 million cycles
Mechanical positioning range	Continuous rotation
Protection class	IP 65 according to DIN EN 60529
Torque	< 0.7 Ncm
Bearing	Slide bearing

AMBIENT CONDITIONS

Operating temperature	– 25°C ... +85°C
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MATERIAL

Housing	Brass (nickel plated)
Axis	Stainless steel
Connectors	Tinned cable wires

SAMPLE ORDER

Part no.	Type series	Resistance range	Elect. measuring range	Elect. connection	Protection class
E050200016	POL 120	10 K	308°	3 x wire	IP 65