

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 IP 67.

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.

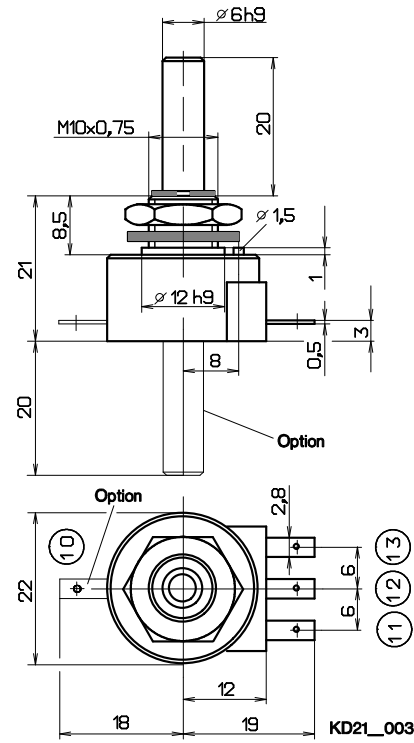


mechanical data

- 1.1 housing.....: reinforced glass fibre plastic
- 1.2 shaft.....: stainless steel $\varnothing 6^{h9}$
- 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 housing protection class.....: IP 60
- 1.7 type of connection.....: blade terminal DIN 46342
- 1.8 mounted by.....: central fixing M10 x 0,75
- 1.9 mechanical rotation angle.....: $330^{\circ} \pm 2^{\circ}$
- 1.10 electrical rotation angle.....: $330^{\circ} - 1^{\circ} + 2^{\circ}$
- 1.11 rotation speed.....: max. 60 rpm
- 1.12 torque.....: 0,6 to 1,5 Ncm
- 1.13 rotation load life.....: 1×10^6 slider path (360°)
- 1.14 end-stop strength.....: 50 Ncm
- 1.15 tensile 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°C till $+100^{\circ}\text{C}$
- 2.13 temperature coefficient.....: 20 ppm/°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 angle of rotation max. 355°
- mechanical angle of rotation max. 360°
- protection class upto IP67, shaft-side
- protection class upto IP67* complete

accessories

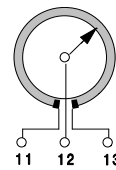
- protective housing
- bellows coupling
- pin coupling
- microswitch
- scale 0 till 100%
- rotary knob
- terminal wires

other types

- multiple version
- print connection
- needle bearing

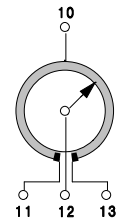
* Potentiometer housing encapsulated, protection class IP65/67, connections are free. Completely encapsulated potentiometers are supplied with cable and protective housing.

Option
Centre tap Dead Zone + 1,5° / - 1,5°
Centre tap Dead Zone + 3° / - 3°
Centre tap Dead Zone + 6° / - 6°
Shaft on both sides



terminal plan

point	function
11	winding
12	slider
13	winding



terminal plan

point	function
11	winding 1
12	slider 1
13	winding 1
10	centre tap

Symmetry of the Dead Zone:

Resistance difference of the halves max. 1% of total resistance

Sheet #: Ke2101

Amendment/ Print: 15.05.13 / 15.05.13