

Precision - Wirewound - Potentiometer DP120 Sy

ALTMANN  Potentiometer

Synchro flange 20

A potentiometer for harsh industrial conditions. The noble metal winding provides the highest protection against environmental conditions. The multiple tapper ensures a safe function. Available with solder connection as an option. Due to the ball bearing axial loads of 50 N can be taken up by the shaft in continuous operation. The potentiometer is through-rotating, but can also be provided with stops on request. To protect it against environmental influences we offer installation in a protective housing. Different adapter plates for attachment facilitate the installation at the place of use. Shafts with special lengths can be manufactured individually for single units.



mechanical data

- | | | |
|------|--------------------------------|--|
| 1.1 | housing..... | : aluminium |
| 1.2 | shaft..... | : stainless steel ø6 ^{h9} |
| 1.3 | bearing..... | : ball bearing |
| 1.4 | resistor element..... | : noble metal winding |
| 1.5 | slider tap / wiper tap..... | : noble metal, multiple |
| 1.6 | housing protection class..... | : IP 64 |
| 1.7 | type of connection..... | : clamp connection |
| 1.8 | mounted by..... | : clamping claws |
| 1.9 | electrical rotation angle..... | : 345° |
| 1.10 | mechanical rotation angle..... | : standard throughrotation |
| 1.11 | rotation speed..... | : max. 60 rpm |
| 1.12 | torque..... | : 0,3 to 0,4 Ncm (IP67: 0,8 to 1,2 Ncm) |
| 1.13 | rotation load life..... | : 10 x 10 ⁶ 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.. | : 90 K-Ohm |
| 2.3 | resistance tolerance..... | : ± 3% |
| 2.4 | lowest starting resistance..... | : 0,05% of overall resistance |
| 2.5 | linearity tolerance..... | : ± 0,3% |
| 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. 3 Watt |
| 2.10 | slider load current..... | : 1 mA (max., life) |
| 2.11 | temperature range..... | : -50°C till +100°C |
| 2.12 | temperature coefficient..... | : 20 ppm/°C |

options

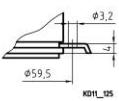
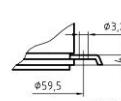
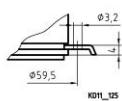
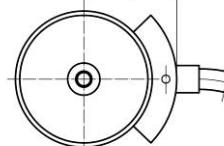
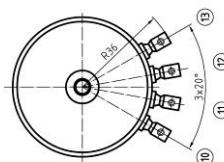
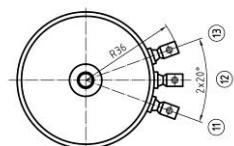
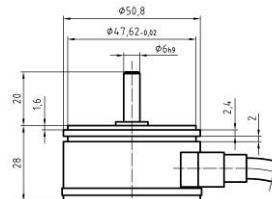
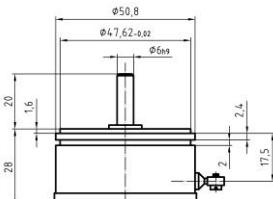
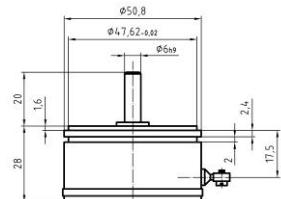
- short-circuit tracks
- centre tap
- rotation angle, electrical and mechanical
- torque 0,1 to 0,2 Ncm
- resistance tolerance: ±1%
- shaft: special length, continuous
- stops (rotation angle max. 350°)
- slip coupling
- protection class IP65
- protection class IP67 with cable connection only

other types

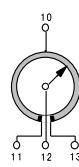
- multiple version
- cable connection
- integrated measuring transducer
- 0/4...20 mA

accessories

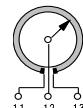
- protective housing
- adapter plate
- bellows coupling
- pin coupling
- microswitch
- rotary knob
- scale



| terminal plan | |
|---------------|----------|
| point | function |
| 11 | winding |
| 12 | slider |
| 13 | winding |



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



| Anschlussplan | | |
|---------------|----------|--------|
| point | function | colour |
| 11 | winding | green |
| 12 | slider | white |
| 13 | winding | brown |

DP120 Sy KL

DP120 Sy KL Mi

DP120 Sy Ka

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ALTMANN Potentiometer

Herringhauser Straße 29
32051 Herford - Germany

P.O. Box 11 42
32001 Herford - Germany

Phone: 05221/3404-0
Fax : 05221/3404-29

www.potentiometer.de
[eMail: info@potentiometer.de](mailto:info@potentiometer.de)

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