

CONDUCTIVE PLASTIC POTENTIOMETER POL 790



The Metallux conductive plastic precision potentiometer POL 790 is extremely robust and features excellent linearity, outstanding resolution and repeatability. The POL 790 is also available with plastic housing.

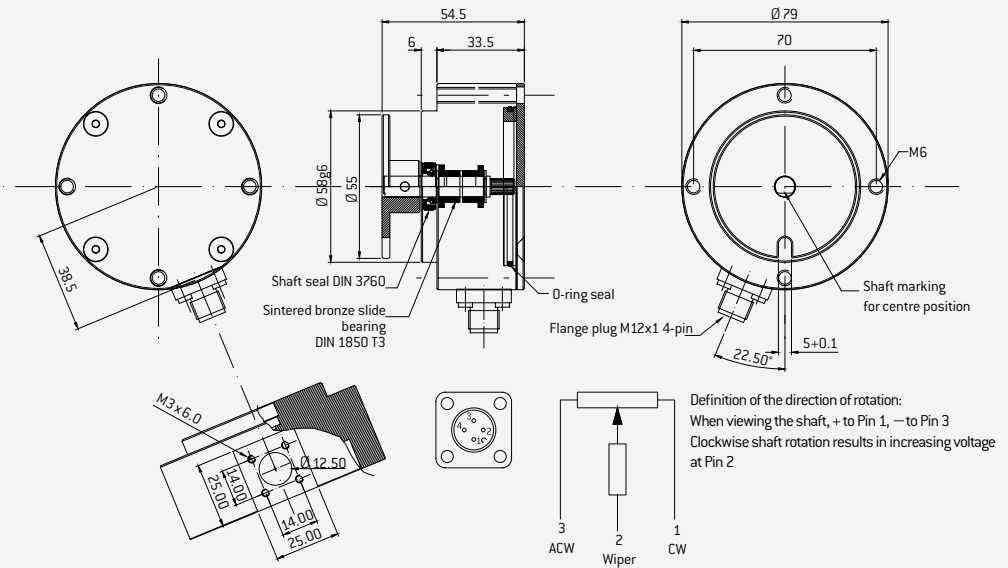
FEATURES

- Extremely robust
- Extremely good linearity

- Excellent resolution and repeatability

APPLICATIONS

- Steering angle measurement on special vehicles
- Axis position sensing in robotics
- Servo systems



ELECTRICAL SPECIFICATIONS

Resistance range [Rn]	5 kΩ*
Resistance tolerance	± 20 %
Electrical angle	350°*
Independent linearity	± 2 %*
Maximum wiper current	5 mA in case of malfunction
Typical supply voltage	3 – 30 VDC
Wiper load	> 100 x Rn
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	10 million cycles
Mechanical positioning range	360° continuous rotation
Protection class	IP 67 according to DIN EN 60529
Bearing	2 fold sinterbronze friction bearing DIN 1850
Shaft diameter	8 mm

AMBIENT CONDITIONS

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

Housing	Anodised aluminium
Axis	Stainless steel
Electrical connectors	Plug connector type M12x1 4-pole

SAMPLE ORDER

Part no.	Type series	Resistance range	Elect. measuring range	Elect. connection	Protection class
E050200416	POL 790	5K	350°	Flange connector M12x1	IP 67