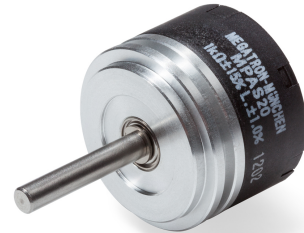


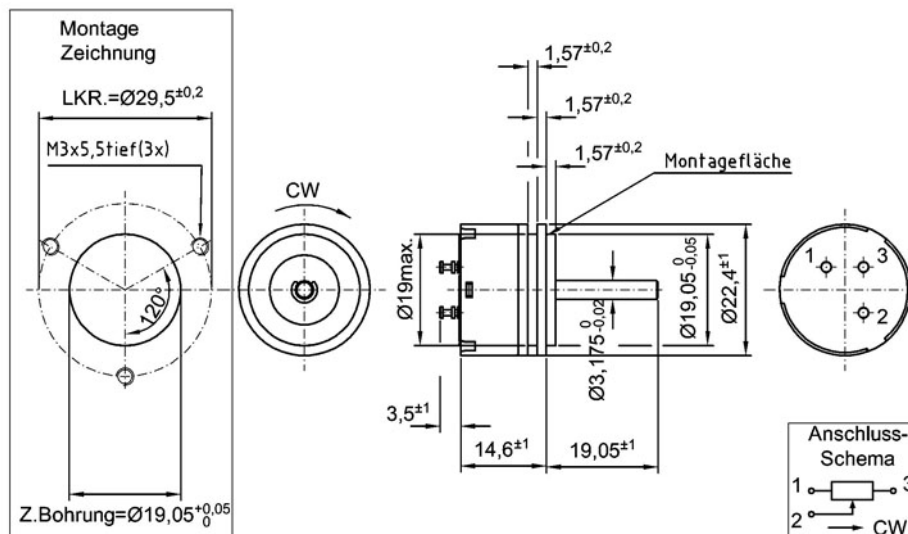
## Series MPAS20, MPAS21 - Conductive Plastic Potentiometer

- Body diameter 22 mm
- 2 precision ball bearings
- With or without mechanical stop
- Resistance values from 0,5 to 100 kOhm
- Life 10 Mio. revolutions
- Customized adaptations

The MPAS is a high precision potentiometer. Main application as a sensor in closed loop controls. Sealed shaft (IP65) and body (IP64) possible. Preference types from stock.



## Drawing



## Series MPAS20, MPAS21 - Conductive Plastic Potentiometer

| Electrical Data                     | MPAS20                        | MPAS21    |
|-------------------------------------|-------------------------------|-----------|
| Electrical rotation angle           | 340° ± 4°                     | 320° ± 4° |
| Resistance values                   | 0,5 .. 100 kOhm               |           |
| Resistance tolerance                | ± 15% (± 10%)                 |           |
| Linearity tolerance, independent    | ± 1% (± 0,5%)                 |           |
| Output smoothness                   | < 0,1%                        |           |
| Power rating at +70°C (0W at 105°C) | 1 W                           |           |
| Wiper current                       | 10 µA max. / 2 µA recommended |           |
| Insulation                          | 1000 MOhm at 500 VDC          |           |

| Mechanical Data           | MPAS20                           | MPAS21              |
|---------------------------|----------------------------------|---------------------|
| Mechanical rotation angle | 360° without stop                | 320° ± 5° with stop |
| Max. rotational speed     | 400 rpm                          |                     |
| Life                      | 10 x 10 <sup>6</sup> revolutions |                     |
| Starting torque           | 0,2 Ncm                          |                     |
| Stopper strength          | --                               | 60 Ncm              |

| Environmental Specifications / Materials |   |  |
|--|---|--|
| Protection class shaft sealing, optional | IP65  |  |
| Operating temperature                    | -55 .. + 105 °C   |  |
| Housing material                         | plastic   |  |
| Bearing                                  | 2 precision ball bearings                                 |  |
| Shaft material                           | stainless steel   |  |
| Connection                               | soldering pins  |  |
| Mounting parts                           | 3 fixing clamps with screws M3x0,5 (included in delivery) |  |
| Weight                                   | 20 g  |  |

# Series MPAS20, MPAS21 - Conductive Plastic Potentiometer

## Order code

| Description                     | Options  |
|---------------------------------|--|
| Without Stop                    | MPAS 20  |
| With Stop                       | MPAS 21  |
| Res [Ohm]                       | R500 (*)<br>R1K<br>R2K (*)<br>R5K<br>R10K<br>R20K (*)<br>R50K (*)<br>R100K (*) |
| Resistance tolerance            | W15%<br>W10% (*)   |
| Independent linearity [± %]     | L1%<br>L0,5% (*)   |
| Sealing ring in the bushing (*) | D (*)  |

short-term stock types can be found on: <http://www.megatron.de/en/stocklists/linear-sensors/lagerliste.html>

bold print = standard option

(\*) = on request available for projects

## For higher quantities or on-going demand, additional options are available as described below

For example:

- Other resistance values
- Mounting of cables and connectors
- Multi ganged versions for redundancy
- Special shaft design

**For technical advice, projects, samples, questions about pricing, delivery times and availability please contact us**

Tel.: +49 89 46094-500

export@megatron.de

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