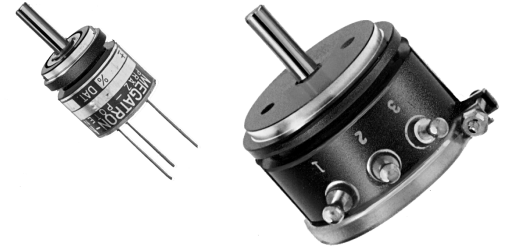


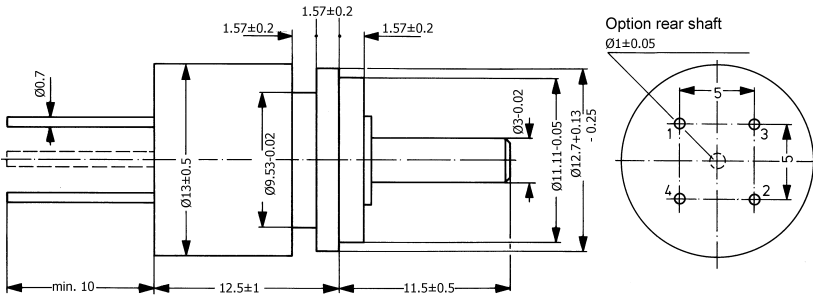
# MCP05 MCP22 MCP40 MCP50

## CONDUCTIVE PLASTIC POTENTIOMETERS

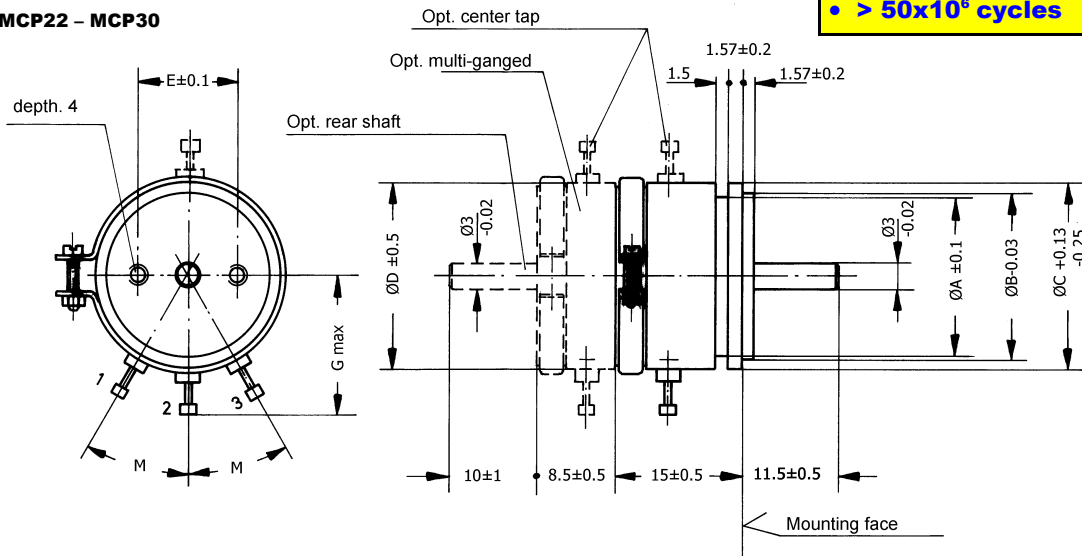
This high quality product has aluminium housing and ball-bearings. It is available in 6 various sizes. Thanks to its high precision, the MCP potentiometer can be used as an angular sensor. Many special versions are possible.



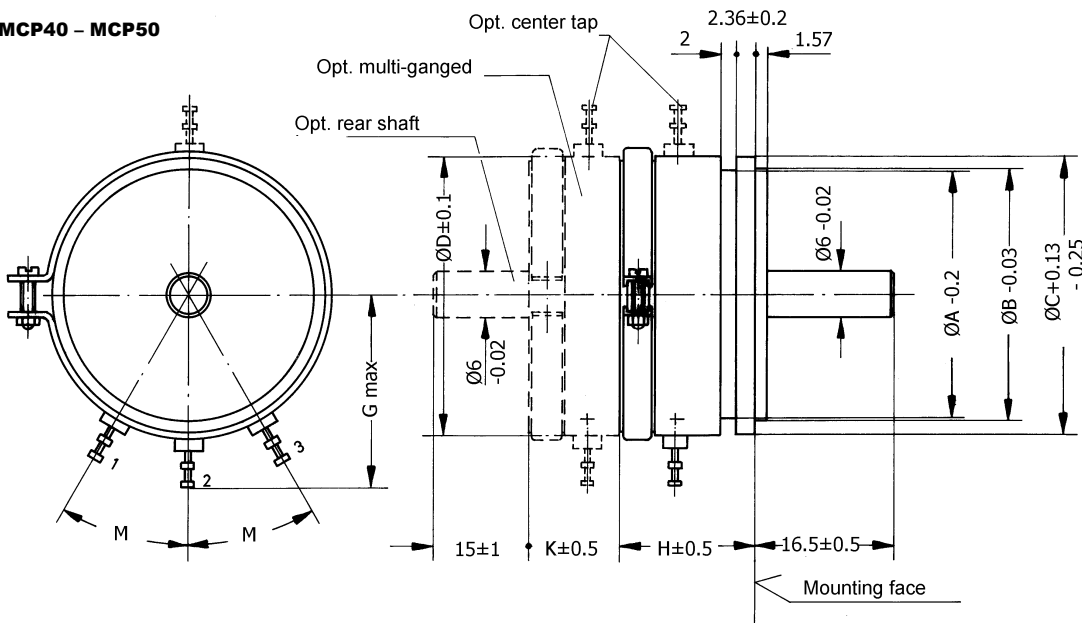
### MCP-05



### MCP22 – MCP30



### MCP40 – MCP50



- High precision
- Linearity  $\pm 0.05\%$
- $> 50 \times 10^6$  cycles

Type	A	B	C	D	E	F	G	H	K	M	Fixing	Clamp
MCP05	9.35	11.11	12.70	12.70	-	-	-	12.5	-	-	17.0	SFN3
MCP22	19.10	19.05	22.83	22.23	12.0	2xM2	18.0	15.0	12.5	30°	28.5	SFN2
MCP30	24.00	24.61	26.97	26.97	15.0	2xM3	20.0	15.0	12.5	30°	35.0	SFN2
MCP40	32.80	33.32	36.50	36.50	-	-	27.0	18.0	12.0	25°	43.7	SFN1
MCP50	47.00	47.63	50.80	50.80	-	-	34.5	18.0	12.0	20°	58.1	SFN1

Electrical specs	MCP05	MCP22	MCP30	MCP40	MCP50
Resistance value (k $\Omega$ )	1 2 5 10 20 (50)	1 2 5 10 20 50 (100)	1 2 5 10 20 50 (100 200)	1 2 5 10 20 50 (100 200)	1 2 5 10 20 50 (100 200 500)
Tolerance (%)	$\pm 10$	$\pm 10$	$\pm 10$	$\pm 5$	$\pm 5$
Best possible tolerance (%)	-	$\pm 5$	$\pm 5$	$\pm 3$	$\pm 2$
Linearity (%)	$\pm 1$	$\pm 0.75$	$\pm 0.25$	$\pm 0.1$	$\pm 0.1$
Best possible linearity (%)	-	$\pm 0.2$	$\pm 0.1$	$\pm 0.05$	$\pm 0.05$
Resolution	$\infty$	$\infty$	$\infty$	$\infty$	$\infty$
Ripple (%)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Power rating at 40°C (0 to +105°C) (W)	0.2	0.5	0.75	1	1.25
Residual ( $\Omega$ )	< 10	< 5	< 5	< 5	< 5
Wiper current max (mA)	1	1	1	1	1
Electrical stroke $\pm 5^\circ$ ( $^\circ$ )	300	320	340	340	350
T.C.					
-55 and +125 $^\circ\text{C}$ ( $\pm\text{ppm/K}$ )	400	400	400	400	400
+25 and +75 $^\circ\text{C}$	200	200	200	200	200
<b>Mechanical specs</b>					
Mechanical stroke ( $^\circ$ )	360	360	360	360	360
Starting torque (Ncm)	0.2	0.2	0.2	0.2	0.3
Operating torque (Ncm)	0.1	0.1	0.15	0.15	0.2
Axial backlash (mm)	0.2	0.2	0.2	0.2	0.2
Radial backlash (mm)	0.05	0.05	0.05	0.05	0.05
Rotation speed (t/mn)	1000	2000	2000	2000	2000
Life time (move)	10x10 <sup>6</sup>	50x10 <sup>6</sup>	50x10 <sup>6</sup>	50x10 <sup>6</sup>	50x10 <sup>6</sup>
Guiding	2 ball-bearings				
Weight (g)	6	20	30	60	80
<b>Environmental specs</b>					
Operating temperature ( $^\circ\text{C}$ )	-55 à +125				
Dielectric strength	1000 V / 1 mn				
Shocks	50 G / 11 ms				
General conditions	MIL-R-39023				
<b>Materials</b>					
Housing	Black anodized aluminium				
Shaft	Amagnetic stainless steel				
Pins	Gold coloured brass				
Accessories	3 mounting clamps included				

Mechanical options :  
 Multi-ganged (except MCP05)  
 Rear shaft  
 Special shafts (diam, length.)  
 Special strokes  
 Lower operating torque

Electrical options :  
 Special resistance values  
 Special tolerances  
 Strokes  
 Neutral zones