

Precision - Wirewound - Potentiometer DP113 Ze

Central fixing M12x1

ALTMANN
Potentiometer



A precision potentiometer with central fixing for plant and machinery construction. The noble metal winding and the multiple tapper provide a safe function also at adverse environmental conditions. Due to the ball bearing axial loads of 5 kp can be taken up by the shaft in continuous operation. The potentiometer is through-rotating, but can also be provided with stops on request. Optionally it can be provided with an oil filling. To protect it against environmental influences we offer installation in a protective housing. Different adapter plates for attachment facilitate the installation at the place of use. Shafts with special lengths can be manufactured individually for single units.



clamp connection

cable connection

Mechanical data

- 1.1 Housing.....: Aluminium
- 1.2 Shaft.....: Stainless steel ø6^{h9}
- 1.3 Bearing.....: Ball bearing / needle bearing
- 1.4 Resistor element.....: Ip to 5 K-Ohm noble metal winding
: > 5 K-Ohm precision wire winding
- 1.5 Slider tap / wiper tap.....: Noble metal, multiple (single with high-impedance resistance)
- 1.6 Housing protection class.....: IP 64
- 1.7 Type of connection.....: According to table
- 1.8 Mounted by.....: Central fixing M12x1
- 1.9 Electrical rotation angle.....: 345° -1° +2°
- 1.10 Mechanical rotation angle.....: Standard throughrotation
- 1.11 Rotation speed.....: Max. 60 rpm
- 1.12 Torque.....: According to table
- 1.13 Rotation load life.....: 10 x 10⁶ slider path (360°)
- 1.14 End-stop strength.....: 50 Ncm

Electrical data

- 2.1 Resistance values, standard.....: 1, 2, 5, 10 K-Ohm
- 2.2 Resistance values,max.possible.: 50 K-Ohm
- 2.3 Resistance tolerance.....: ± 3%
- 2.4 Lowest starting resistance.....: 0,05% of overall resistance
- 2.5 Linearity tolerance.....: ± 0,3%
- 2.6 Insulation resistance.....: 20 M-Ohm
- 2.7 Test voltage.....: 500 V, 50 Hz
- 2.8 Operating voltage.....: Max. 50 V
- 2.9 Power rating.....: Max. 2 Watt
- 2.10 Slider load current.....: 1 mA (max., load life)
- 2.11 Temperature range.....: -50°C bis +100°C
- 2.12 Temperature coefficient.....: 20 ppm/°C

Options

- Multiple version
- Integrated measuring transducer 0/4...20 mA or 0...10 VDC
- Short-circuit tracks
- Centre tap
- Central fixing M10x0,75
- Rotation angle, electrical and mechanical
- Resistance tolerance: ±1%
- Shaft: special length, continuous
- Stops (rotation angle max. 345°)
- Slip coupling
- Protection class IP65
- Protection class IP67 with cable connection only
- Oil filling

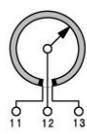
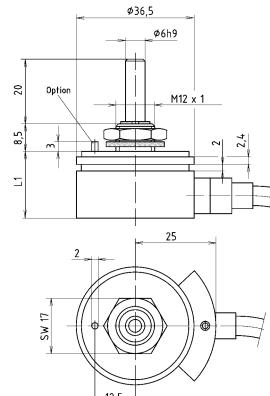
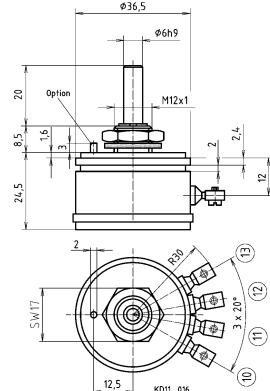
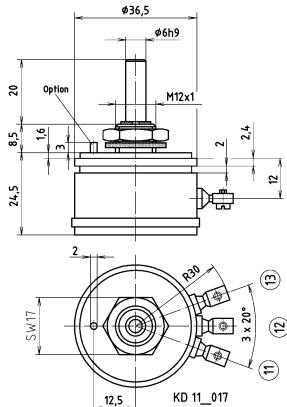
Accessories

- Adapter plate
- Bellows coupling
- Pin coupling
- Microswitch
- Rotary knob
- Scale

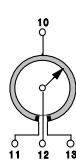
Centre tap

| |
|---------------|
| +0,5° / -0,5° |
| +1,5° / -1,5° |
| +3° / -3° |
| +6° / -6° |

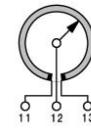
| Option | L ₁ mm | Torque Ncm |
|-----------------------------------|-------------------|------------|
| Standard (Ka) | 20,6 | Till 0,4 |
| Standard (KL) | 24,5 | Till 0,4 |
| Standard with shaft on both sides | 24,5 | Till 1,2 |
| Oil filling | 26 | Till 2,5 |
| Sensor | 38,5 | Till 0,4 |
| Internal slip coupling | --- | Till 3,5 |
| End stop stage | 46 | 6 till 13 |
| Latching function | 46 | 15 till 25 |



| terminal plan | | |
|---------------|----------|--------|
| point | function | colour |
| 11 | winding | brown |
| 12 | slider | white |
| 13 | winding | green |



| terminal plan | | |
|---------------|------------|--------|
| point | function | colour |
| 10 | centre tap | yellow |
| 11 | winding | brown |
| 12 | slider | white |
| 13 | winding | green |



| terminal plan | | |
|---------------|----------|--------|
| point | function | colour |
| 11 | winding | brown |
| 12 | slider | white |
| 13 | winding | green |