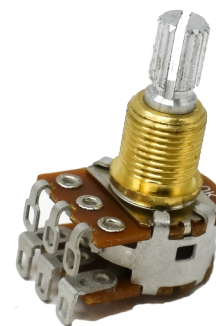


# 17 mm Rotary Potentiometer

## P165 Series



### Features:

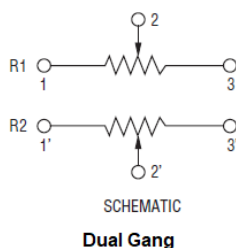
- Resistance range 1 kΩ to 1 MΩ
- Temperature range -10°C to +70°C
- Rotational cycles of 100,000 minimum
- Switch option
- RoHS compliant

### Description:

17 mm rotary dual gang potentiometer with MN taper. Options include metal shaft; metal bushing; knurled or plain shaft types.

### Applications:

- Electric guitars
- Amplifiers
- Mixers
- Drum machines
- Synthesizers



### 3D Model

To view 3D model:  
1) Enable 3D content  
2) Click and drag below



If unable to view 3D content, [download and save](#) this PDF to your computer and open it in Adobe Acrobat Reader.

## Electrical Characteristics

T<sub>A</sub> = 25°C unless otherwise noted

Resistance Range	1 kΩ to 1 MΩ
Standard Resistance Tolerance	500 Ω < R < 1 MΩ ± 20% R ≤ 500 Ω or R ≥ 1 MΩ ± 30%
Residual Resistance	Term. 1~2: Less than 20 Ω Term: 2~3: Less than 20 Ω
Resistance Taper	MN
Maximum Operating Voltage	150 Vac
Rated Power	0.1 W
Dielectric Strength	1 minute at 500 Vac
Rotational Noise	Less than 100 mV
Insulation Resistance	More than 100 MΩ at 500 Vdc

### General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

### Mechanical Characteristics

T<sub>A</sub> = 25°C unless otherwise noted

Mechanical Travel	300 ° ±5 °
Rotational Torque	20 gf.cm~100 gf.cm
Rotational Stop Strength	7 kgf.cm minimum
Shaft Pull Strength	8 kgf minimum
Detent Torque	100~300 gf.cm
Nut Tightening Strength	8 kgf.cm minimum
Rotational Life	100,000 cycles minimum

### Environmental Characteristics

T<sub>A</sub> = 25°C unless otherwise noted

Operating Temperature	-10 °C to +70 °C
IP Rating	IP 40
Soldering Condition	Wave Soldering 260 °C maximum for 1-3 seconds Hand Soldering 300 °C maximum for 3 seconds
RoHS	Please refer to TT Electronics website
REACH	Please refer to TT Electronics website

### Ordering Information

P165	M	2	00	Q	N	C	20	MN	103
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**Part Family**

**Terminal Configuration**

M - PC Pins, Rear Facing

K - Solder Lugs, Rear Facing

**Gang Number**

2 - 2 Gang

**Detents/ Rotation**

00 - No Position

**Shaft Style**

Q - Metal Knurled Type

P - Plain Type

**Switch Option**

N - No Switch

**Full CCW Position**

A/C/N (see note 1 page 4)

**Shaft Length (mm) - L**

20

**Resistance Taper**

MN

**Resistance**

See Resistance Table

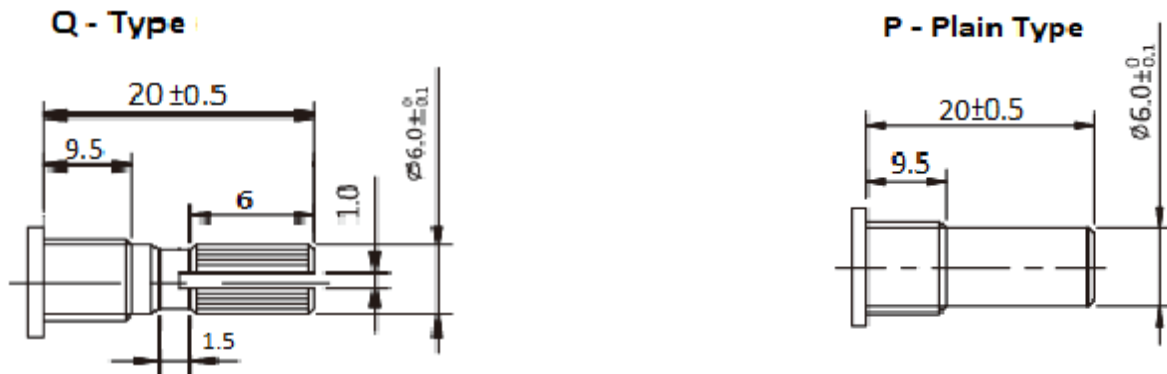
Resistance Table	
Resistance (Ohms)	Code
10,000	103
25,000	253
50,000	503
100,000	104
250,000	254
300,000	304
500,000	504
1,000,000	105

General Note

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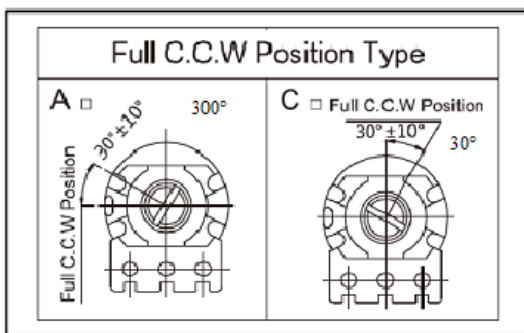
### Outline Drawings

#### Shaft Style & Length

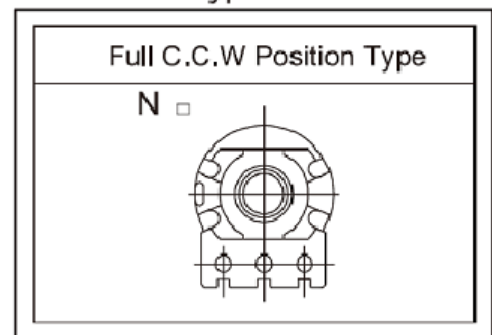


**Note 1: Full CCW Position**

Q-type shaft



P-type shaft

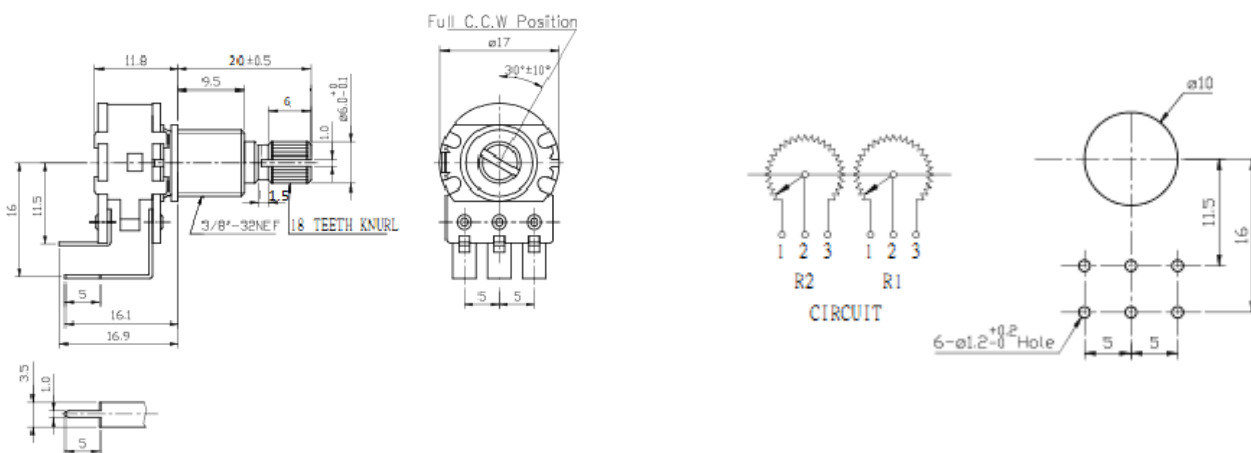
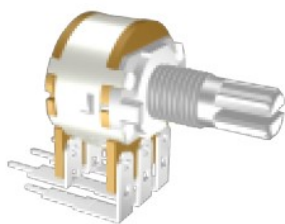


# 17 mm Pro Audio Rotary Potentiometer

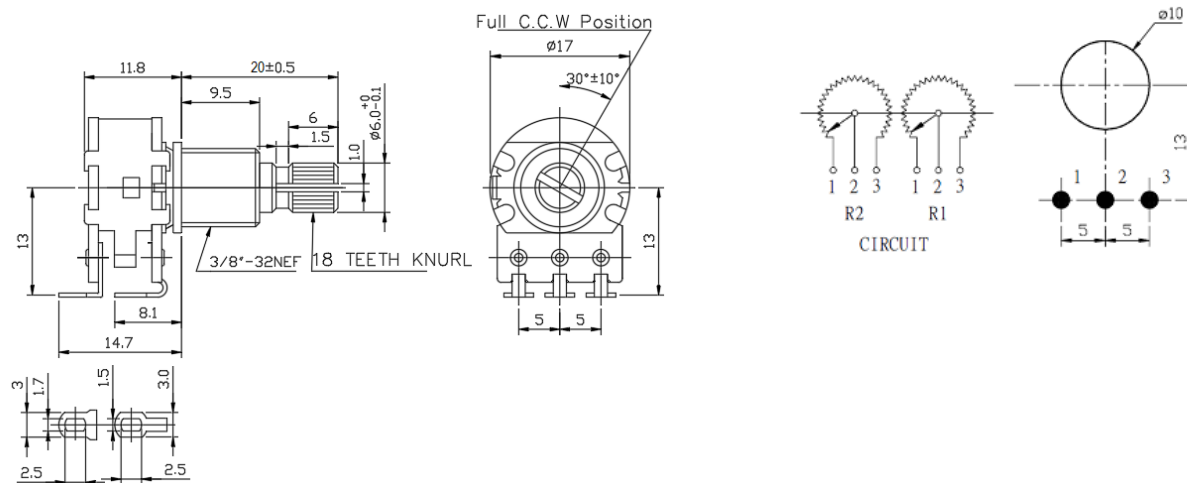
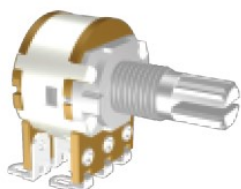


## P165 Series

**M - PC Pins, Rear Facing, Dual Gang**



**K - Solder Lugs, Rear Facing, Dual Gang**



**General Note**

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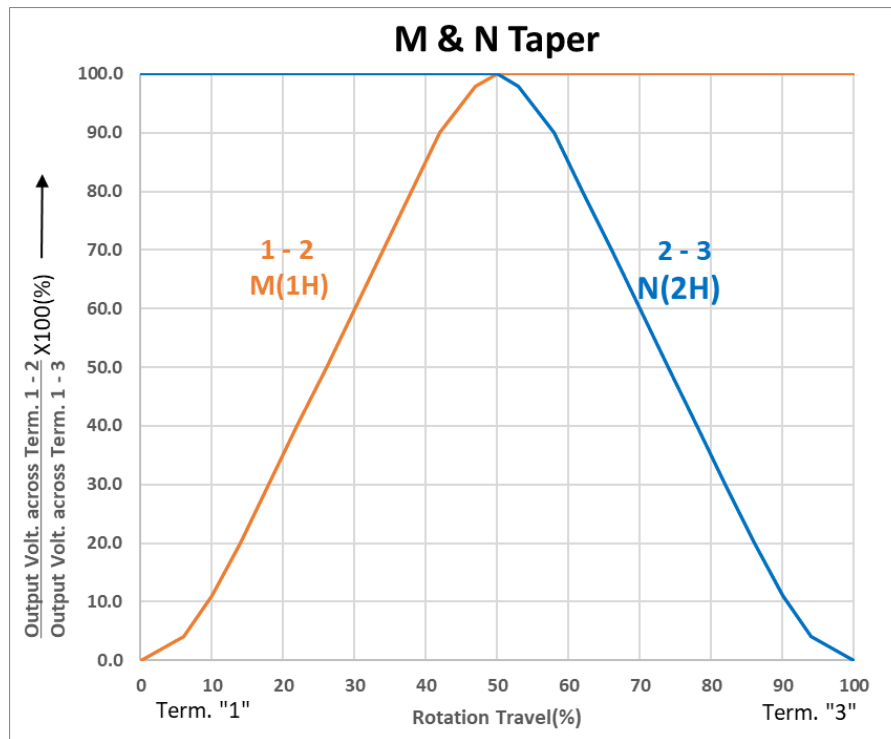
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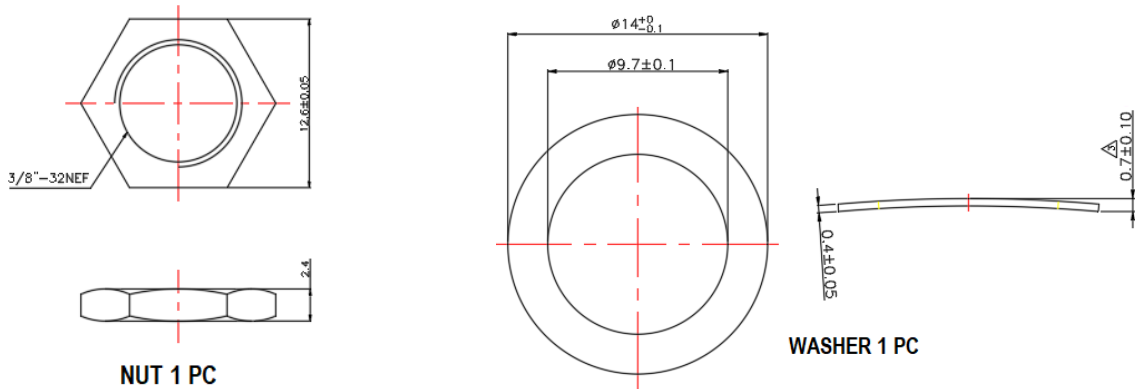
### Standard Tapers



#### General Note

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### Screw & Washer Dimensions



### Packaging

Standard Packaging	Plastic Trays
Hardware	Two flat washers and mounting nut