

Precision - Wirewound - Potentiometer DP120 Sy

Synchro flange 20

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 $\phi 6^{H9}$
- 1.3 Bearing.....: Ball bearing
- 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.....: Clamping claws
- 1.9 Electrical rotation angle.....: 345°
- 1.10 Mechanical rotation angle.....: Standard throughrotation
- 1.11 Rotation speed.....: max. 60 rpm
- 1.12 Torque.....: 0,3 ... 0,4 Ncm
(IP67 0,8 ... 1,2 Ncm)
- 1.13 Rotation load life.....: 10×10^6 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..: 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 ... $+100^\circ\text{C}$
- 2.12 Temperature coefficient.....: 20 ppm/ $^\circ\text{C}$

Options

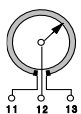
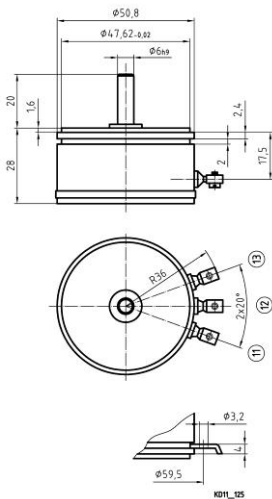
- Short-circuit tracks
- Centre tap
- Rotation angle, electrical and mechanical
- Torque 0,1 ... 0,2 Ncm
- Resistance tolerance: $\pm 1\%$
- Shaft: special length, continuous
- Stops (rotation angle max. 350°)
- Slip coupling
- Protection class IP65
- Protection class IP67 with cable connection only

Other types

- Multiple version
- Cable connection
- Integrated measuring transducer
- 0/4...20 mA

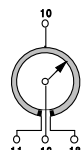
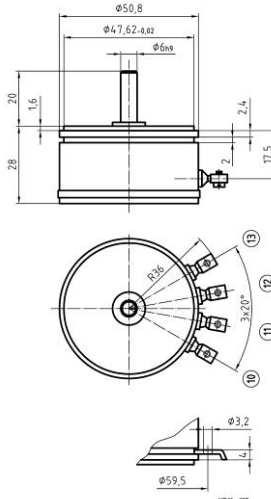
Accessories

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



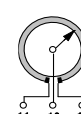
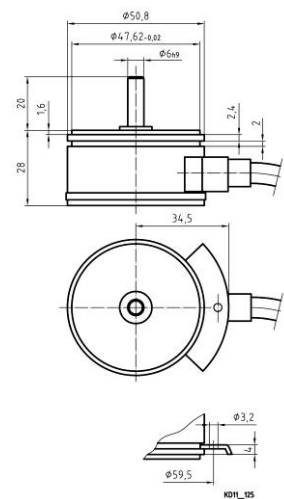
Terminal plan	
Point	Function
11	winding
12	slider
13	winding

DP120 Sy KL



Terminal plan	
Point	Function
10	centre tap
11	winding
12	slider
13	winding

DP120 Sy KL Mi



Terminal plan		
Point	Function	Colour
11	winding	green
12	slider	white
13	winding	brown

DP120 Sy Ka