

CONDUCTIVE PLASTIC PRECISION POTENTIOMETER POL 230

with ball bearing



The single-turn precision potentiometer with conductive plastic technology and a servo flange features a robust aluminum housing as well as ball bearing to protect it from high mechanical stress. The cable, wire or pin connection is sealed. The axis diameter can be selected from a range of 3 – 6.35 mm. Standard is \varnothing 3,165 mm. The POL 230 also features a long lifetime and good linearity.

FEATURES

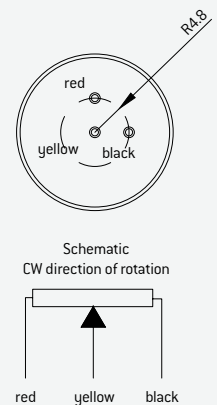
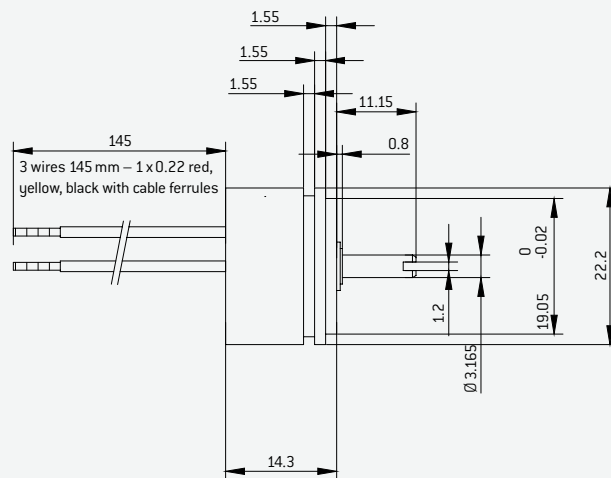
- Long lifetime
- Good linearity

APPLICATIONS

- High quality measuring systems
- Servo systems
- Drives

SPECIAL FEATURES:

- 2x ball bearing
- Diameter: 22 mm
- Lifetime: 20 million cycles, redundant versions, special versions possible



ELECTRICAL SPECIFICATIONS

| | |
|-------------------------------|-----------------------------|
| Resistance range (Rn) | 5 k Ω * |
| Resistance tolerance | \pm 20 % |
| Electrical angle | 340° * |
| Independent linearity | \pm 2 % * |
| Resolution | Analogue, almost infinite |
| Maximum wiper current | 5 mA in case of malfunction |
| Typical supply voltage | 3 – 30 VDC |
| Wiper load | > 100x Rn |
| Insulation resistance | 10 G Ω 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 | 20 million cycles |
| Mechanical positioning range | 360° continuous rotation |
| Protection class | IP 63 according to DIN EN 60529 |
| Torque | < 0.2 Ncm |
| Bearing | Ball bearing |

AMBIENT CONDITIONS

| | |
|------------------------------|-----------------|
| Operating temperature | -25°C ... +85°C |
|------------------------------|-----------------|

MATERIALS

| | |
|-------------------|----------------------------|
| Housing | Anodised aluminium |
| Axis | Stainless steel |
| Connectors | Flex cable with end sleeve |

SAMPLE ORDER

| Part no. | Type series | Resistance range | Elect. measuring range | Elect. connection | Protection class |
|------------|-------------|------------------|------------------------|-------------------|------------------|
| H060423003 | POL 230 | 5 K | 340° | 3 x wire | IP 63 |