

Precision Wirewound Potentiometer DP18 St

Single Tap, Plug Connection, Sliding Bearing



The potentiometer DP18 has a reinforced glass-fibre plastic housing of high thermal resistance and hardness. It can be additionally encapsulated and then achieves the protection class IP67.

The potentiometer can be supplied with a shaft led through on the rear side and is also available as multiple version (stackable).

The resolution of 0,15% at 5 K-Ohm / 330° is lower than for our types DP113 or DP120 corresponding to the smaller housing diameter.

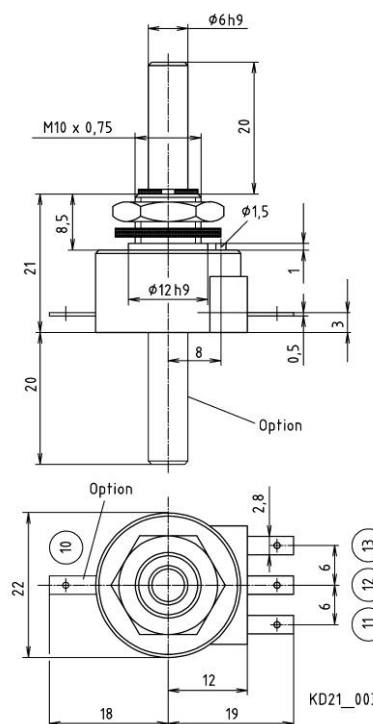


Mechanical Data

- 1.1 Housing.....: Reinforced glass-fibre plastic
- 1.2 Shaft.....: Stainless steel $\phi 6^{h9}$
- 1.3 Bearing.....: Maintenance-free sliding bearing
- 1.4 Resistor element.....: Precision wire winding
- 1.5 Slider tap / wiper tap.....: Noble metal, single
- 1.6 Protection class.....: IP60
- 1.7 Type of connection.....: Blade terminal DIN 46342
- 1.8 Mounted by.....: Central fixing M10x0,75
- 1.9 Mechanical rotation angle.....: $330^\circ +5^\circ$
- 1.10 Electrical rotation angle.....: $330^\circ -1^\circ +2^\circ$
- 1.11 Rotation speed.....: max. 60 rpm
- 1.12 Torque.....: max. 1,0 Ncm
- 1.13 Rotation life-time.....: 1×10^6 slider path (360°)
- 1.14 End-stop strength.....: 50 Ncm
- 1.15 Tension strength at blade terminals...: 30 N

Electrical Data

- 2.1 Resistance values, standard.....: 1, 2, 5, 10 K-Ohm
- 2.2 Resistance value, max.possible.....: 20 K-Ohm
- 2.3 Resistance tolerance.....: $\pm 5\%$
- 2.4 Resolution at 5 K-Ohm / 330°.....: 0,15 %
- 2.5 Max. starting / end resistance.....: 1 % (of overall resistance => 1K)
- 2.6 Linearity tolerance.....: $\pm 0,5\%$
- 2.7 Insulation resistance.....: 20 M-Ohm
- 2.8 Test voltage.....: 500 V, 50 Hz
- 2.9 Operating voltage.....: max. 50 V
- 2.10 Power rating.....: max. 1,5 Watt
- 2.11 Slider load current.....: 1 mA (max. load life)
- 2.12 Temperature range.....: $-50^\circ\text{C} \dots +100^\circ\text{C}$
- 2.13 Temperature coefficient.....: 20 ppm/ $^\circ\text{C}$



Options

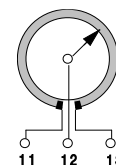
Short-circuit tracks
 Centre taps
 Resistance tolerance: $\pm 3\%$
 Resistance tolerance: $\pm 1\%$
 Shaft: special length, led through on the rear side
 Slider throughrotation
 Electrical rotation angle: max. 355°
 Mechanical rotation angle: max. 360°
 Protection class: up to IP67, shaft-side
 Protection class: up to IP67* complete

Accessories

Protection housing
 Bellows coupling
 Micro switch
 Scale 0 till 100 %
 Rotary knob
 Terminal wires

Other types

Multiple version
 Print connection
 Needle bearing

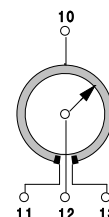


Terminal plan	
Point	Function
11	winding
12	slider
13	winding

* Potentiometer housing encapsulated, protection class IP65/67, connections are free.
 Completely encapsulated potentiometers are supplied with cable and protective housing.

Option
Centre tap dead zone + $1,5^\circ$ / - $1,5^\circ$
Centre tap dead zone + 3° / - 3°
Centre tap dead zone + 6° / - 6°
Shaft on both sides

Symmetry of the dead zone:
 Resistance difference of the halves max. 1 % of total resistance



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