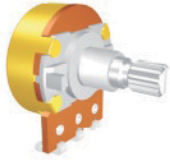


# Potentiometers

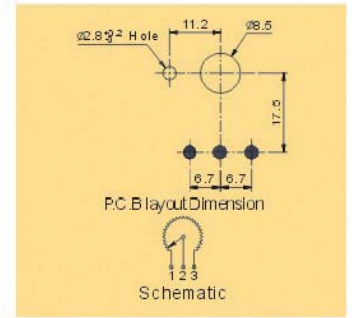
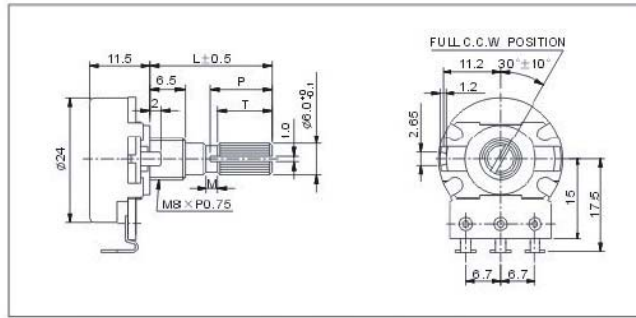
## Rotary Potentiometer with Metal Shaft

## GP9M Series

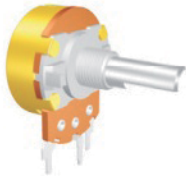
### Vertical Type, Single Unit, Solder Terminal



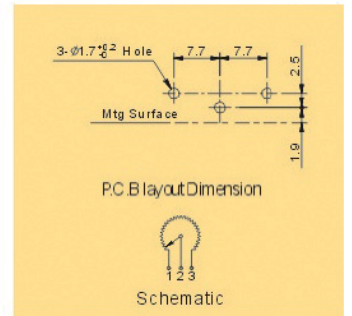
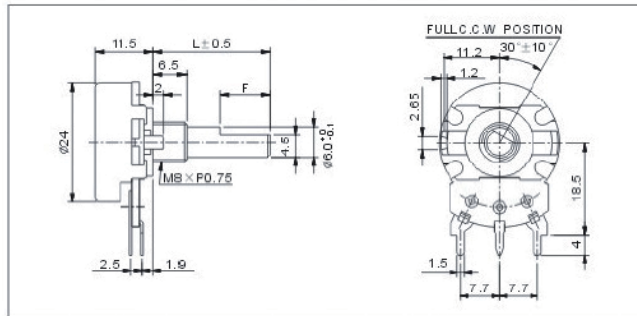
GP9MNP8



### Vertical Type, Single Unit, P.C.B. Terminal



GP9MN



## SPECIFICATIONS

### Electrical Characteristics

- > Total Resistance: 500 Ω to 1M Ω
- > Total Resistance Tolerance: +/-20%
- > Resistance Taper: A, B, C
- > Max. Operating Voltage: 500VAC (Taper B), 250VAC (other Tapers)
- > Rated Power: 0.5W (Taper B), 0.25W (other Tapers)
- > Sliding Noise: 100mV Max.
- > Insulation Resistance: 100MΩ Min. at 500VDC
- > Withstand Voltage: 500VAC 1 min.
- > Residual Resistance (Terminal 1~2, 2~3): 10Ω Max.

### Durability

- > Rotational Life: 10,000 Cycles (Standard)  
1,000,000 Cycles (By Request)

### Mechanical Characteristics

- > Total Rotational Angle: 300°±10°
- > Rotational Torque: 30gf.cm ~150gf.cm
- > Rotational Stopper Strength: 5.0Kgf.cm Min.
- > Push-Pull Strength: 10.0Kgf Min.

### Switch Characteristics

- > Circuit: SPST
- > Contact Resistance: 50mΩ Max.
- > Rated Power: 1.0A 125VAC/DC
- > Rotational Angel: 50°±10°
- > Torque: 300gf.cm~800gf.cm

## How to order:

GP9M

RoHS Compliant

### 1 SWITCH FUNCTION:

- N Without Switch
- S With Switch

### 2 TYPE OF TERMINALS:

- ... See drawings

### 3 TYPE OF TAPER:

- A Logarithm
- B Linear
- C Anti-Logarithm

### 4 RESISTANCE VALUE (Unit: Ω):

- free text 500 Ω to 1M Ω
- e.g.: 220K for 220.000 Ω

### 5 SHAFT TYPE:

- KQ See drawings
- R See drawings
- RE See drawings
- F See drawings

### 6 SHAFT LENGTH (L):

- free text See drawings
- e.g.: 25 for L=25mm

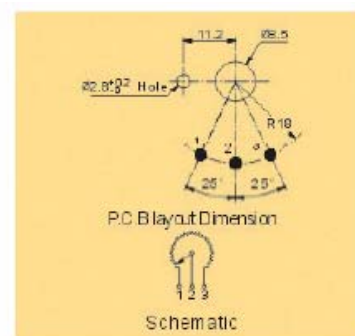
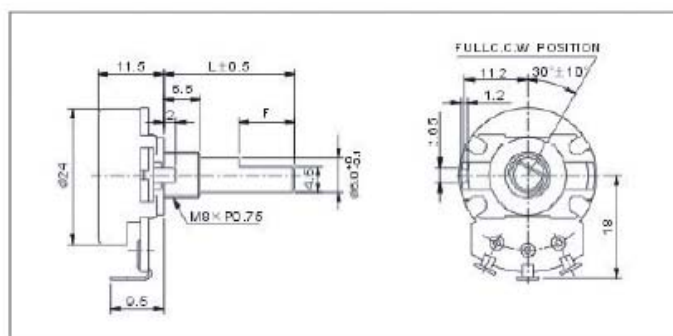
### Shaft Type:

KQ-Type		R-Type	
L	15 20 25 30 35	L 15 20 25 30 35	
P	7 12 14 14 14		
T	6 10 12 12 12		
M	1 2 2 4 4		
RE-Type		F-Type	
L 15 20 25 30 35		L 15 20 25 30 35	
		F 7 12 12 12 12	

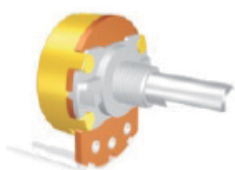
Vertical Type, Single Unit, Solder Terminal



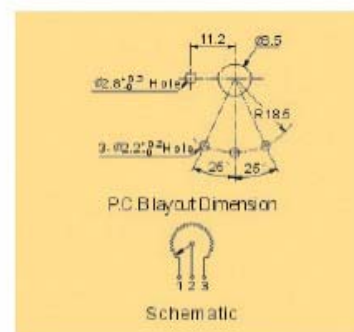
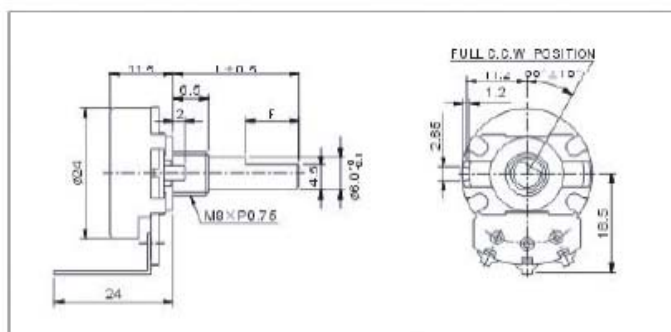
GP9MNP



Horizontal Type, Single Unit, P.C.B. Terminal



GP9MNP2

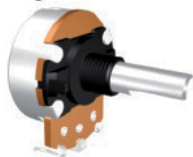


# Potentiometers

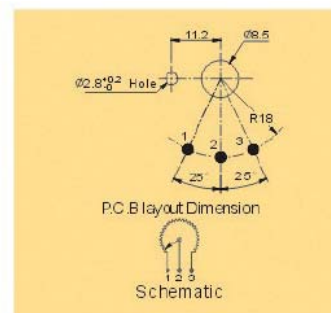
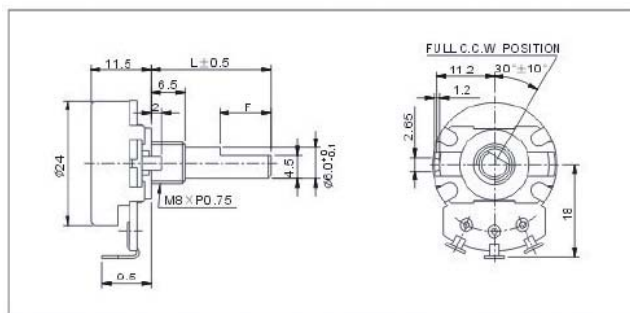
## Rotary Potentiometer with Metal Shaft

## GP9M Series

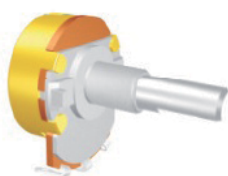
Vertical Type, Single Unit,  
Solder Terminal, Plastic  
Bushing



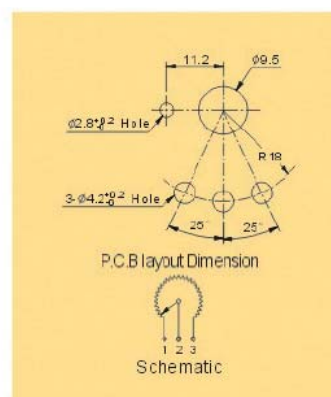
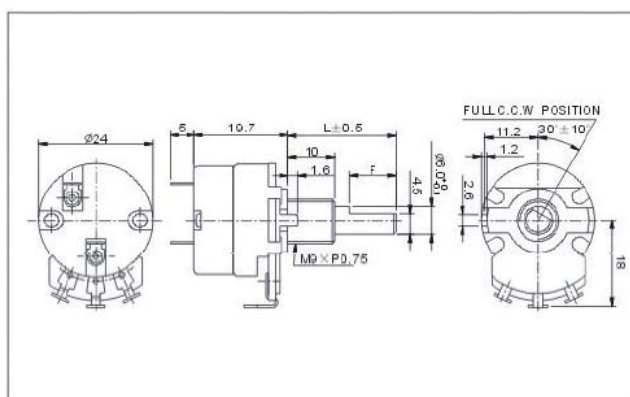
GP9MNP-U



Vertical Type, Single Unit,  
Solder Terminal With plastic  
bushing



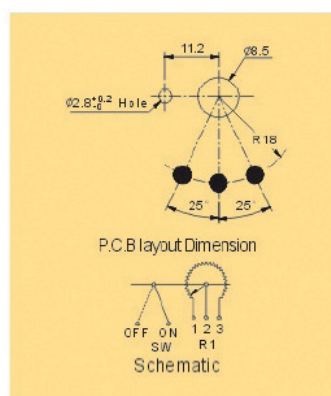
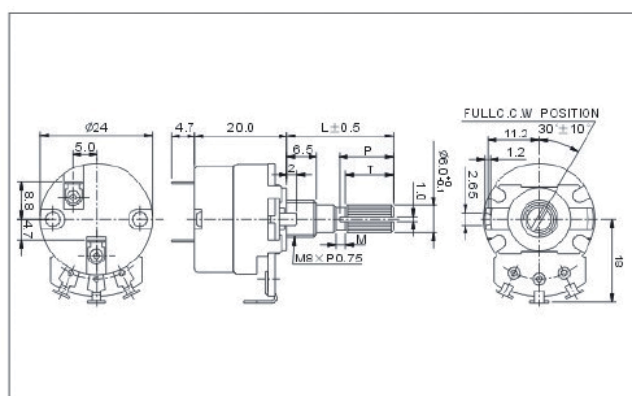
GP9MNP-U



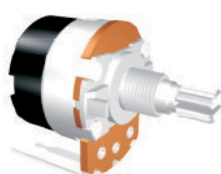
Vertical Type with Switch,  
Single Unit, Solder Terminal



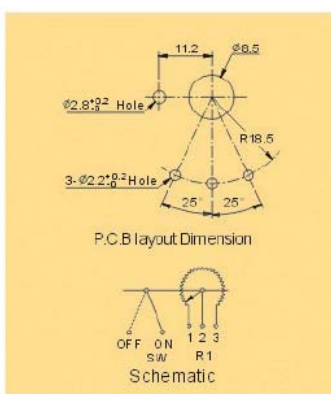
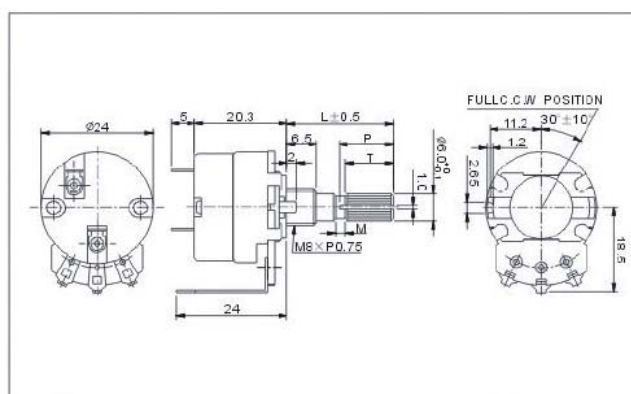
GP9MSP



Horizontal Type with Switch,  
Single Unit, P.C.B. Terminal



GP9MSP4

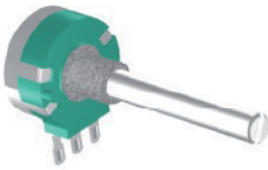


# Potentiometers

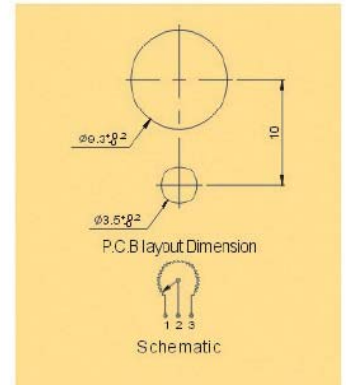
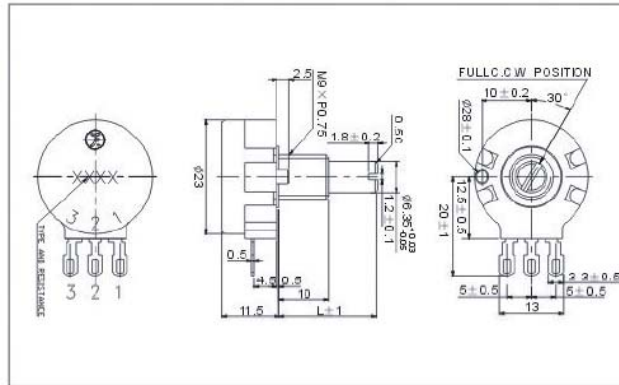
## Rotary Potentiometer with Metal Shaft

## GP9M Series

Vertical Type, Single Unit,  
Solder Terminal,  
Sealed Type

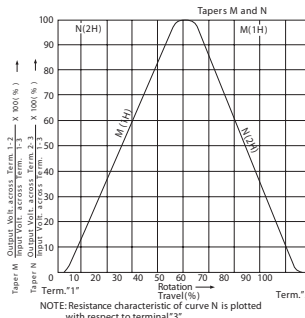
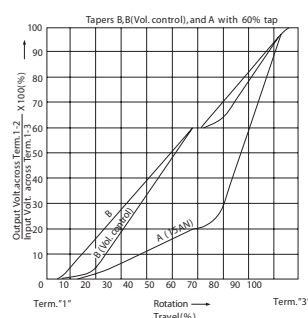
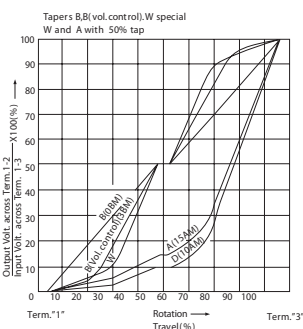
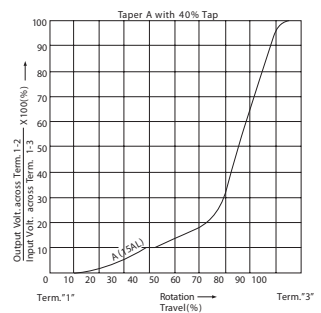
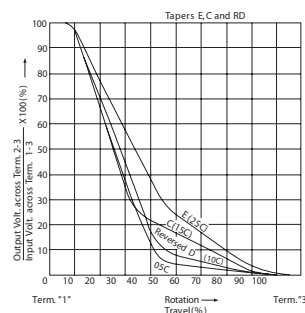
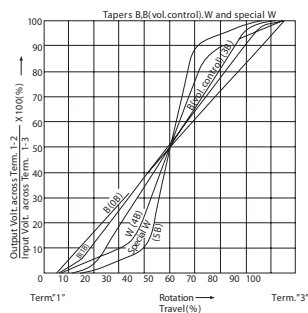
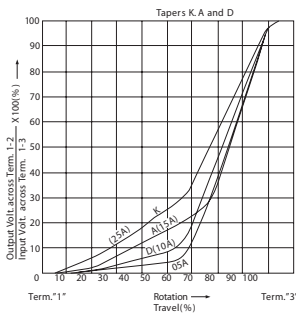


GP9MN5



### • Resistance Taper Characteristics

Resistance Taper Characteristic	Test Point Rotation (%)	$\frac{V1-2}{V1-3} \times 100$ (%)	$\frac{V2-3}{V1-3} \times 100$ (%)
A	50	10 ~ 25	—
B	50	40 ~ 60	—
C	50 (started from 3T)	—	10 ~ 25
D	50	6 ~ 15	—
E	50	—	18 ~ 34
W	30 ( $\pm 5$ -degree)	5 ~ 15	—
	50	40 ~ 60	—
	70 ( $\pm 5$ -degree)	85 ~ 95	—



NOTE: Resistance characteristic of curve N is plotted with respect to terminal '3'