

# Precision Wirewound Potentiometer DP18 St Ff/Rs



With or without spring reset in central position or left-side fixing

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).

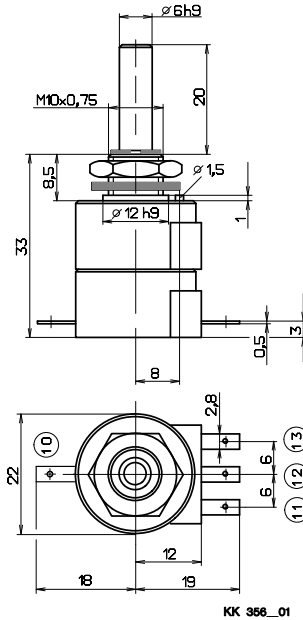


### mechanical data

- 1.1 housing..... : reinforced glass fibre plastic
- 1.2 shaft..... : stainless steel  $\varnothing 6h9$
- 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..... : according to table
- 1.10 electrical rotation angle..... : according to table
- 1.11 rotation speed..... : max. 60 rpm
- 1.12 torque..... : reset 5 Ncm on average
- 1.13 rotation load life..... :  $1 \times 10^5$  slider path (360°)
- 1.14 end-stop strength..... : 50 Ncm

### electrical data

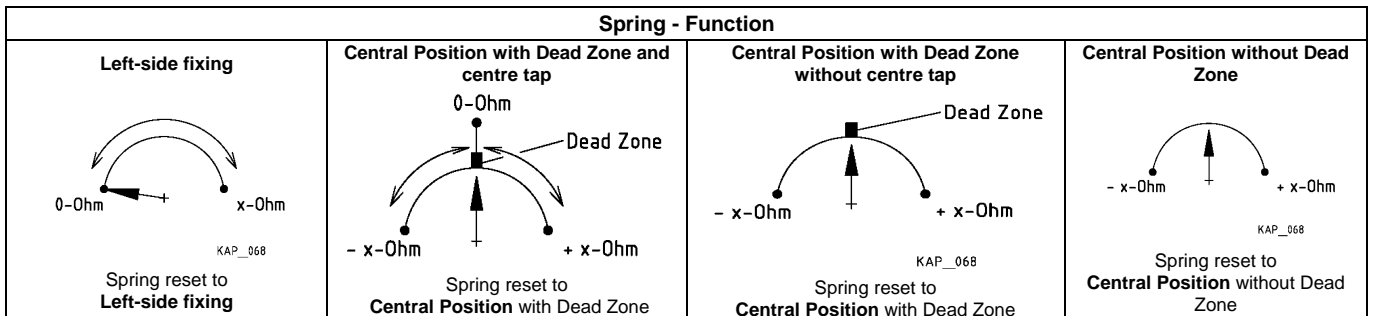
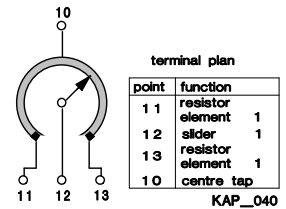
- 2.1 resistance values, standard..... : 1 , 2 , 5 , 10 K-Ohm
- 2.2 resistance values, max.possible.. : according to table
- 2.3 resistance tolerance..... :  $\pm 5\%$
- 2.4 resolution at 5 K-Ohm / 330°..... : 0,15%
- 2.5 max. starting / end resistance..... : 1% (of overall resistance => 1K)
- 2.6 linearity tolerance..... :  $\pm 1\%$
- 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..... : 1mA (max. load life)
- 2.12 temperature range..... : -20°C till +100°C
- 2.13 temperature coefficient..... : 20 ppm/°C



### Options

- resistance tolerance  $\pm 3\%$
- resistance tolerance  $\pm 1\%$
- protection class upto IP67, shaft-side
- protection class upto IP67\* complete
- protective housing
- needle bearing
- shaft: special length, led through on the rear side
- print connection
- limit switch
- scale 0 till 100%
- rotary knob
- terminal wires

**Symmetry of the Dead Zone:**  
Resistance difference of the halves  
max.1% of total resistance



Order #	Basic type/ Construction set	Type	Options			
			Spring reset	Electrical rotation angle	Mechanical rotation angle*1	Resistance values max.
21900	Basic type	DP18 St Ff/Rs				
21911	Construction set	DP18 St Ff 2 x 60°	Central Position	2 x 60° $\pm 1^\circ$	2 x 62° $\pm 1^\circ$	10 K-Ohm
21912	Construction set	DP18 St Ff 2 x 90°		2 x 90° $\pm 1^\circ$	2 x 92° $\pm 1^\circ$	20 K-Ohm
21914	Construction set	DP18 St Ff 120°	Left-side fixing	120° $\pm 1^\circ$	124° $\pm 1^\circ$	10 K-Ohm
21915	Construction set	DP18 St Ff 180°		180° $\pm 1^\circ$	184° $\pm 1^\circ$	20 K-Ohm
21920	Basic type	DP18 D2 St Ff/Rs				
21918	Construction set	DP18 D2 St Ff 2 x 60°	Central Position D2 (Tandem)	2 x 60° $\pm 1^\circ$	2 x 62° $\pm 1^\circ$	10 K-Ohm
21916	Construction set	DP18 D2 St Ff 2 x 90°		2 x 90° $\pm 1^\circ$	2 x 92° $\pm 1^\circ$	20 K-Ohm
21917	Construction set	DP18 D2 St Ff 120°	Left-side fixing D2 (Tandem)	120° $\pm 1^\circ$	124° $\pm 1^\circ$	10 K-Ohm

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

21179	Dead Zone +3° / -3° without centre tap
70750	centre tap with Dead Zone +0,5° / -0,5°
70751	centre tap with Dead Zone +1,5° / -1,5°
70752	centre tap with Dead Zone +3° / -3°
70753	centre tap with Dead Zone +6° / -6°
21212	Centre locking (without spring reset up to max. 2x165° $\pm 1^\circ$ / 2x165° +1°)
21215	10-point Lock-in position 270° electr. Angle / 330° mechan. angle

\*1 2° overflow

Sheet #: ke2145

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ALTMANN Potentiometer

Order #: According to table

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