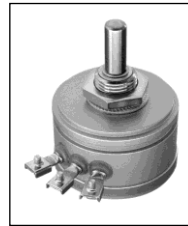


# Precision - Wirewound - Potentiometer DP113 Ze

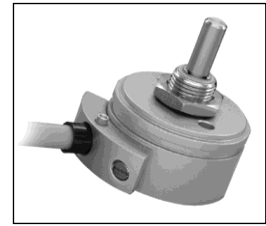


Central fixing M12x1

A precision potentiometer with central fixing for plant and machinery construction. The noble metal winding and the multiple taper provide a safe function also at adverse environmental conditions. 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.



Clamp connection



Cable connection

## Mechanical data

- 1.1 Housing.....: Aluminium
- 1.2 Shaft.....: Stainless steel  $\varnothing 6^{h9}$
- 1.3 Bearing.....: Ball bearing / needle bearing
- 1.4 Resistor element.....:  $\leq$  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-impedence resistance)
- 1.6 Protection class.....: IP64
- 1.7 Type of connection.....: see table
- 1.8 Mounted by.....: Central fixing M12x1
- 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.....:  $10 \times 10^6$  slider path ( $360^\circ$ )
- 1.14 End-stop strength.....: 50 Ncm

## 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:  $\pm 1\%$   
 Shaft: special length, continuous  
 Stops (rotation angle max.  $345^\circ + 2^\circ$ )  
 Slip coupling  
 Protection class IP65  
 Protection class IP67 with cable connection only  
 Oil filling

Type	Option
DP113 Ze KL	Clamp connection
DP113 Ze Ka	3m cable
---	Internal slip coupling

## Accessories

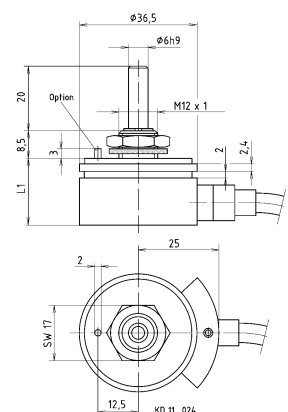
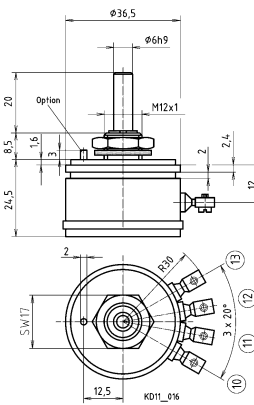
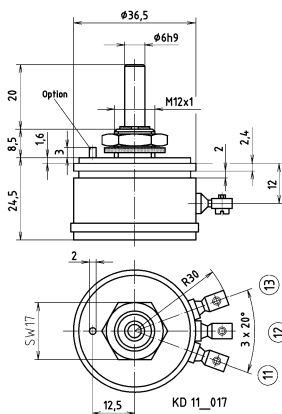
Adapter plate  
 Bellows coupling  
 Microswitch  
 Rotary knob  
 Scale

Centre tap
+0,5° / -0,5°
+1,5° / -1,5°
+3° / -3°
+6° / -6°

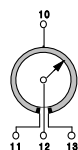
## Electrical data

- 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/ $^\circ\text{C}$

Option	L1 mm	Torque Ncm
Standard (Ka)	20,6	$\leq 0,4$
Standard (KL)	24,5	$\leq 0,4$
Standard with shaft on both sides	24,5	$\leq 1,2$
Oil filling	26	$\leq 2,5$
Sensor	38,5	$\leq 0,4$
Internal slip coupling	---	$\leq 3,5$
End stop stage	46	6 ... 13
Latching function	46	15 ... 25



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



Point	Function	Colour
10	centre tap	yellow
11	winding	brown
12	slider	white
13	winding	green



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

Sheet #: KE1122

Amendment/ Print: 22.08.25 / 22.08.25