

## Series MP20, MP21 / Conductive Plastic Potentiometer

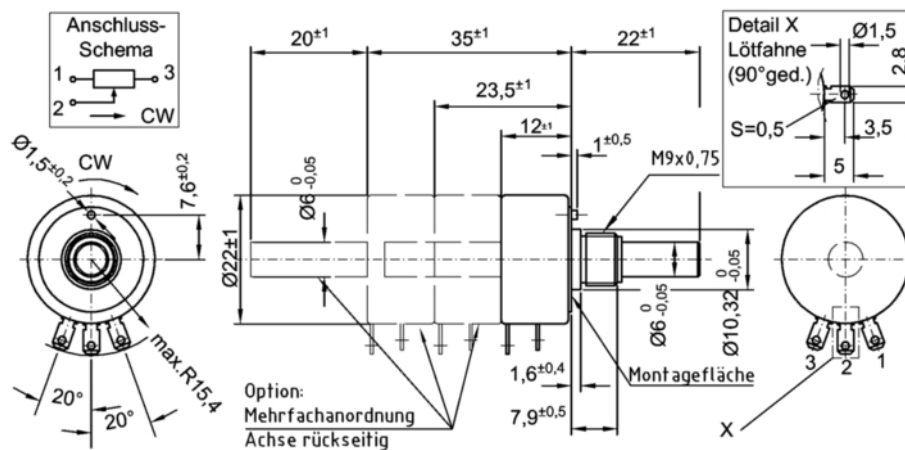
- Housing  $\varnothing$  22 mm
- With or without stop
- Multi ganging up to 10 Pot.
- Rear shaft optional
- Linearity tolerance  $\pm 1\%$  ( $\pm 0,5\%$ )
- Life 10 million revolutions
- Customized adaptations

High precision, with a very long life expectancy and a wide range of options.

Sealed shaft (IP65) and body (IP64) possible. Preference types from stock.



## Drawing



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### Electrical Data

Electrical rotation angle	320° ± 5°
Resistance values	0,5 .. 100 kOhm
Resistance tolerances	± 15% (± 10%)
Linearity tolerance, independent	± 1% (± 0,5%)
Noise	< 0,1%
Power rating at +70°C (0W at 105°C)	1 W
Wiper current	max. 10 µA / recomm. < 2 µA
Insulation	00 MOhm at 500 VDC
Dielectric strength	500 VAC (1 min)

Mechanical Data	MP20	MP21
Mechanical rotation angle	360° without stop	32° with stop
Rotational speed	400 rpm max.	
Life (n x 90% elec. angle)	10 x 10 <sup>6</sup> rev.	
Startoing torque	< 0,5 Ncm	
Stopper strength	--	< 60 Ncm
Fastening torque mounting nut	< 150 Ncm max.	

### Other Data

Protection class	Standard IP40 / Optional IP65
Operating temperature	-55 .. +105° C
Bearing	sleeve bearing
Housing Material	Nylon
Shaft Material	stainless steel
Connection	gold-plated solder lugs (for receptacle like AMP Faston 110 Part-No. 42236-1)
Mounting parts	hex-nut, tooth washer (included in delivery)
Weight	20 g

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Options and Order Description										
Description	Series	Options (Code)								
without stop	MP20									
with stop	MP21									
Resistance values		R500	<b>R1K</b>	R2K	<b>R5K</b>	<b>R10K</b>	R20K	R50K	R100K	
Rear shaft length (Standard 20 mm)			RA							
Rear shaft Ø (Standard 6 mm)				RADM						
Resistance tolerance					<b>W15%</b>	W10%				
Linearity tolerance						<b>L1%</b>	LO,5%			
Center tap (voltage type ***)							CT			
Special front shaft length (Standard 22 mm)								A..		
Special front shaft Ø (Standard 6 mm)									DM..	
Screwdriver slot										B
Sealing ring										D
Example Standard Version	MP20	R1K				W15%	L1%			

**\*\*\*Remark:**

For the option center tap as voltage type, the current has to be < 1mA. Because of the small short circuit zone on this type (ca. 1°-2°). But the advantage is a minor influence to the linearity. If it is necessary to connect the center tap with ground or the voltage supply, the current type should be used. For this type is the short circuit zone at least 3°-6°. Unless otherwise indicated the voltage type will be supplied. Please talk to our sales team for further details.

**Please ask for more options and accessories.**

Preference type (bold) from stock.

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.  
2008 April 30. All specifications are subject to change without notice.