

## Features

- Single and dual section control
- Metal shaft styles
- Carbon element
- Center and multiple detent options
- Wide range of resistance tapers
- Plain or knurled shaft options

## PDB18 Series - 17 mm Rotary Potentiometer

### Additional Information

Click these links for more information:



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INVENTORY



SAMPLES



CONTACT

### Electrical Characteristics

Taper..... Linear, audio  
Standard Resistance Range  
..... 1 K ohms to 1 M ohms  
Standard Resistance Tolerance.....  $\pm 20\%$   
Residual Resistance..... 1 % max.

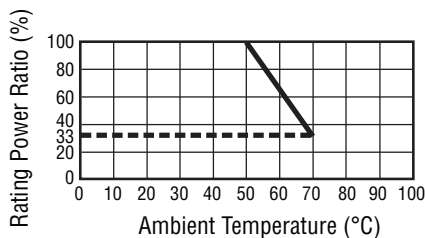
### Environmental Characteristics

Operating Temperature...  $-10\text{ }^{\circ}\text{C}$  to  $+50\text{ }^{\circ}\text{C}$   
Power Rating  
Linear ..... 0.2 watt  
Dual Section..... 0.125 watt  
Audio ..... 0.1 watt  
Dual Section..... 0.06 watt  
Maximum Operating Voltage  
Linear ..... 200 V  
Audio ..... 150 V  
Sliding Noise ..... 47 mV max.

### Mechanical Characteristics

Mechanical Angle.....  $300^{\circ} \pm 5^{\circ}$   
Rotational Torque ..... 10 to 150 gf-cm  
Detent Torque..... 150 to 500 g-cm  
Stop Strength ..... 5 kg-cm min.  
Rotational Life ..... 15,000 cycles  
Soldering Condition  
.....  $260\text{ }^{\circ}\text{C}$  max. within 3 seconds  
Hardware ..... One flat washer and  
mounting nut supplied per  
potentiometer with bushing

### Derating Curve



**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

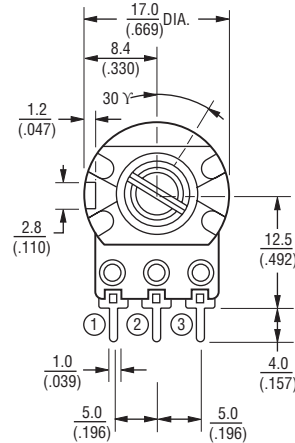
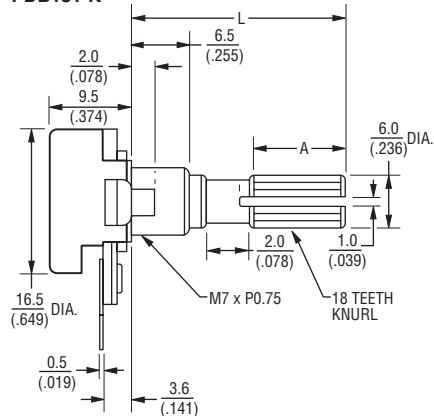
Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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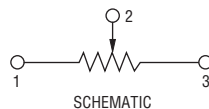
### Product Dimensions

PDB181-K

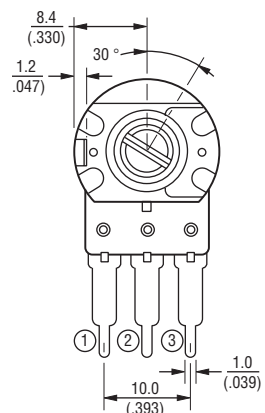
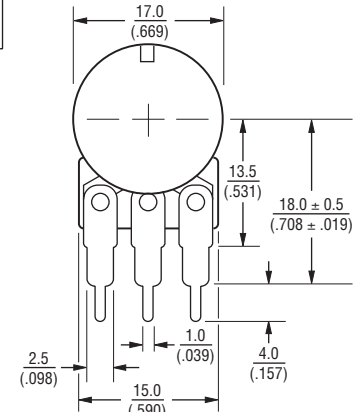
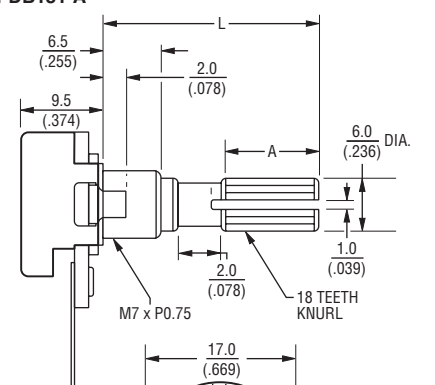


SHAFT SHOWN IN CCW POSITION

DIMENSIONS:  $\frac{\text{MM}}{(\text{INCHES})}$



PDB181-A



SHAFT SHOWN IN CCW POSITION

## Additional Features

- Linear, audio and reverse audio taper options
- RoHS compliant\*

## Applications

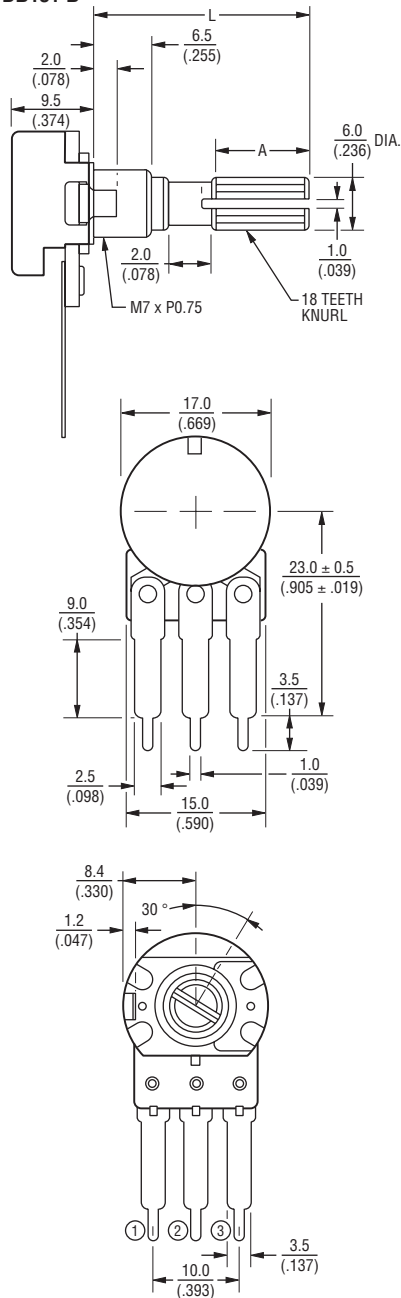
- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

# PDB18 Series - 17 mm Rotary Potentiometer

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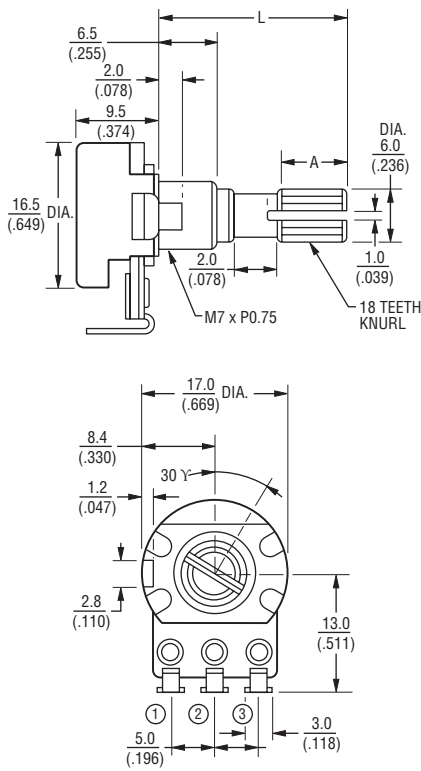
## Product Dimensions

PDB181-B



SHAFT SHOWN IN CCW POSITION

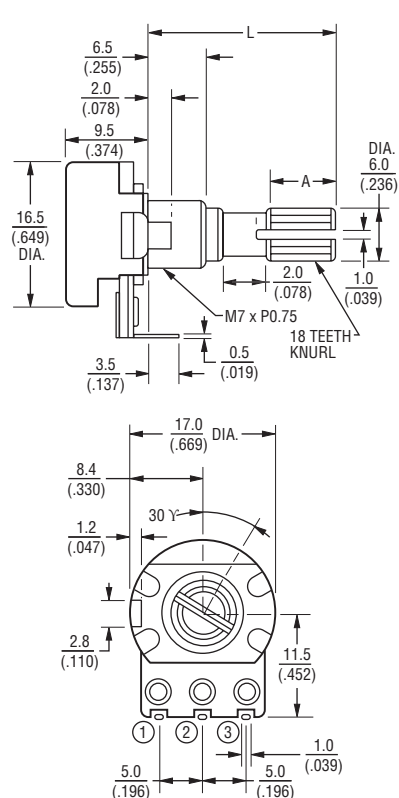
PDB181-E



SHAFT SHOWN IN CCW POSITION

DIMENSIONS:  $\frac{\text{MM}}{(\text{INCHES})}$

PDB181-D



SHAFT SHOWN IN CCW POSITION

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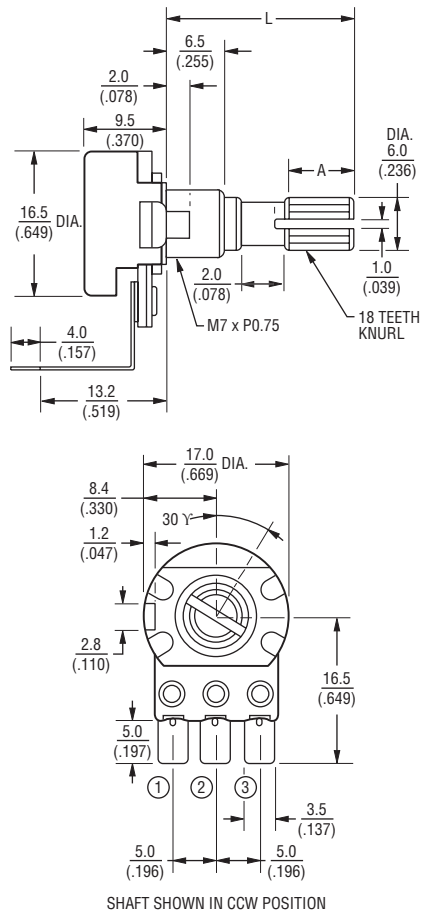
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# PDB18 Series - 17 mm Rotary Potentiometer

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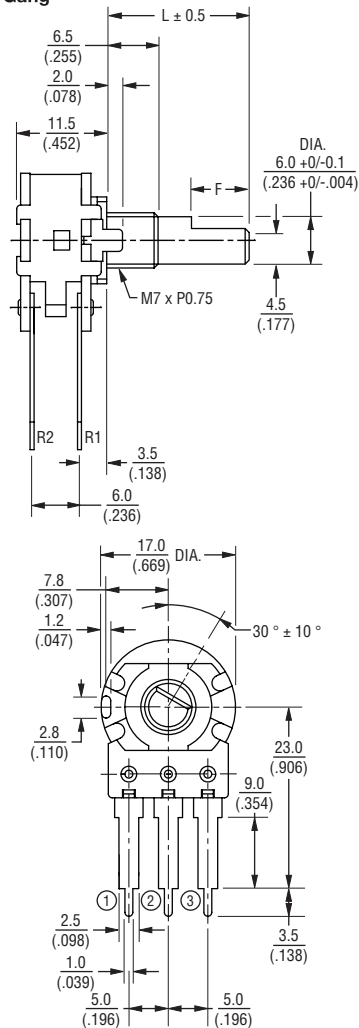
## Product Dimensions

**PDB181-P**



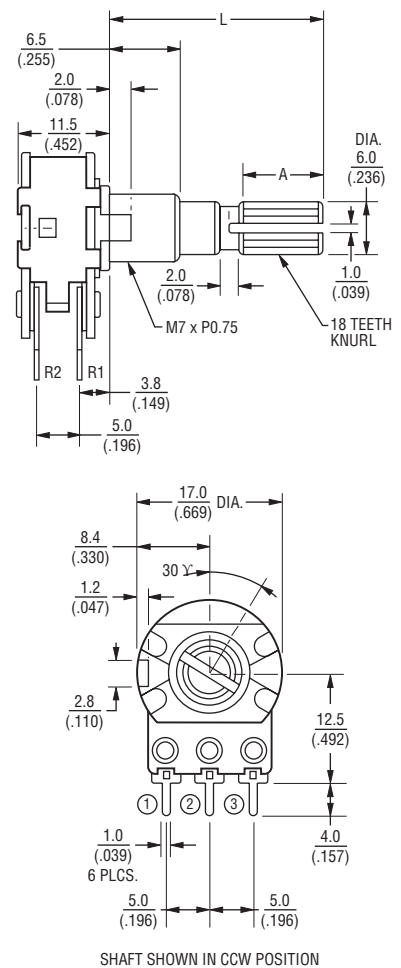
SHAFT SHOWN IN CCW POSITION

**PDB182-B  
Dual Gang**

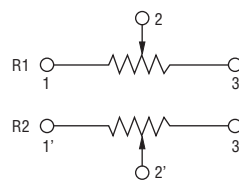


SHAFT SHOWN IN CCW POSITION

**PDB182-K  
Dual Gang**



SHAFT SHOWN IN CCW POSITION



SCHEMATIC

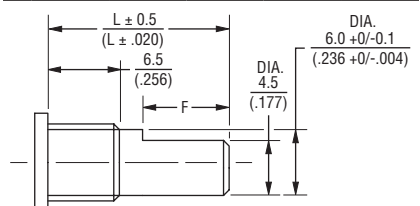
DIMENSIONS:  $\frac{\text{MM}}{(\text{INCHES})}$

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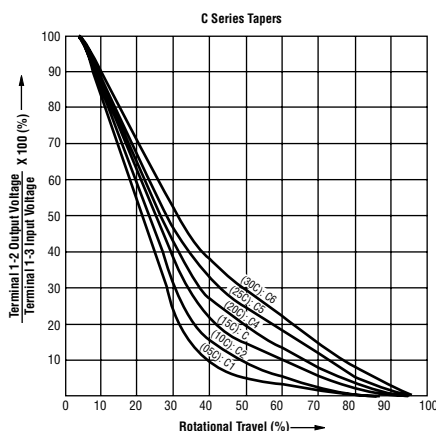
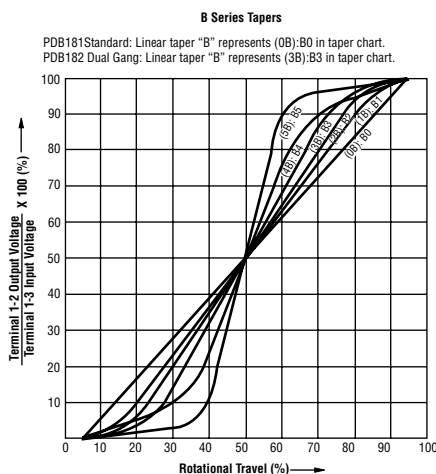
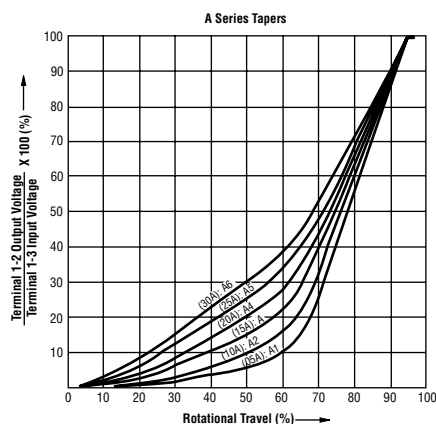


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# PDB18 Series - 17 mm Rotary Potentiometer

**BOURNS®**

## Tapers



## How To Order

**PDB18 1 - K 4 25 K - 103 A1**

Model

Number of Sections

- 1 = Single Section
- 2 = Dual Section

Terminal Configuration

(Pin Layout)

(see individual drawings)

- K = PC Pins vertical/Down Facing (12.5 mm)
- A = PC Pins vertical/Down Facing (18.0 mm)
- B = PC Pins vertical/Down Facing (23.0 mm)
- E = Solder Lugs Rear Facing
- P = PC Pins Rear Facing
- D = PC Pins Front Facing

Detent Option

- 2 = Center Detent
- 4 = No Detents
- 5 = 10 Detent / 11 Position
- 6 = 20 Detent / 21 Position
- 7 = 30 Detent / 31 Position
- 8 = 40 Detent / 41 Position

Standard Shaft Length

- 15 = 15 mm
- 18 = 18 mm
- 20 = 20 mm
- 25 = 25 mm
- 30 = 30 mm

Shaft Style

- F = Metal Flatted Shaft
- K = Metal Knurled Type Shaft  
18 Toothed Serration Type
- P = Metal Plain Shaft

Resistance Code (See Table)

Resistance Taper (See Taper Charts)  
Taper Series followed by Curve Number

Other styles available.

## Standard Resistance Table

Resistance (Ohms)	Resistance 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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