

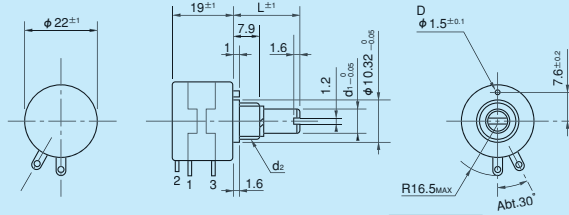
# MODEL 22HP

● Wirewound ● Bushingmount ● Low-cost Item ● RoHS Compliant



Model 22HP-10

## Standard Dimensions



Model No.	Shaft Dimensions		Mounting Screw	Anti-rotation
	d1	L	d2	D
22HP-10	φ6	20.6	3/8-32UNEF	Yes
22HP-10M	φ6	25.0	M9 P=0.75	No
22HP-10E	φ6.35	20.6	3/8-32UNEF	Yes
22HP-10N	φ6	20.6	M9 P=0.75	No

Note: 1. 1 pc. each inner teeth washer and hex nut are attached.  
 2. Outer dimension of 5-turn version is the same as those of 10-turn.  
 3. Housing length of 2 ganged version is extended by 19mm.  
 4. Please process the mounting hole on the panel. The diameter should be  $10.32\text{mm} + 0.05$ .

## Standard Model Numbers

5-turn models	22HP-5 22HP-5M 22HP-5E 22HP-5N
10-turn models	22HP-10 22HP-10M 22HP-10E 22HP-10N

Note: Please select the exact model number from the right-side table, because each model number has different shaft dia. and bushing dimensions.

## General Specifications

<b>Standard Resistance Range</b>	100Ω to 20kΩ (5-turn) 100Ω to 50kΩ (10-turn)	
<b>Max. Practical Resistance Value</b>	50kΩ (5-turn) 100kΩ (10-turn)	
<b>Total Resistance Tolerance</b>	Standard Class ±5% (J) Precision Class ±1% (F)	
<b>Independent Linearity Tolerance</b>	5-turn	10-turn
	Standard Class ±0.3% Precision Class ±0.2% (Within 5kΩ)	±0.25% ±0.1% (±0.15%)
<b>Power Rating</b>	1.0W (5-turn) 2.0W (10-turn)	
<b>Noise</b>	Within 100Ω E.N.R.	
<b>Electrical Travel</b>	$360^\circ \times n \pm 5^\circ$ (n: No. of turns)	
<b>Mechanical Travel</b>	$360^\circ \times \frac{+10^\circ}{n} \frac{0^\circ}{0^\circ}$ (n: No. of turns)	
<b>Insulation Resistance</b>	Over 1,000MΩ at 500V.D.C.	
<b>Dielectric Strength</b>	1 minute at 1,000V.A.C.	

<b>Starting Torque</b>	Within 10mN · m (100gf · cm)
<b>Stopper Strength</b>	Approx. 0.35N · m (3.5kgf · cm)
<b>Appropriate fastening torque of the nut</b>	Within 1.0N · m (10kgf · cm) (In case of panel thickness with over 2.5mm., the rotating torque may become heavier.)
<b>Resistance Temperature Coefficient</b>	±20p.p.m./°C
<b>Materials</b>	<b>Shaft</b> Stainless steel <b>Housing case</b> Glass-filled nylon <b>Bushing</b> Glass-filled nylon (For ganged version, the bushing is metal-brass without plating.) <b>Terminals</b> Gold-plated brass (All terminals can be fitted with the Tyco 110 series faston receptacle (2.8×0.5mm) or equivalents.)
<b>Mass</b>	Approx. 20g (Both 5-turn and 10-turn)

## Standard Resistance Values ■ No. of Wire Turns ■ Resistance Wire Used

Resist. Value (Ω)	100	200	500	1k	2k	5k	10k	20k	50k	100k
22HP-5	1,240	1,560	2,000	2,510	2,400	3,200	3,900	4,800	※ 5,500	—
22HP-10	2,100	2,480	3,300	4,000	5,020	5,000	6,400	7,800	10,100	※ 11,000
Resist. Wire Used	Cu-Ni System					Ni-Cr System				

Note: Mark※ shows special high resistance value.

## Special Specifications Available

(In case of the potentiometer with special specifications, the general specifications and environmental specifications may change. Please consult us in advance.)

- Shaft with front and rear extension (Rear shaft with 6mm dia. and 15mm length)
- Multi-ganged (Available up to 10 gangs)
- With high torque
- Special shaft dia. (φ 3mm, φ 3.175mm, φ 4mm, φ 5mm)
- Special machining on the shaft
- Metal bushing type (22HPM-n with anti-rotation pin)
- 1, 2, 3, 4, 6, 7 and 8-turn versions are available (These versions have same outer dimensions, but general specifications are please request us for details)
- Simple sealed housing
- Slipping-clutch incorporated type (20mN·m ~ 60mN·m)
- Extra tap (Available up to 1 tap only for 10-turn model)
- Servomount type (Same dimensions as 22HHPS-10)