

# CONDUCTIVE PLASTIC POTENTIOMETER POL 120



The Metallux single-turn potentiometer POL 120, with its robust design, is one of the smallest conductive plastic potentiometers (Ø 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 Ø 13 mm

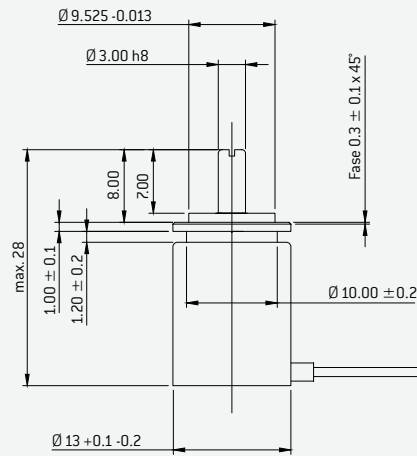
## APPLICATIONS

- Valve controls
- Joysticks

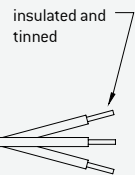
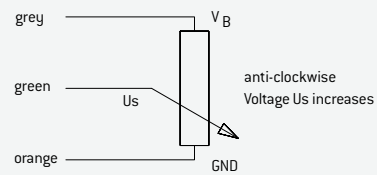
- Steering angle measurement
- Servo systems

## SPECIAL FEATURES

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



Potentiometer connector assignments



## ELECTRICAL SPECIFICATIONS

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

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

## MECHANICAL SPECIFICATIONS

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

## AMBIENT CONDITIONS

<b>Operating temperature</b>	– 25°C ... +85°C
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## MATERIAL

<b>Housing</b>	Brass (nickel plated)
<b>Axis</b>	Stainless steel
<b>Connectors</b>	Tinned cable wires

## SAMPLE ORDER

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