# **Model 22HHP** Hybrid (bushingmount servomount) Low cost item

Standard dimensions (with metric dimensions)

Bushingmount type



Note: Dimensions of shaft and bushing are equal to those of model 22HP series with wirewound resistive element and please refer to those dimensions and notes

## Servomount type (bronze bearing incorporated)





Model 22HHP-10 (Bushingmount)



Model 22HHPS-10 (Servomount)

## Standard Model Nos.

#### Bushingmount type:

5-turn models:	22HHP-5	22HHP-5M
	22HHP-5E	22HHP-5N
10-turn models:	22HHP-10	22HHP-10M
	22HHP-10E	22HHP-10N
Servomount type:		
5-turn models:	22HHPS-5	
10-turn models:	22HHPS-10	

### General Specifications

Standard Resistance			
Values:	1k, 2k, 5k, 10k, 20	0k, 50k (Ω)	(5-turn)
	2k, 5k, 10k, 20k, 5	50k, 100k (	Ω) (10-turn)
Total Resistance			
Tolerance:	Standard Class ±10%(K)		
	Precision Class ±	5%(J)	
Independent Linearity			
Tolerance:		<u>5-turn</u>	<u>10-turn</u>
	Standard Class	±0.35%	±0.25%
	Precision Class	±0.2%	±0.1%
Resolution:	Esentially infinite		
Output Smoothness:	Within 0.05% against input voltage		
	(5-turn)		
	Within 0.015% against input voltage		
	(10-turn)		



Contact Resistance		
Variation:	Within 5% C.R.V. (5-turn)	
Dower Doting	Within 3% C.R.V. (10-turn)	
Power Rating:	1.0W (5-turn) 2.0W (10-turn)	
Electrical Travel:	360° X n ±5° (n: No. of turns)	
Mechanical Travel:	360° X n $^{+10^{\circ}}_{0^{\circ}}$ (n: No. of turns)	
Insulation Resistance:	Over 100MΩ at 1,000V.D.C.	
Dielectric Strength:	1 minute at 1,000 V.A.C.	
Starting Torque:	Within 5mN⋅m (50gf⋅cm)	
Stopper Strength:	Approx. 0.9N·m (9kgf·cm)	
Max. Working Voltage:	500V	
Resistance Tempera- ture Coefficient:		
Max. Torque exerted on	±100p.p.m./ºC	
fastening the mounting		
nut to the bushing:	Within 1.0N·m (10kgf·cm)	
•	(in case of panel thickness with	
	over 2.5mm, the rotating torque may	
	become heavier)	
Mass:	Approx. 20g (Bushingmount)	
	Approx. 30g (Servomount)	
	(both 5-turn and 10-turn)	

## Special Specifications Available

Shaft with front and rear extension (rear shaft with 6mm dia. and 15mm length), 3-turn type, multi-ganged (available up to 10-gangs), with high torque, special shaft dia. (ø3mm, ø3.175mm, ø4mm, ø5mm, ø6.35mm), special machining on the shaft, with plastic shaft, metal bushing type (22HHPM with anti-rotation pin), simple sealed housing, extra taps (available up to 1 tap only for 10-turn), slipping-clutch incorporated type (20mN·m~60mN·m).

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