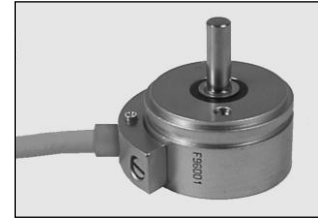


Precision - Wirewound - Potentiometer DP113 Sy

Synchro-flange 13



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. 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.



Cable connection

Mechanical data

- 1.1 Housing..... : Aluminium
- 1.2 Shaft..... : Stainless steel $\varnothing 6^{h9}$
- 1.3 Bearing..... : Ball bearing
- 1.4 Resistor element..... : ≤ 5 K-Ohm noble metal winding
: > 5 K-Ohm precision wire winding
- 1.5 Slider tap / wiper tap..... : Noble metal, multiple
- 1.6 Protection class..... : IP64
- 1.7 Type of connection..... : see table
- 1.8 Mounted by..... : Clamping claws
- 1.9 Electrical rotation angle..... : $345^\circ -1^\circ + 2^\circ$
- 1.10 Mechanical rotation angle..... : Standard throughrotation
- 1.11 Rotation speed..... : max. 60 rpm
- 1.12 Torque..... : see table
- 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... : 50 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. 2 Watt
- 2.10 Slider load current..... : 1 mA (max., load life)
- 2.11 Temperature range..... : $-50^\circ\text{C} \dots +100^\circ\text{C}$
- 2.12 Temperature coefficient..... : 20 ppm/ $^\circ\text{C}$

Options

- Short-circuit tracks
- Centre tap
- Rotation angle, electrical and mechanical
- Resistance tolerance: $\pm 1\%$
- Shaft: special length, continuous
- Stops (rotation angle max. 345°)
- Slip coupling
- Oil filling
- Protection class IP65
- Protection class IP67 with cable connection only

Other types

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

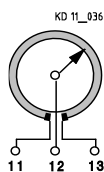
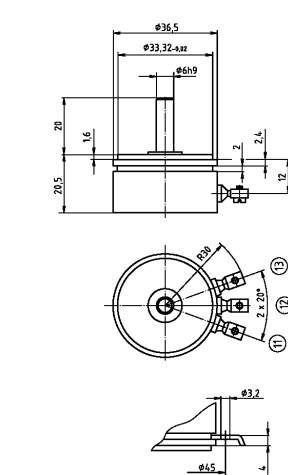
Accessories

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

Type
DP113 Sy KL
DP113 Sy Ka

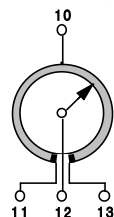
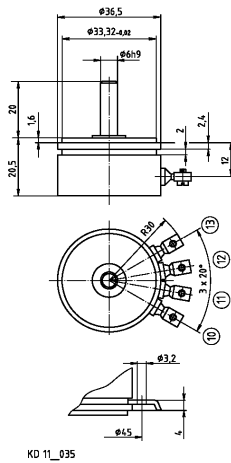
Centre tap
$+0,5^\circ / -0,5^\circ$
$+1,5^\circ / -1,5^\circ$
$+3^\circ / -3^\circ$
$+6^\circ / -6^\circ$

Options	Torque
Standard	$\leq 0,4$ Ncm
Oil filling	$\leq 2,5$ Ncm
Sensor	$\leq 0,4$ Ncm
Shaft on both sides	$\leq 2,0$ Ncm



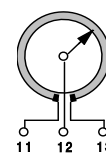
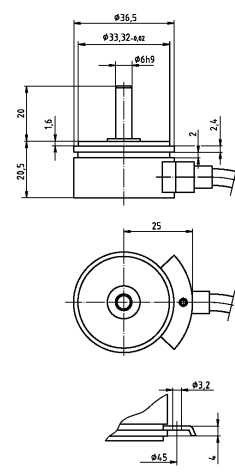
Terminal plan	
Point	Function
11	winding
12	slider
13	winding

DP113 Sy KL
Standard



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

DP113 Sy KL
+ Centre tap



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

DP113 Sy Ka
Standard

Sheet #: KE1121

Amendment/ Print: 22.08.25 / 22.08.25