



Model 20HHP-10S  
(Servomount)

● Standard Model Nos.

**Bushingsmount type:**

- 20HHP-5S (5-turn)
- 20HHP-10S (10-turn)

**Servomount type:**

- 20HHP-5S (5-turn)
- 20HHP-10S (10-turn)

● General Specifications

**Standard Resistance**

**Values:** 1k,2k,5k,10k,20k,50k (Ω) (5-turn)  
2k,5k,10k,20k,50k,100k (Ω)(10-turn)

**Total Resistance**

**Tolerance:** Standard Class ±10% (K)  
Precision Class ±5% (J)

**Independent Linearity**

**Tolerance:** 5-turn 10-turn  
Standard Class ±0.35% ±0.25%  
Precision Class ±0.2% ±0.1%

**Resolution:**

Essentially infinite

**Output Smoothness:**

Below 0.05% against input voltage (5-turn)  
Below 0.015% against input voltage (10-turn)

**Contact Resistance**

**Variation:** Below 5% C.R.V. (5-turn)  
Below 3% C.R.V. (10-turn)

**Power Rating:**

1.0W (5-turn)  
2.0W (10-turn)

**Electrical Travel:**

360°×n ±5°(n: No. of turns)

**Mechanical Travel:**

360°×n +10°<sub>0</sub>(n: No. of turns)

**Insulation Resistance:**

Over 100MΩ at 1,000V.D.C.

**Dielectric Strength:**

1 minute at 1,000V.A.C.

**Starting Torque:**

Below 5mN·m (50gf·cm) (Bushingsmount type)  
Below 3mN·m (30gf·cm) (Servomount type)

**Stopper Strength:**

Approx. 0.9N·m (9kgf·cm) (Bushingsmount type)  
Approx. 0.6N·m (6kgf·cm) (Servomount type)

**Max. Working Voltage:** 500V

**Resistance Temperature Coefficient:**

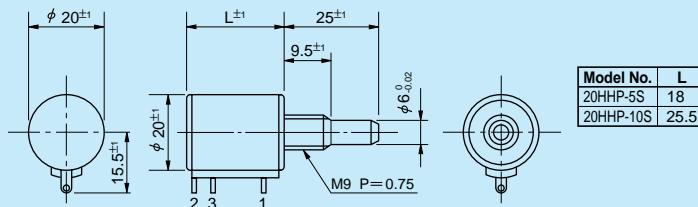
±100p.p.m./°C

**Mass:**

Approx. 20g (5-turn)  
Approx. 25g (10-turn)

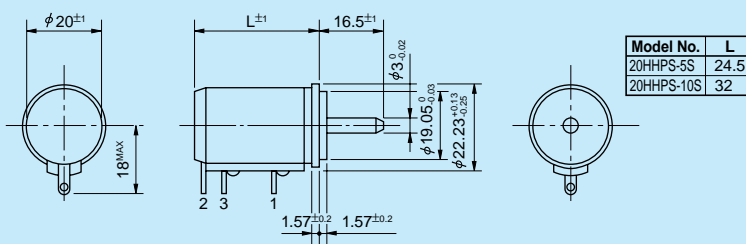
● Standard Dimensions

■ Bushingsmount type



Note: 1 pc. inner teeth washer and 2 pcs. hex nuts are attached.

■ Servomount type

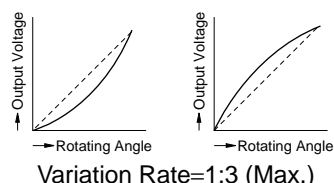


● Special Specifications Available

Extra taps (Available up to 1 tap), Multi-ganged (Available up to 2 gangs), Shaft with front and rear extension (Rear shaft with 2mm dia. and 10mm length), Shaft dia. (Ø6.35mm for 20HHP, Ø3.175mm for 20HHP-5S)•bushing with inch dimensions, Special machining on the shaft, With slipping-clutch, With a limit-switch adaptor, Simple sealed housing (except servomount type).

Specialty Ordered Models

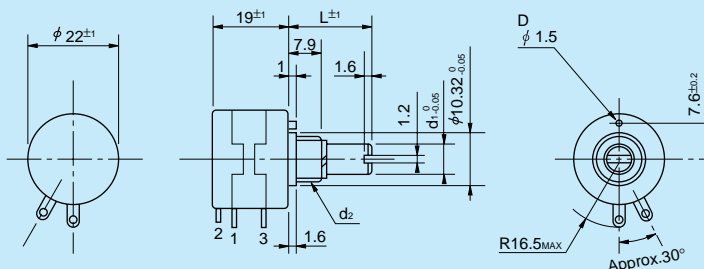
Special functions of high accuracy are available for multiturn hybrid potentiometers of models 12HHP and 20HHP series as illustrated on the right hand side and are suitable for load correction circuit or temperature compensation circuit.





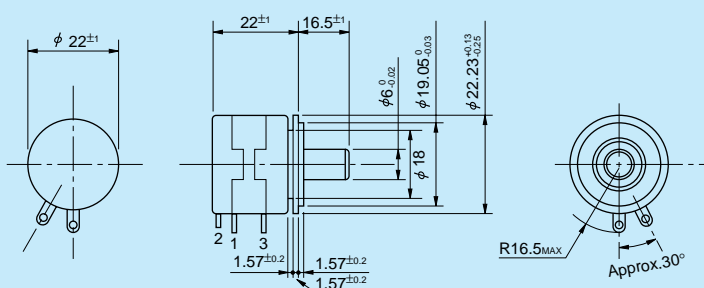
● Standard Dimensions

■ 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)



● 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:	22HHP-5
10-turn models:	22HHP-10

● General Specifications

**Standard Resistance Values:**

1k,2k,5k,10k,20k,50k ( $\Omega$ ) (5-turn)  
2k,5k,10k,20k,50k,100k ( $\Omega$ )(10-turn)

**Total Resistance Tolerance:**

Standard Class  $\pm 10\%$  (K)  
Precision Class  $\pm 5\%$  (J)

**Independent Linearity Tolerance:**

	5-turn	10-turn
Standard Class	$\pm 0.35\%$	$\pm 0.25\%$
Precision Class	$\pm 0.2\%$	$\pm 0.1\%$

**Resolution:**

Essentially infinite

**Output Smoothness:**

Below 0.05% against input voltage (5-turn)  
Below 0.015% against input voltage (10-turn)

**Contact Resistance Variation:**

Below 5% C.R.V. (5-turn)  
Below 3% C.R.V. (10-turn)

**Power Rating:**

1.0W (5-turn)  
2.0W (10-turn)

**Electrical Travel:**

$360^\circ \times n \pm 5^\circ$  (n: No. of turns)

**Mechanical Travel:**

$360^\circ \times n + 10^\circ$  (n: No. of turns)

**Insulation Resistance:**

Over 100M $\Omega$  at 1,000V.D.C.

**Dielectric Strength:**

1 minute at 1,000V.A.C.

**Starting Torque:**

Below 5mN·m (50gf·cm)

**Stopper Strength:**

Approx. 0.9N·m (9kgf·cm)

**Max. Working Voltage:**

500V

**Resistance Temperature Coefficient:**

$\pm 100$ p.p.m./ $^\circ\text{C}$

**Max. Torque exerted on fastening the mounting nut to the bushing:**

Below 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. ( $\phi 3$ mm, $\phi 3.175$ mm, $\phi 4$ mm, $\phi 5$ mm, $\phi 6.35$ mm), 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.