

# 17 mm Single Gang Potentiometer with Rotary Switch

## P162 Series

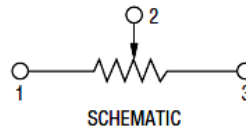


### Features:

- Resistance range 1 kΩ to 1 MΩ
- Temperature range -10°C to +70°C
- Rotational cycles of 15,000 minimum
- Switch option
- Vertical only mount versions
- RoHS compliant

### Description:

17mm rotary single gang potentiometer with rotary switch. Options include metal shaft; audio and linear tapers; metal bushing; knurled or plain shaft types.



Single Gang

### 3D Model

Use this bounding box to place and size the 3D content. Cover this box entirely. If there is no 3D content for this product, delete the box.

### Applications:

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

## 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 ± 2 0% 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	A, B, C, D
Maximum Operating Voltage	Linear Taper B: 200 Vac Other Tapers: 150 Vac
Rated Power	Linear Taper B: 0.2 W Audio: 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
Gang Error (Dual Unit)	N/A

#### 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.

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Rev - 06/2019 Page 1

Document No.: \_\_\_\_\_

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### Switch Characteristics

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

Switch Circuit	SPST
Contact Resistance	Less than 50 mΩ
Rated Power	Single Unit: 1.0 A at 12V ac/dc
Rotational Angle	35 ° ± 10 °
Rotational Strength	70~250 gf.cm.
Switch Life	15,000 cycles

### 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 Torque 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

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## P162 Series

### Ordering Information

P162	G	1	00	Q	R	C	20	B	102
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**Part Family**

**Terminal Configuration**

G - PC Pins, Down Facing

T - Solder lugs, Down Facing

**Gang Number**

1 - 1 Gang

**Detents/ Rotation**

00 - No Position

**Shaft Style**

Q - Metal Knurled Type

**Switch Option**

R - Rotary Switch

**Full CCW Position**

A/C (see note 1 page 4)

**Shaft Length (mm) - L**

20/25/30

**Resistance Taper**

A - Audio (15A)

B - Linear (0B)

C - Reverse Audio (15C)

D - Audio (10A)

**Resistance**

See Resistance Table

Resistance Table	
Resistance (Ohms)	Code
1,000	102
2,000	202
5,000	502
10,000	103
20,000	203
50,000	503
100,000	104
200,000	204
500,000	504
1,000,000	105

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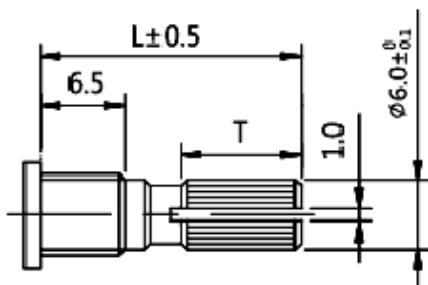


P162 Series

## Outline Drawings

### Shaft Style & Length

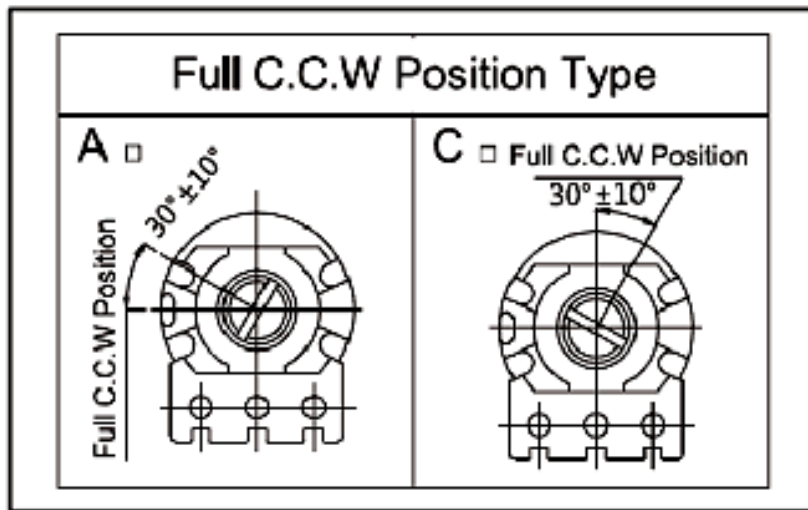
#### Q - Type (Switch Option)



Q Type			
L	20	25	30
	T - 10	T - 12	T - 12

Note 1: Full CCW Position

### Q-type shaft



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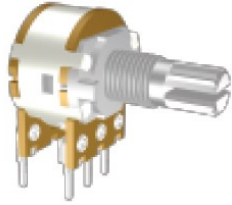
Rev - 06/2019 Page 4

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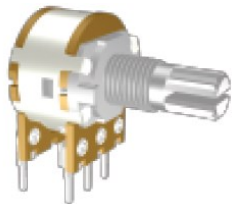
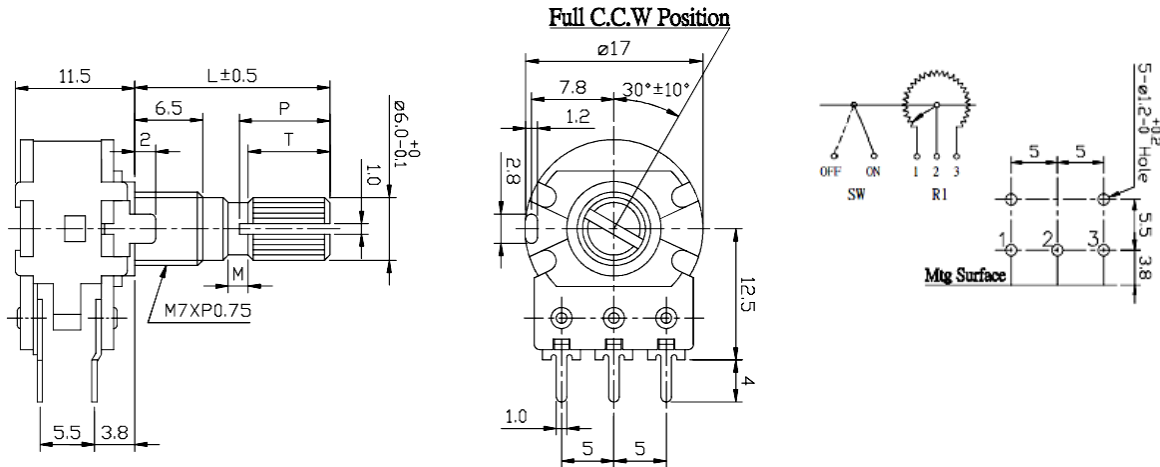
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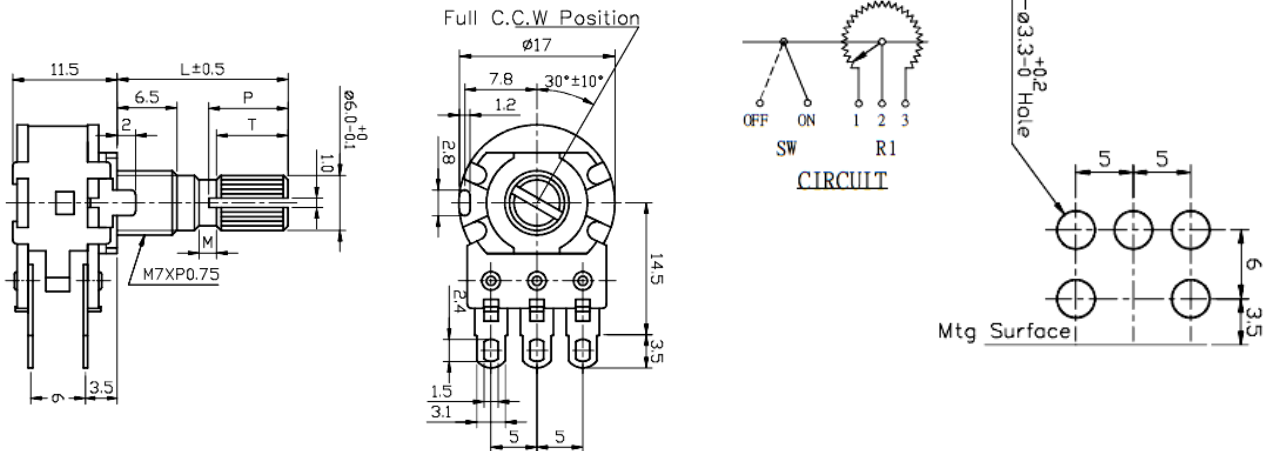
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**G** - PC Pins, Down Facing, Single Gang, Rotary Switch



**T** - Solder lugs, Down Facing, Single Gang, Rotary Switch



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Rev - 06/2019 Page 5

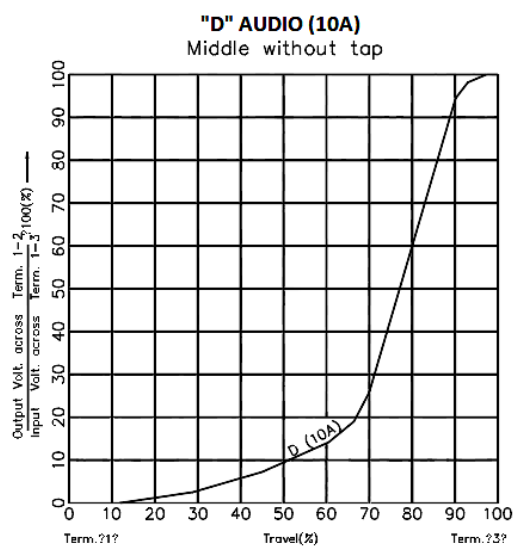
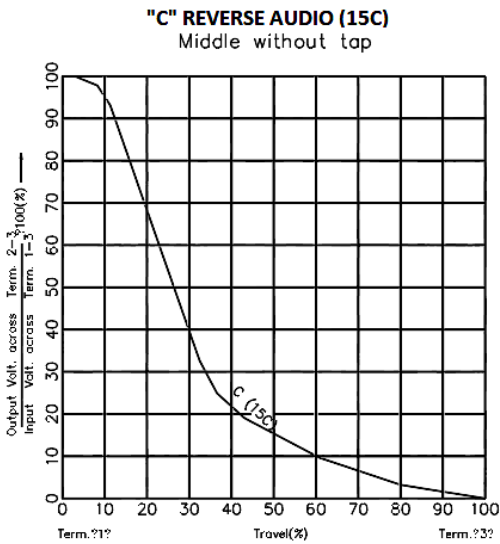
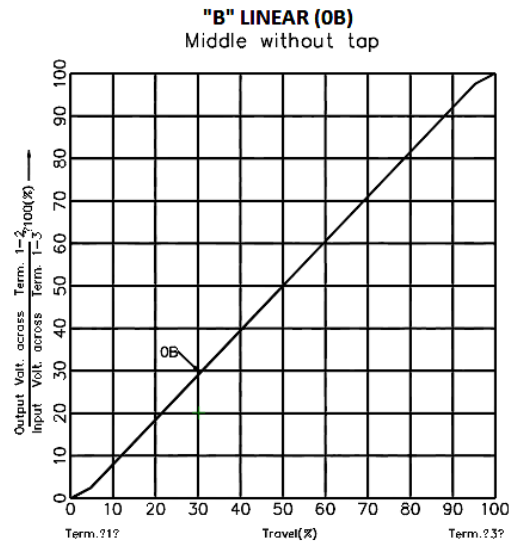
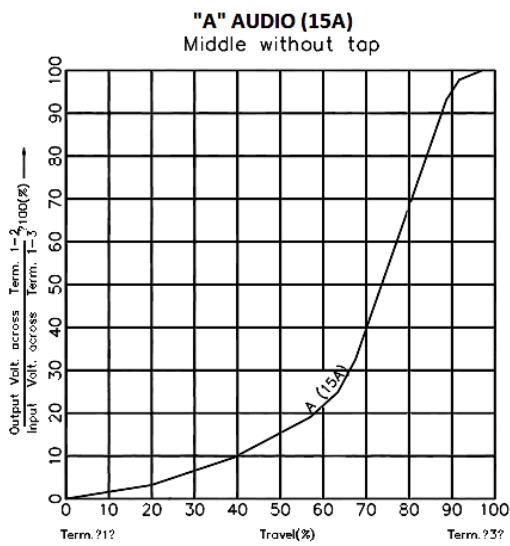
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### Standard Tapers



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Rev - 06/2019 Page 6

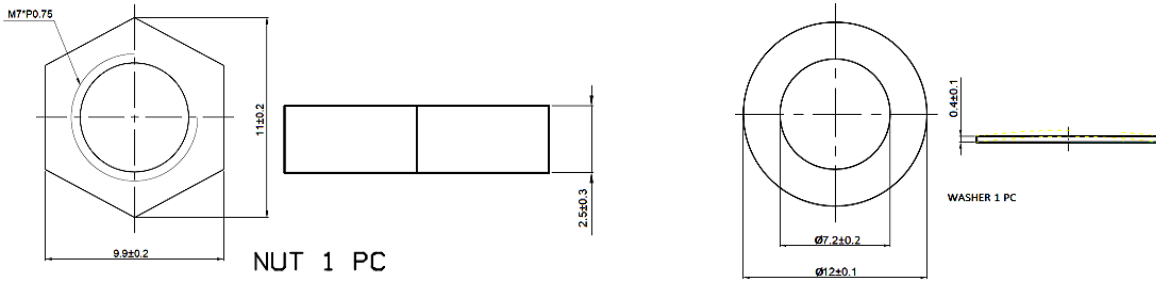
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## P162 Series

### Screw & Washer Dimensions



### Packaging

Standard Packaging	Plastic Trays
Hardware	Two flat washers and mounting nut

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Rev - 06/2019 Page 7

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