

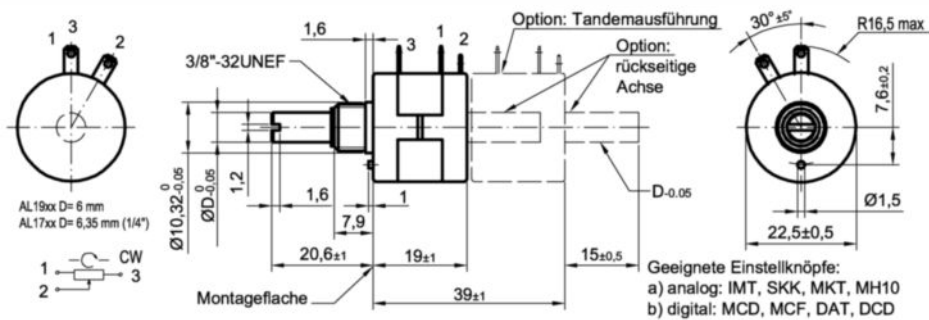
Series HH17xxM, HH19xxM / Multiturn Hybrid Potentiometer

- Body diameter 22 mm, with brass bushing
- Resistance values from 1 kOhm to 100 kOhm
- Linearity tolerance $\pm 0,25\%$ ($\pm 0,1\%$)
- Various options like:
 - tandem or multi ganging,
 - sealing ring (IP65),
 - reinforced bearings for radial shaft load
- Custom specific adaptations

For applications which demands a high life expectancy and a low noise. Position sensor in closed loop control systems. Preference types from stock.



Drawing (with optional tandem version and rear shaft extension)



Dimensions in mm

Series HH17xxM, HH19xxM / Multiturn Hybrid Potentiometer

Electrical Data		3 turn	5 turn	10 turn
Technology		hybrid		
Electrical angle	[°]	1080 ± 5	1800 ± 5	3600 ± 5
Resistance values	[kOhm]	1 ... 50	1 ... 50	2 ... 100
Resistance tolerance	[%]	± 10 (± 5)		
Independent Linearity Tolerance	[%]	± 0,5	± 0,35 (± 0,2)	± 0,25 (± 0,1)
Output smoothness (relating to feeding voltage)	[%]	k.A.	0,05	0,015
Power at + 40°C (0W at 125°C)	[W]	0,5	1	2
Wiper current recomb. / max.	[µA]	2 / 10		
Insulation Resistance	[MOhm]	100 at 1000 VDC		

Mechanical Data		3 turn	5 turn	10 turn
Mechanical rotation angle	[°]	1080 + 10	1800 + 10	3600 + 10
Maximum rotational speed	[rpm]	40		
Life time	[turns]	1,5 x 10 ⁶	2,5 x 10 ⁶	5 x 10 ⁶
Starting torque	[Ncm]	0,5		
Stopper strength	[Ncm]	35		
Max. fastening torque mounting nut	[Ncm]	150		

Other Data		
Protection class of optional shaft sealing		IP65
Operating temperature	[°C]	-55 ... + 105
Bearing		sleeve bearing
Housing material		glass-fiber reinforced Nylon
Shaft material		stainless steel
Material bushing		brass
Terminals		gold-plated solder lugs for connector acc. DIN46247 part 3
Mounting parts, included in delivery		hexnut, tooth washer
Weight	[g]	22

Series HH17xxM, HH19xxM / Multiturn Hybrid Potentiometer

Options and Order Description

Description	Series	Options									
Potentiometer 3 turn, 6,35mm shaft	HH1703M	M = metal bushing									
Potentiometer 3 turn, 6mm shaft	HH1903M										
Potentiometer 5 turn, 6,35mm shaft	HH1705M										
Potentiometer 5 turn, 6mm shaft	HH1905M										
Potentiometer 10 turn, 6,35mm shaft	HH1710M										
Potentiometer 10 turn, 6mm shaft	HH1910M										
Res. Values 1k, 2k , 5k , 10k , 20k, 50k, 100k (1K - 3 and 5 turn only, 100K - 10 turn only)		R									
Rear shaft length (Standard 15mm)			RA								
Rear shaft diameter (Standard 6mm)				RADM							
Resistance tolerance $\pm 10\%$, ($\pm 5\%$)					W						
Linearity tolerance 10 turn: $\pm 0,25\%$ ($\pm 0,1\%$) 5 turn: $\pm 0,35\%$ ($\pm 0,2\%$) 3 turn: $\pm 0,35$						L					
Center tapping							CT				
Special front shaft length (Standard 20,6mm)								A			
Special front shaft diameter (Standard 6 resp. 6,35mm)									DM		
Sealing ring in the bushing											D
Example: Standard version	HH1710M	R2k				W10%	L0,25%				
	HH1710, metal bushing, res. value 2kOhm, res. tolerance $\pm 10\%$, independent linearity tolerance $\pm 0,25\%$, front shaft length 20,6mm, front shaft diameter 6,35mm										
Example: Special version	HH1710M	R2k	RA9	RADM4	W5%	L0,1%	CT	A15	DM5	D	
	HH1710, metal bushing, res. value 2kOhm, rear shaft length 9mm, rear shaft diameter 4mm, resistance tolerance $\pm 5\%$, independent linearity tolerance $\pm 0,1\%$, center tapping, front shaft length 15mm, front shaft diameter 5mm, sealing ring										

Please ask for more options.

Preference types from stock. (Standard versions with bold printed resistance values)

Series HH17xxM, HH19xxM / Multiturn Hybrid Potentiometer

Our speciality are custom solutions, for reasonable prices even for small series

Special shaft dimensions, o-ring for shaft sealing, sealed housing, special electrical and mechanical angles, tighter tolerances, center tapping. Mounting of gear wheels and other mechanical parts, assembling of cables and connectors. Reinforced bearing depending on the application.

Please note

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. Please also consider our detailed specifications. (Available on request)

02. December 2003. All specifications are subject to change without notice.