

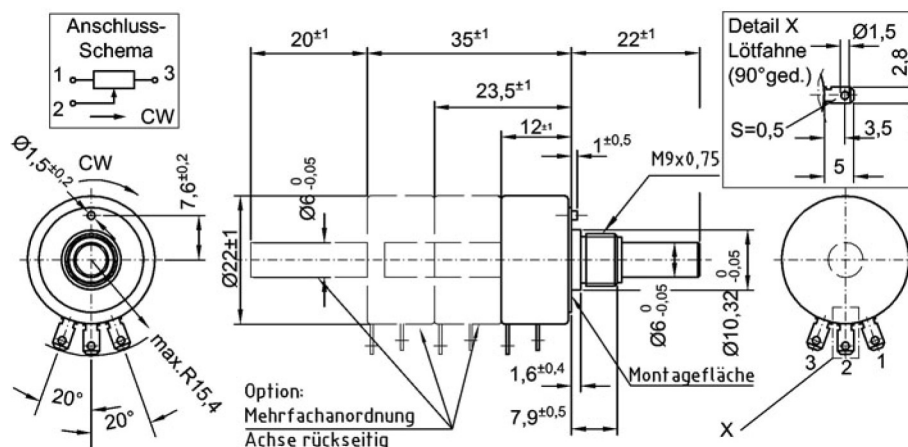
## Series RP19, RP20 / Singleturn Wirewound Potentiometer

- Housing  $\varnothing$  22 mm
- With or without stop
- Multi ganging up to 10 Pots possible
- Linearity tolerance  $\pm 0,5\%$  ( $\pm 0,25\%$ )
- Rear shaft optional
- Customized adaptations

A robust angle sensor with excellent linearity tolerance.  
Front shaft sealing (IP65) optional. Preference types from stock.



## Drawing



## Series RP19, RP20 / Singleturn Wirewound Potentiometer

Electrical Data	RP19	RP20
Electrical Angle	320° ± 5°	355° ± 5°
Resistance Values	10 ... 20 kOhm	
Resistance Tolerance	± 3% (± 1%)	
Linearity Tolerance, independent	± 0,5% Standard ± 0,25% improved ± 0,35% improved < 1K	
Noise	< 100 Ohm	
Power Rating at + 70°C (0W at 105°C)	0,5 W	
Wiper Current	maximum 35 mA recommended < 0,02 mA	
Insulation	1000 MOhm at 1000 VDC	
Dielectric Strength	1000 VAC (1 min.)	

Windings, Resolution									
Resistance Value [Ohm]	50	100	200	500	1k	2k	5k	10k	20k
Windings	300	370	470	450	570	740	1000	1270	1670
Resolution in % (100% / winding)	0,333	0,27	0,213	0,222	0,1754	0,135	0,1	0,079	0,599

Mechanical Data	RP19	RP20
Mechanical Angle	320° ± 5° with Stop	360° without Stop
Maximum Rotational Speed	40 rpm	
Life (n x 90% elec. angle)	1 Mio. turns	
Starting Torque	< 0,5 Ncm	
Stopper Strength	< 60 Ncm	--
Fastening torque mounting nut	< 150 Ncm max.	

Other Data	
Protection	Standard IP40 / Optional IP65
Operating Temperature	-55 ... + 105° C
Bearing	Sleeve Bearing
Housing Material	glass-fiber reinforced plastic PA66
Shaft Material	stainless steel
Connection	gold-plated solder lugs, fitted to receptacles
Mounting parts	hex-nut, tooth washer
Weight	20 g

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### Order code

Description	Options
<b>With Stop</b>	<b>RP 19</b>
<b>Without Stop</b>	<b>RP 20</b>
<b>Res [Ohm]</b>	<b>R500</b> (*) <b>R1K</b> <b>R2K</b> (*) <b>R5K</b> <b>R10K</b> <b>R20K</b> (*) <b>R50K</b> (*) <b>R100K</b> (*)
Rear shaft, length [mm] (*)	RA.. (*)
Special diameter of the rear shaft [mm] (*)	RADM (*)
<b>Resistance tolerance</b>	<b>W3%</b> <b>W1%</b> (*)
<b>Independent linearity [± %]</b>	<b>L0,5%</b> <b>L0,25%</b> (*)
Center tap (voltage type) (*)	CT (*)
Special shaft length [mm] (*)	A.. (*)
Special shaft diameter [mm] (*)	DM (*)
Screwdriver slot (*)	B (*)
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**

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The specifications and information in this datasheet cannot consider all special demands that are caused by the application. Because of this, they are no general description of the properties of the product.  
 2014 December 23th. All specifications are subject to change without notice.