

# Precision - Wirewound - Potentiometer DP120 Ze KL

Central fixing M12x1



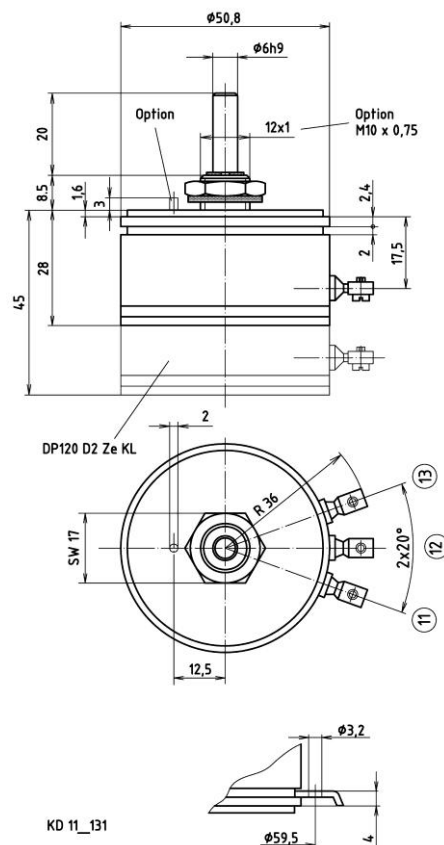
A potentiometer for rough industrial conditions. The noble metal winding provides the highest protection against environmental conditions. The multiple taper ensures a safe function. Available with solder connection as an option. Due to the ball bearing axial loads of 50 N can be taken up by the shaft in continuous operation. The potentiometer is through-rotating, but can also be provided with stops on request. 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.

## Mechanical data

- 1.1 Housing.....: Aluminium
- 1.2 Shaft.....: Stainless steel  $\varnothing 6^{h9}$
- 1.3 Bearing.....: see to table
- 1.4 Resistor element.....: Noble metal winding
- 1.5 Slider tap / wiper tap.....: Noble metal, multiple
- 1.6 Protection class.....: IP64
- 1.7 Type of connection.....: Clamp connection
- 1.8 Mounted by.....: Central fixing M12x1
- 1.9 Electrical angle of rotation.....: 345°
- 1.10 Mechanical angle of rotation.....: Standard throughrotation
- 1.11 Rotation speed.....: max. 60 rpm
- 1.12 Torque (M12).....: max. 0,4 Ncm (D2: max. 1,0 Ncm)
- 1.13 Torque (M10).....: max. 0,8 Ncm
- 1.14 Rotation load life.....: 10x10<sup>6</sup> slider path (360°)

## Electrical data

- 2.1 Resistance values, standard.....: 1, 2, 5, 10 K-Ohm
- 2.2 Resistance values,max.possible...: 90 K-Ohm
- 2.3 Resistance tolerance.....:  $\pm 3 \%$
- 2.4 Lowest starting resistance.....: 0,05 % of overall resistance
- 2.5 Linearity tolerance.....:  $\pm 0,3 \%$
- 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. 3 Watt
- 2.10 Slider load current.....: 1 mA (max., life)
- 2.11 Temperature range.....: -50 °C ...+100 °C
- 2.12 Temperature coefficient.....: 20 ppm/°C



Option: Indexing pin

## Options

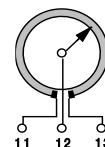
- Short-circuit tracks
- Centre tap
- Rotation angle, electrical and mechanical
- Resistance tolerance:  $\pm 1 \%$
- Shaft: special length, continuous
- Stops (rotation angle max. 350°)
- Slip coupling
- Protection class IP65
- Protection class IP67 with cable connection only
- Central fixing M10x0,75

## Accessories

- Protective housing
- Adapter plate
- Bellows coupling
- Microswitch
- Rotary knob
- Scale

## Other types

- Multiple version
- Cable connection
- Integrated measuring transducer: 0 / 4...20 mA or 0...10 VDC



| Terminal plan |          |
|---------------|----------|
| Point         | Function |
| 11            | winding  |
| 12            | slider   |
| 13            | winding  |

| Type                    | Central fixing |          | Bearing                  |
|-------------------------|----------------|----------|--------------------------|
| DP120 Ze KL             | M12x1          | Standard | Ball bearing             |
| DP120 D2 Ze KL          | M12x1          | Standard | Ball bearing             |
| Central fixing M10x0,75 | M10x0,75       | Option   | Ball and sliding bearing |

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