



• Standard Model Nos.

5-turn models:

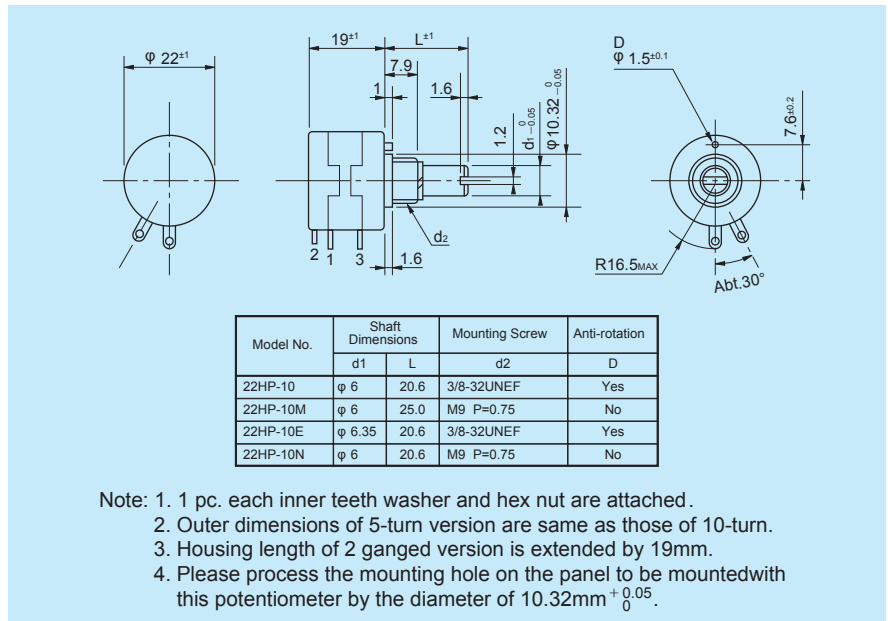
22HP-5 22HP-5M
22HP-5E 22HP-5N

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.)

• Standard Dimensions



• General Specifications

Standard Resistance

Range: 100Ω to 50kΩ (5-turn)
 100Ω to 100kΩ (10-turn)

Total Resistance

Tolerance: Standard Class ±5% (J)
 Precision Class ±1% (F)

Independent Linearity

Tolerance: 5-turn 10-turn
 Standard Class $\pm 0.3\%$ $\pm 0.25\%$
 Precision Class $\pm 0.2\%$ $\pm 0.1\%$
 (Within 5kΩ) $(\pm 0.25\%)(\pm 0.15\%)$

Power Rating:

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

Noise:

Within 100Ω E.N.R.

Electrical Travel:

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

Mechanical Travel:

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

Insulation Resistance:

Over 1,000MΩ at 500V.D.C.

Dielectric Strength:

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

Starting Torque:

Within 10mN·m (100gf·cm)

Stopper Strength:

Approx. 0.35N·m (3.5kgf·cm)

Max. Working Voltage: 250V

Resist. Temperature

Coefficient of Wire: ±20p.p.m./°C

Materials:

Shaft: Stainless steel
Housing case: Glass-filled nylon
Bushing: Glass-filled nylon
 (For ganged version, the bushing is metal-brass without plating.)
Terminals: Gold-plated brass
 (All terminals can be fitted with the AMP 110 series faston receptacle (2.8× 0.5mm) or equivalents.)

Max. Torque exerted on 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 (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				

• Special Specifications Available

Rear shaft (6mm dia. and 15mm length), Multi-ganged (Available up to 10 gangs), High torque, Special shaft dia. (φ 3mm, φ 3.175mm, φ 4mm, φ 5mm), Special machining on the shaft, Plastic shaft, Metal bushing (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 different each other, so please ask us for details), Simple sealed housing, Slipping-clutch incorporated type (20mN·m~60mN·m), Extra taps (Available up to 1 tap only for 10-turn model), Servomount type (Same dimensions as 22HHPS-10).