

# Precision – Rotary - Potentiometer DP18 St Sy

Synchro flange 09

**ALTMANN**  
precision-potentiometer

The potentiometer DP18 has reinforced glass fibre plastic housing of high thermal and moisture resistivity. It can also be additionally potted in order to achieve the protection class of IP 64.

The potentiometer can be supplied with a shaft extending from the back of the housing, as well in a multiple version (stackable).

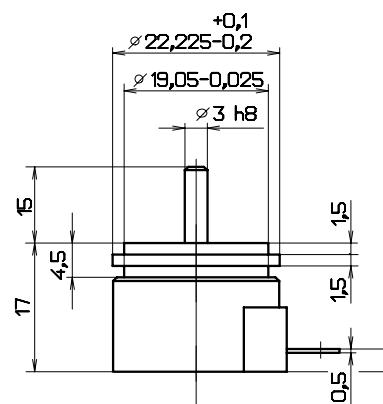
We recommend our type DP18 St Sy V02 with ball bearing and double slider tapper for quick rotary movement and high axial loads.

The scope of delivery includes Faston connectors DIN 46247 (3 pieces) and 2 clamping claws.



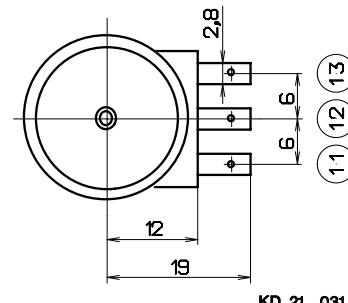
## mechanical data

- |      |                               |  |
|------|-------------------------------|--|
| 1.1  | housing.....                  | : reinforced glass fibre plastic       |
| 1.2  | shaft.....                    | : stainless steel $\varnothing 3^{h8}$ |
| 1.3  | bearing.....                  | : see table                            |
| 1.4  | resistor element.....         | : see table                            |
| 1.5  | slider tap / wiper tap.....   | : see table                            |
| 1.6  | housing protection class..... | : IP 60                                |
| 1.7  | type of connection.....       | : Faston connectors DIN 46342          |
| 1.8  | mounted by.....               | : clamping claws                       |
| 1.9  | mechanical travel.....        | : 330°, stops                          |
| 1.10 | electrical travel.....        | : 330°                                 |
| 1.11 | rotation speed.....           | : max. 60 rpm                          |
| 1.12 | torque.....                   | : 0,2 to 0,3 Ncm                       |
| 1.13 | rotation load life.....       | : see table                            |



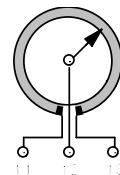
## electrical data

- |      |                                  |                               |
|------|----------------------------------|-------------------------------|
| 2.1  | resistance values, standard..... | : 1, 2, 5, 10 K-Ohm           |
| 2.2  | resistance values,max.possible   | : 20 K-Ohm                    |
| 2.3  | resistance tolerance.....        | : $\pm 3\%$                   |
| 2.4  | lowest starting resistance.....  | : 0,05% of overall resistance |
| 2.5  | linearity tolerance.....         | : $\pm 0,4\%$                 |
| 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. 1,5 Watt               |
| 2.10 | slider load current.....         | : max. 100 mA                 |
| 2.11 | temperature range.....           | : -20°C till +100°C           |
| 2.12 | temperature coefficient.....     | : 20 ppm/°C                   |



KD 21\_031

options	accessories	other types
short-circuit left taps	outer housing	multiple version
angle of rotation, electrical and mechanical resistance tolerance: $\pm 1\%$	bellows coupling	print connection
shaft: special length, extending from back of housing	pin coupling	
slider throughrotation angle of rotation 360°	microswitch	
torque reduct 0,1 to 0,2 Ncm	scale 0 bis 100	
protection IP64	rotary knob	
	terminal wires	



terminal plan	
point	function
1 1	resistor element 1
1 2	slider 1
1 3	resistor element 1

Orderno.	Type	Bearing	Element	Slider tap
21509	DP18 St Sy	Maintenace-free sliding bearing	Prec. winding	single tap
21510	DP18 St Sy V01	Maintenace-free sliding bearing	Noble winding	Noble multiple typ
21511	DP18 St Sy V02	Needle Bearing	Noble winding	Noble multiple typ

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