

Precision Low - Torque - Potentiometer F25RU



Throughrotation, electrical functional angle 360° or 358°, shaft \varnothing 1,5 mm

The Low - Torque - Potentiometer has no stops.
The mechanical rotation angle is larger than 360°:

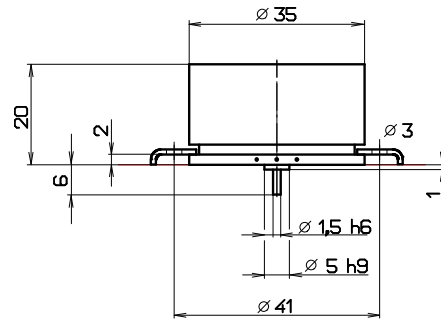
The standard electrical rotation angle is 360° or 358°.
For a functional angle of 360°, the slider can bridge the start and end of the winding. If this is not required, a functional angle of 358° should be selected.

The electrical tapping is effected by a collector to the terminal wires.
Therefore the torque amounts to 0,004 Ncm.



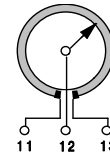
mechanical data

- 1.1 housing.....: aluminium
- 1.2 shaft.....: stainless steel \varnothing 1,5mm
- 1.3 bearing.....: brass
- 1.4 resistor element.....: noble metal winding
- 1.5 slider tap / wiper tap.....: noble metal, double
- 1.6 housing protection class.....: IP 60
- 1.7 type of connection.....: terminal wires, 200 mm
- 1.8 mounted by.....: clamping claws
- 1.9 mechanical rotation angle.....: 360°
- 1.10 electrical rotation angle.....: 358° or 360° -1°+2°
- 1.11 interruption-zone.....: 2°-1°
- 1.12 rotation speed.....: max, 1 rps
- 1.13 torque winding.....: 0,002 Ncm
- 1.14 torque total.....: 0,004 Ncm
- 1.15 rotation load life.....: 50 x 10⁶ slider path (360°)



electrical data

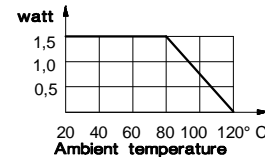
- 2.1 resistance values, standard.....: 1, 2, 5 K-Ohm
- 2.2 resistance values,max possible : 50 K-Ohm
- 2.3 resistance tolerance.....: \pm 3%
- 2.4 lowest starting resistance.....: 0,1% of overall resistance *1
- 2.5 linearity tolerance.....: \pm 0,3% effectively \pm 0,7% *2
- 2.6 insulation resistance.....: 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.....: 1 mA (max., load life)
- 2.11 temperature coefficient.....: -50°C till +100°C
- 2.12 temperature range.....: 20 ppm/°C



terminal plan

point	function	colour
11	winding 1	red
12	slider	yellow
13	winding 1	blue

power derating curve



*1 The value applies only for versions with short-circuit tracks and stops.
*2 incl. potential jump between winding turns

Order#	Type	Electrical rotation angle
01244	F25RU eD 360°	360°
01245	F25RU eD 358°	358°

options

short-circuit tracks
centre tap
electrical rotation angle
resistance tolerance: \pm 1%
shaft: special length, continuous
suitable for oil-filled instruments

accessories

outer housing
mounting set
couplings

other types

F25RD: multiple versions
F25RM: integrated measuring transducer 0/4...20mA
F25R Lin: winding linearized

F25Z160: dial surface mounting \varnothing 160
F25Z100: dial surface mounting \varnothing 100

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Order #: According to table

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