

# Precision Wirewound Potentiometer DP18 St Ff/Rs



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

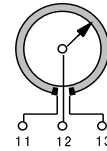
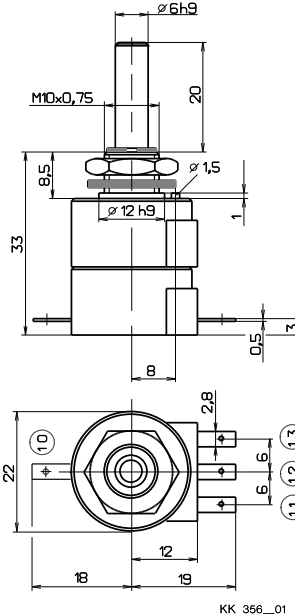
The potentiometer DP18 has a reinforced glass fibre plastic housing of high thermal resistance and hardness.

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).



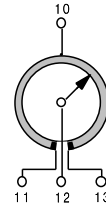
- Mechanical data**
- 1.1 Housing.....: Reinforced glass fibre plastic
  - 1.2 Shaft.....: Stainless steel  $\phi 6^{h9}$
  - 1.3 Bearing.....: Maintenance-free sliding bearing
  - 1.4 Resistor element.....: Precision wire winding
  - 1.5 Slider tap / wiper tap.....: Noble metal, single
  - 1.6 Protection class.....: 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



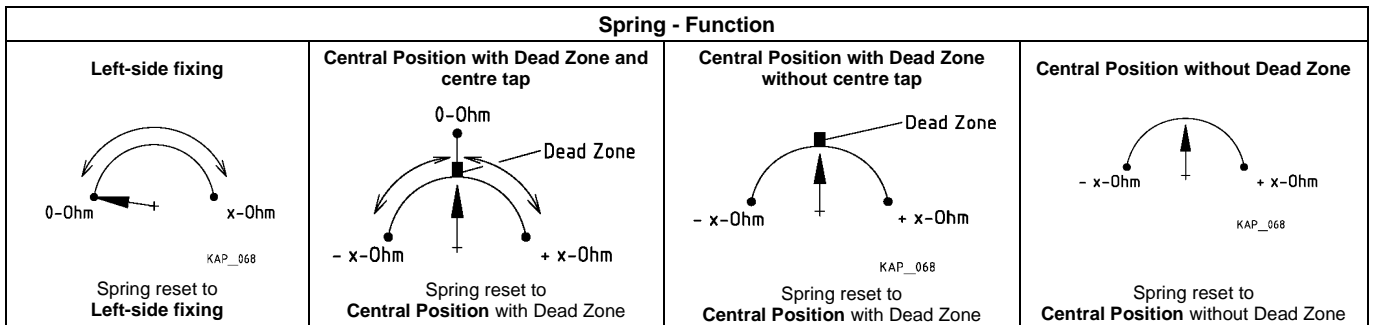
terminal plan	
point	function
11	winding
12	slider
13	winding

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

- 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



terminal plan	
point	function
10	centre tap
11	winding
12	slider
13	winding



Type	Options			
	Spring reset	Electrical rotation angle	Mechanical rotation angle*1	Resistance values max.
DP18 St Ff 2 x 60°	.Central Position	2 x 60° $\pm 1^\circ$	2 x 62° $\pm 2^\circ$	10 K-Ohm
DP18 St Ff 2 x 90°		2 x 90° $\pm 1^\circ$	2 x 92° $\pm 2^\circ$	20 K-Ohm
DP18 St Ff 120°	Left-side fixing	120° $\pm 1^\circ$	124° $\pm 4^\circ$	10 K-Ohm
DP18 St Ff 180°		180° $\pm 1^\circ$	184° $\pm 4^\circ$	20 K-Ohm
DP18 D2 St Ff 2 x 60°	Central Position D2 (Tandem)	2 x 60° $\pm 1^\circ$	2 x 62° $\pm 2^\circ$	10 K-Ohm
DP18 D2 St Ff 2 x 90°		2 x 90° $\pm 1^\circ$	2 x 92° $\pm 2^\circ$	20 K-Ohm
DP18 D2 St Ff 120°	Left-side fixing D2 (Tandem)	120° $\pm 1^\circ$	124° $\pm 4^\circ$	10 K-Ohm
DP18 St Rs	Centre locking (without spring reset up to max. 2x165° $\pm 1^\circ$ / 2x165° $\pm 1^\circ$ )			
DP18 St Rs	10-point Lock-in position 270° electr. Angle / 330° mechanical angle			
DP18 D2 Rs	Centre locking (without spring reset up to max. 2x165° $\pm 1^\circ$ / 2x165° $\pm 1^\circ$ )			

Option
centre tap with Dead Zone +0,5° / -0,5°
centre tap with Dead Zone +1,5° / -1,5°
centre tap with Dead Zone +3° / -3°
centre tap with Dead Zone +6° / -6°

\*1 2° overflow

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

**Options**

- Centre tap
- Resistance tolerance  $\pm 3\%$
- Resistance tolerance  $\pm 1\%$
- Shaft: special length, led through on the rear side
- Protection class upto IP67, shaft-side
- Protection class upto IP67\* complete

**Accessories**

- Protective housing
- Scale 0 till 100%
- Rotary knob
- Connecting wires
- Limit switch

**Further types**

- Print connection
- Needle bearing

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