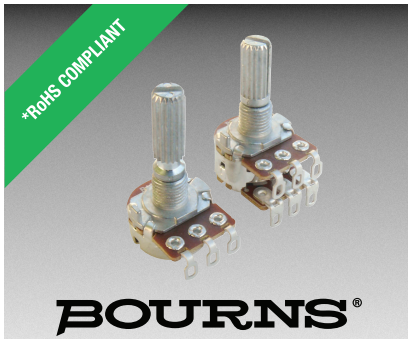




## Features

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

## PDB18 Series - 17 mm Rotary Potentiometer

### Additional Information

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[SAMPLES](#)



[CONTACT](#)

### Electrical Characteristics

Taper..... Linear, audio  
Standard Resistance Range  
..... 1 K ohms to 1 M ohms  
Standard Resistance Tolerance  
.....  $R \leq 1K \Omega \pm 30\%$   
.....  $1K \Omega < R < 1M \Omega \pm 20\%$   
.....  $\geq 1M \Omega \pm 30\%$   
Residual Resistance ..... 1 % max.

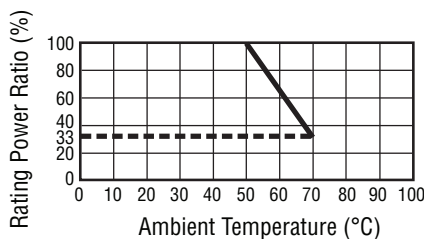
### Environmental Characteristics

Operating Temperature... -10 °C to +50 °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

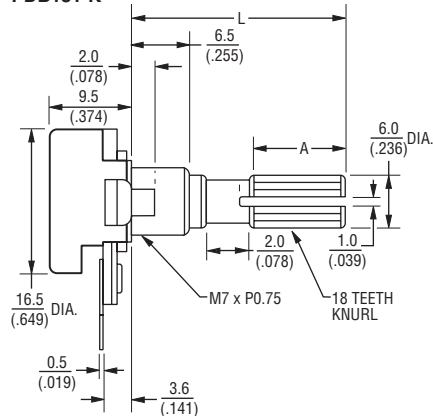
Mechanical Angle ..... 300 °  $\pm 5^\circ$   
Rotational Torque ..... 10 to 150 gf-cm  
Detent Torque ..... 150 to 500 g-cm  
Stop Strength ..... 5 kg-cm min.  
Rotational Life ..... 15,000 cycles  
Soldering Condition  
..... 260 °C max. within 3 seconds  
Hardware ..... One flat washer and  
mounting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

### Derating Curve



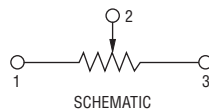
### Product Dimensions

PDB181-K

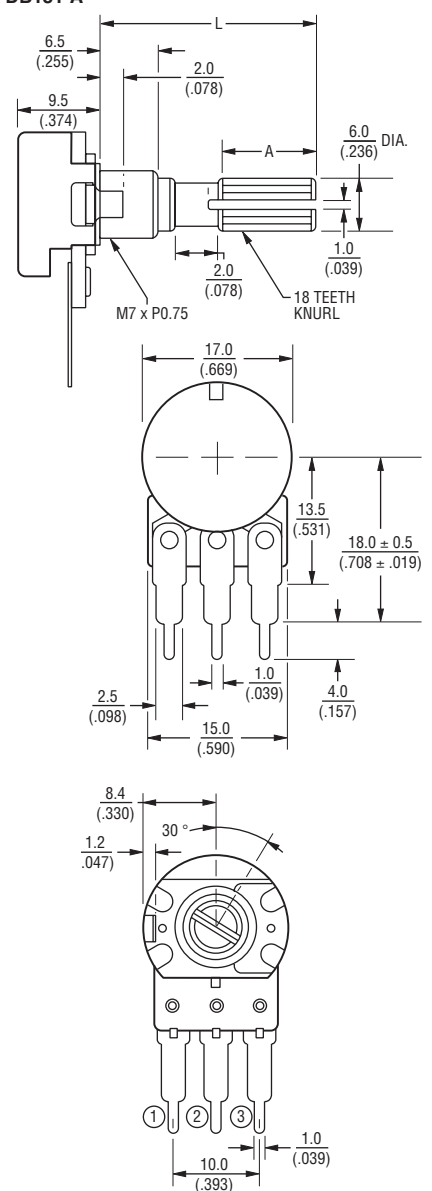


SHAFT SHOWN IN CCW POSITION

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



PDB181-A



SHAFT SHOWN IN CCW POSITION



**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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## Applications

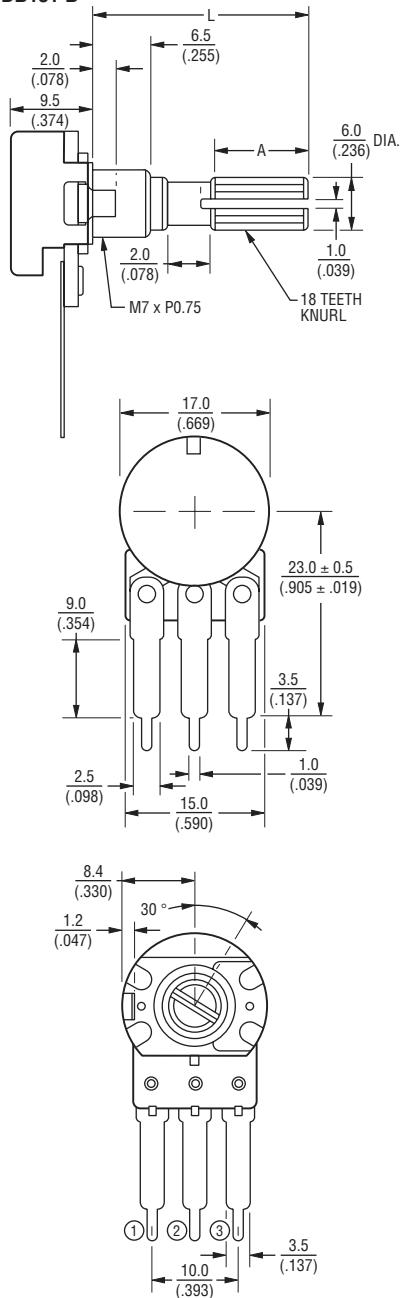
- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

## PDB18 Series - 17 mm Rotary Potentiometer

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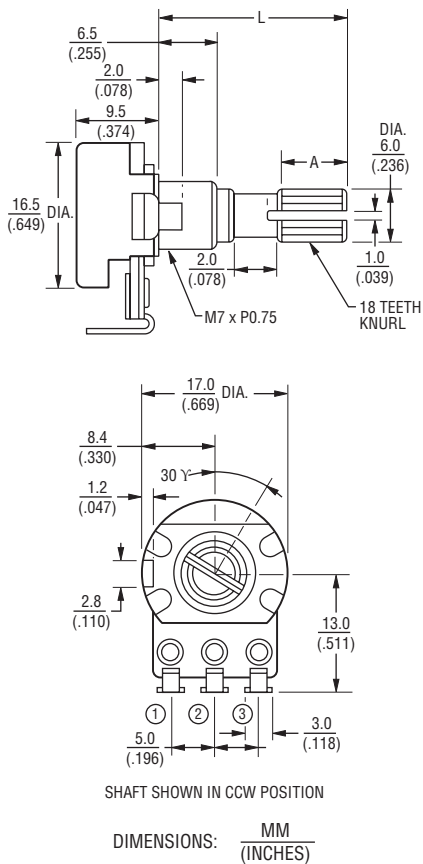
### Product Dimensions

PDB181-B



SHAFT SHOWN IN CCW POSITION

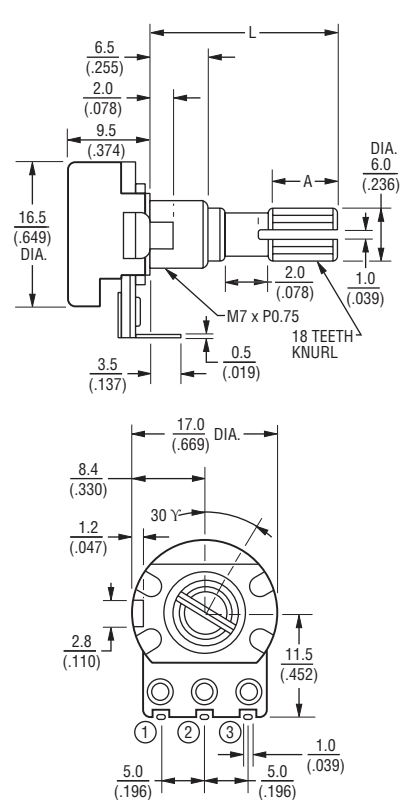
PDB181-E



SHAFT SHOWN IN CCW POSITION

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

PDB181-D



SHAFT SHOWN IN CCW POSITION

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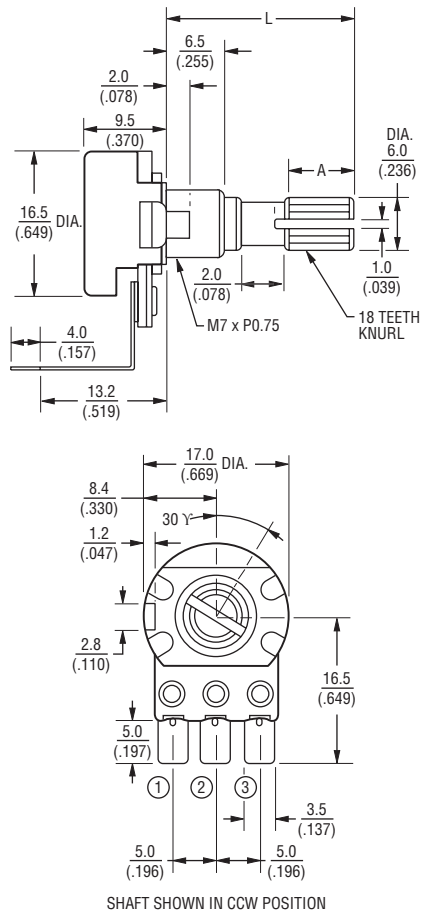
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# PDB18 Series - 17 mm Rotary Potentiometer

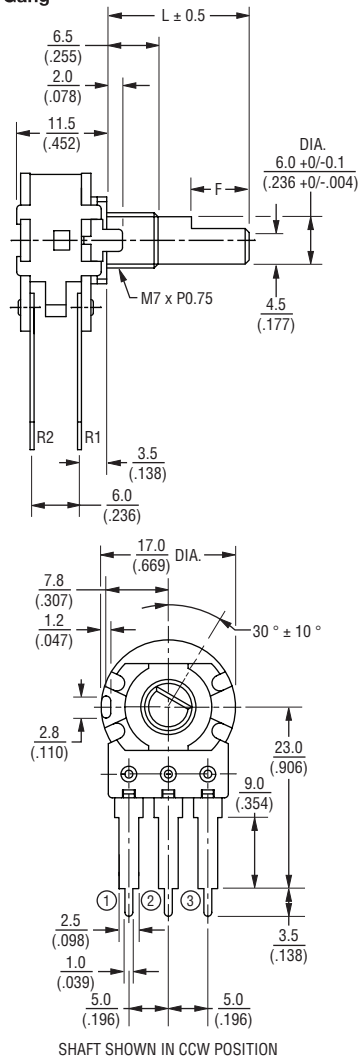
**BOURNS®**

## Product Dimensions

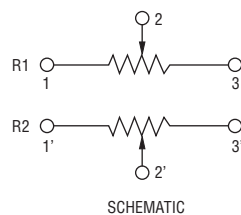
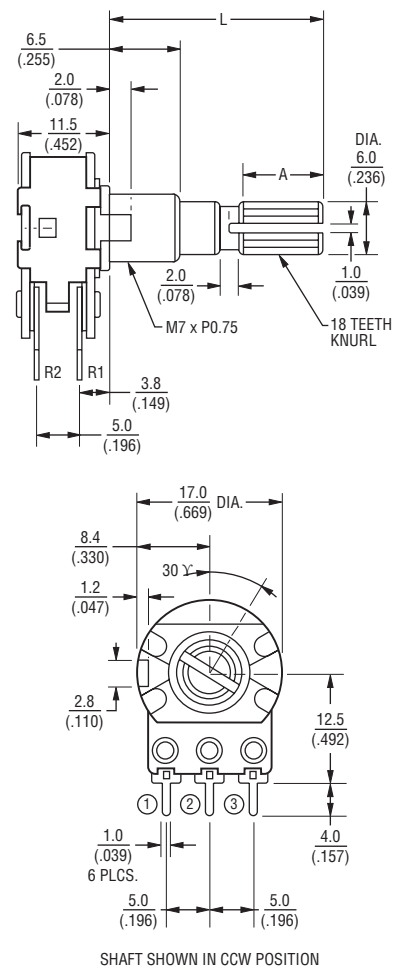
**PDB181-P**



**PDB182-B  
Dual Gang**



**PDB182-K  
Dual Gang**



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

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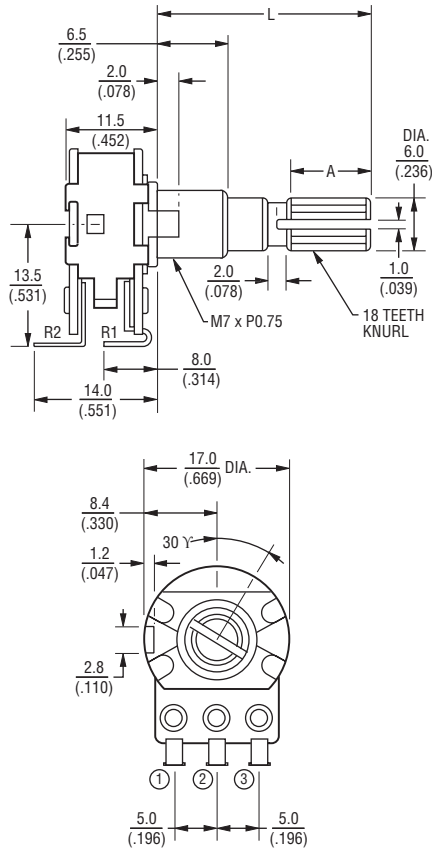
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# PDB18 Series - 17 mm Rotary Potentiometer

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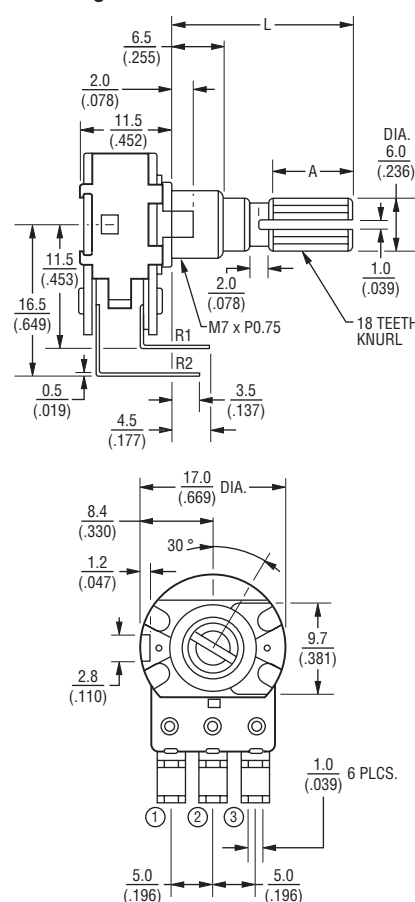
## Product Dimensions

**PDB182-E**  
Dual Gang



SHAFT SHOWN IN CCW POSITION

**PDB182-D**  
Dual Gang



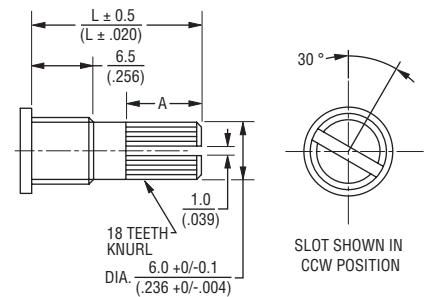
SHAFT SHOWN IN CCW POSITION

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

## Shaft Styles

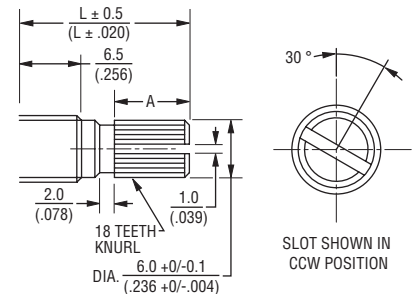
### K Type

|   |               |               |                |
|---|---------------|---------------|----------------|
| L | 15<br>(.591)  | 18<br>(.709)  | 20<br>(.787)   |
| A | 6.5<br>(.256) | 9.5<br>(.374) | 11.5<br>(.453) |



SLOT SHOWN IN CCW POSITION

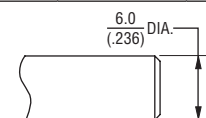
|   |              |               |
|---|--------------|---------------|
| L | 25<br>(.984) | 30<br>(1.181) |
| A | 14<br>(.551) | 19<br>(.748)  |



SLOT SHOWN IN CCW POSITION

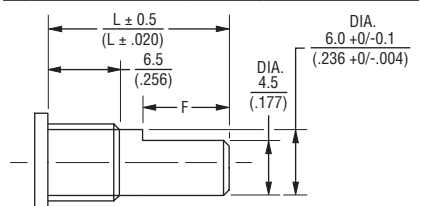
### P Type

|   |              |              |               |
|---|--------------|--------------|---------------|
| L | 20<br>(.787) | 25<br>(.984) | 30<br>(1.181) |
|---|--------------|--------------|---------------|



### F Type

|   |              |              |              |               |               |
|---|--------------|--------------|--------------|---------------|---------------|
| L | 15<br>(.591) | 20<br>(.787) | 25<br>(.984) | 30<br>(1.181) | 35<br>(1.378) |
| F | 7<br>(.276)  | 12<br>(.472) | 12<br>(.472) | 12<br>(.472)  | 12<br>(.472)  |



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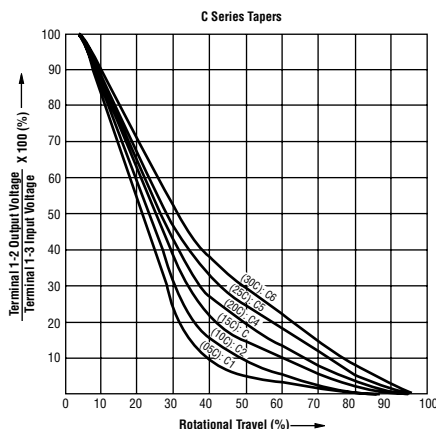
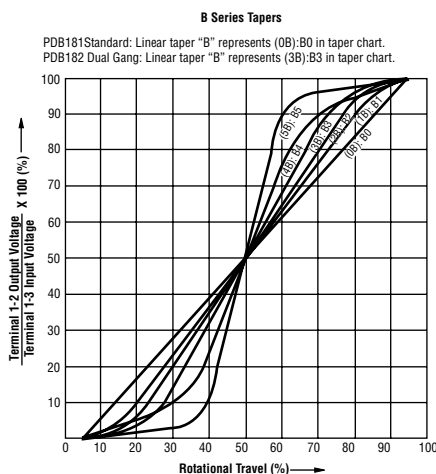
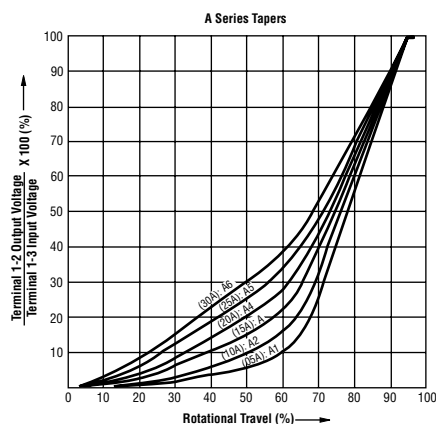
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# PDB18 Series - 17 mm Rotary Potentiometer

**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             |

REV. 07/25

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