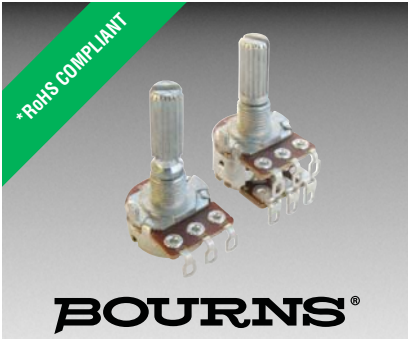




## Features

- 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

### Electrical Characteristics

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

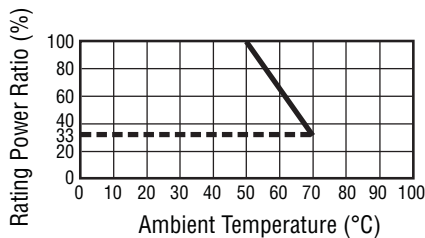
### Environmental Characteristics

Operating Temperature....  $-10^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$   
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

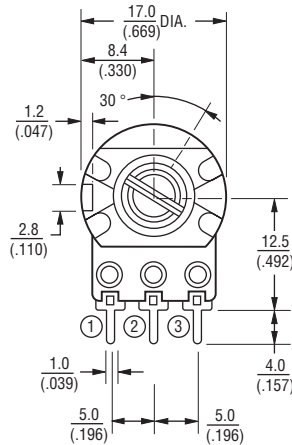
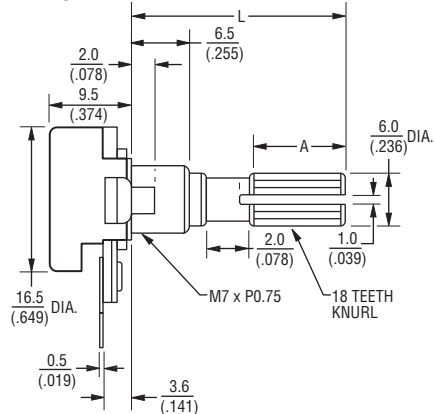
Mechanical Angle.....  $300^{\circ} \pm 5^{\circ}$   
Rotational Torque..... 10 to 150 gf-cm  
Detent Torque..... 150 to 500 g-cm  
Stop Strength..... 5 kg-cm min.  
Rotational Life..... 15,000 cycles  
Soldering Condition  
.....  $260^{\circ}\text{C}$  max. within 3 seconds  
Hardware..... One flat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

### Derating Curve



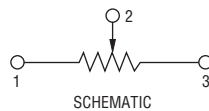
### Product Dimensions

PDB181-K

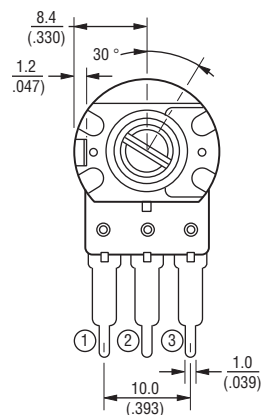
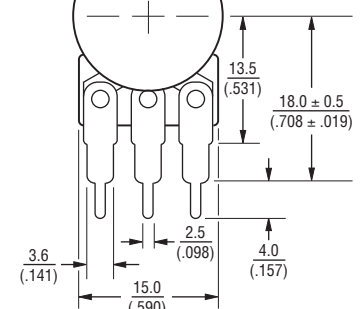
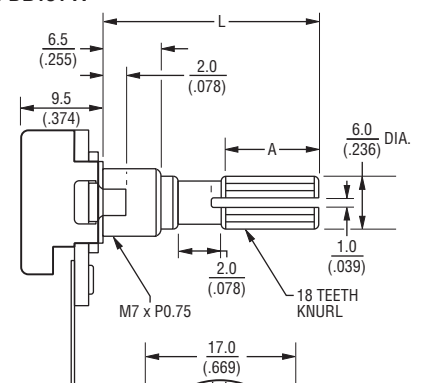


SHAFT SHOWN IN CCW POSITION

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



PDB181-A



SHAFT SHOWN IN CCW POSITION

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

## Additional Features

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

## Applications

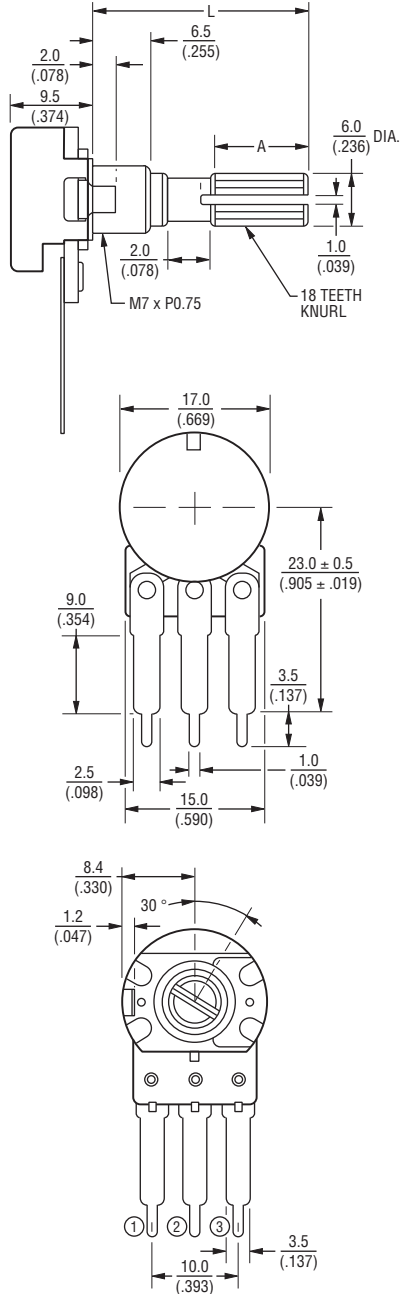
- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

# PDB18 Series - 17 mm Rotary Potentiometer

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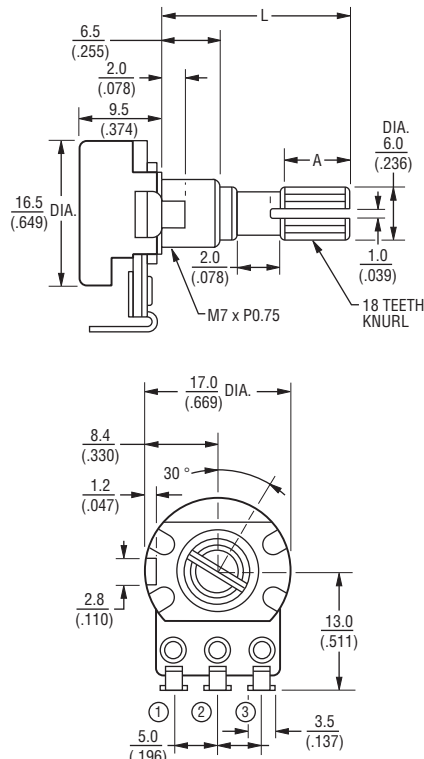
## Product Dimensions

PDB181-B



SHAFT SHOWN IN CCW POSITION

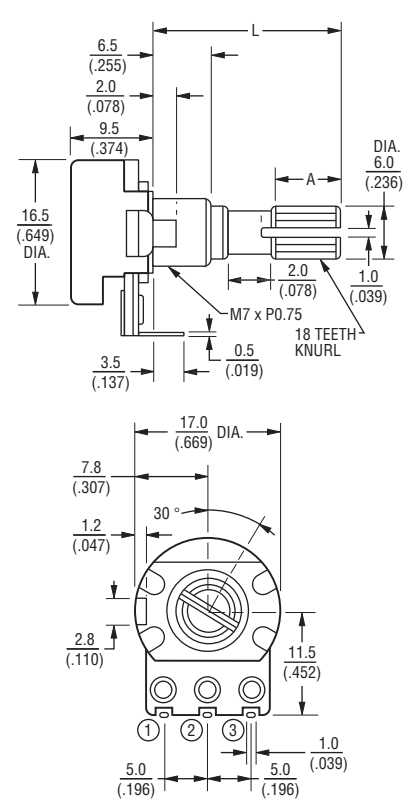
PDB181-E



SHAFT SHOWN IN CCW POSITION

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

PDB181-D



SHAFT SHOWN IN CCW POSITION

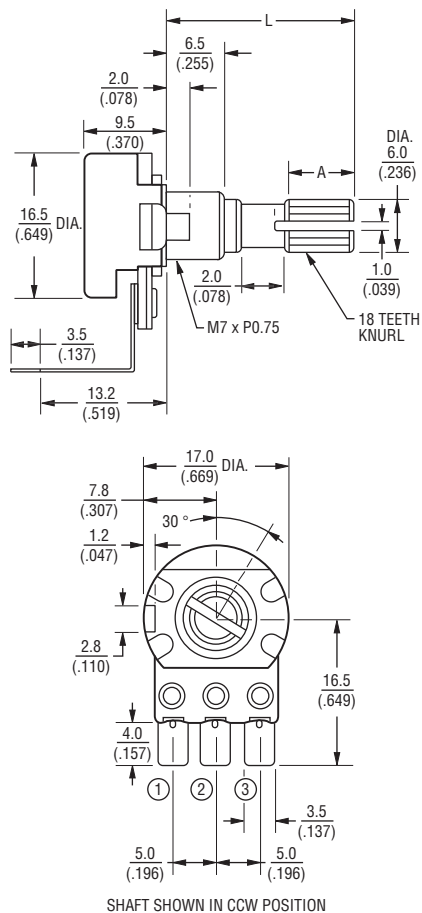
Specifications are subject to change without notice.  
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.  
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# PDB18 Series - 17 mm Rotary Potentiometer

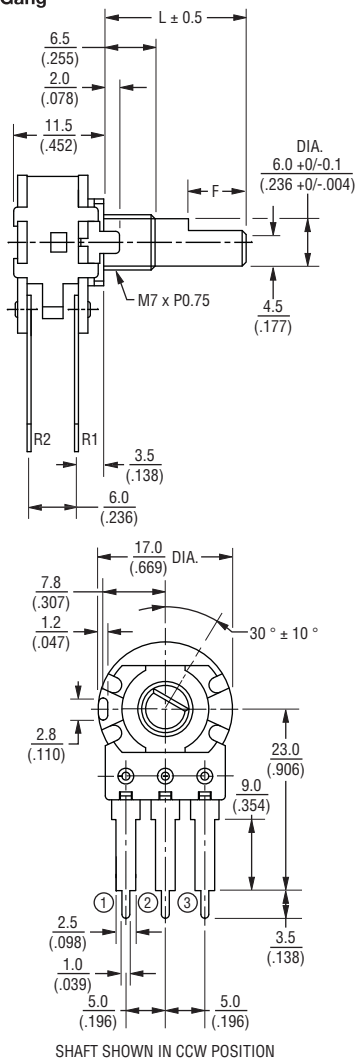
**BOURNS®**

## Product Dimensions

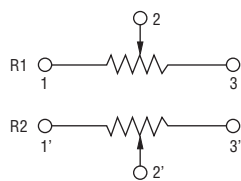
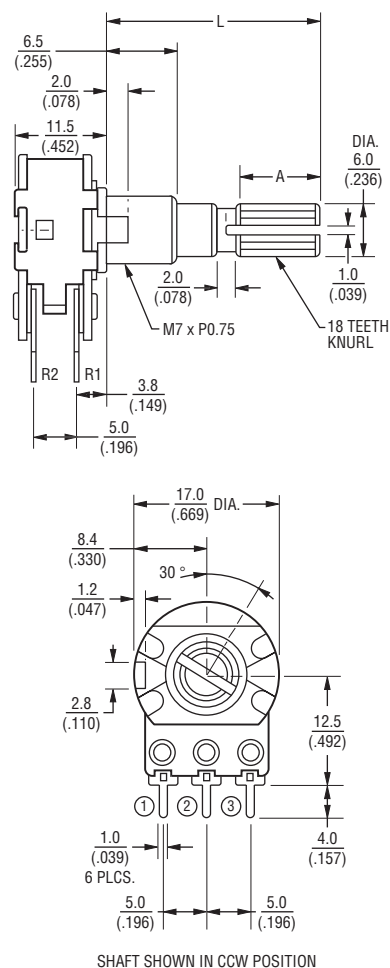
**PDB181-P**



**PDB182-B  
Dual Gang**



**PDB182-K  
Dual Gang**



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

Specifications are subject to change without notice.

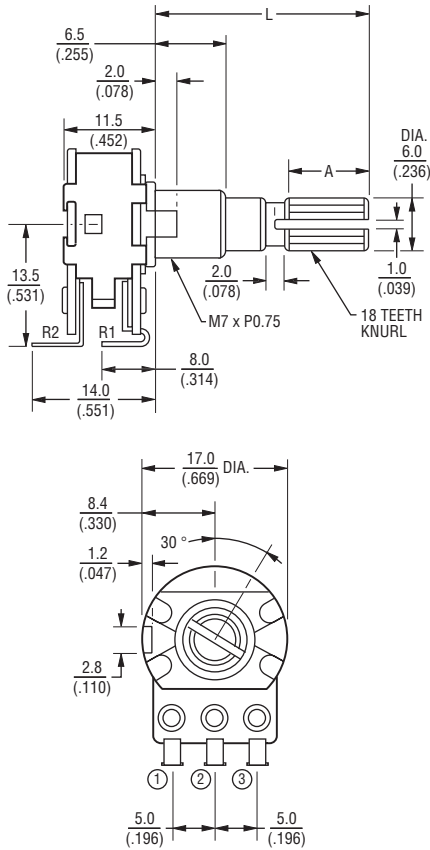
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# PDB18 Series - 17 mm Rotary Potentiometer

**BOURNS®**

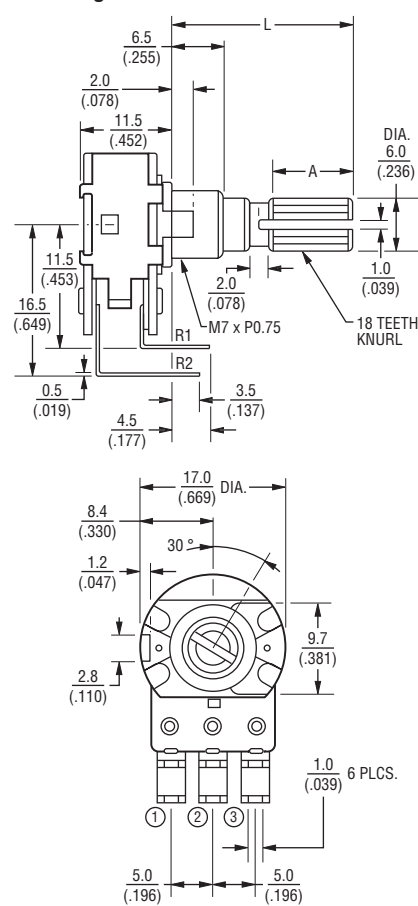
## Product Dimensions

**PDB182-E**  
Dual Gang



SHAFT SHOWN IN CCW POSITION

**PDB182-D**  
Dual Gang



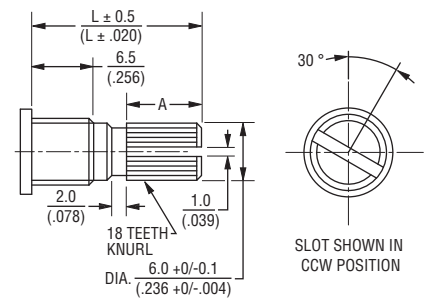
SHAFT SHOWN IN CCW POSITION

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

## Shaft Styles

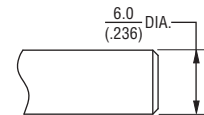
### K Type

|   |               |               |                |              |               |
|---|---------------|---------------|----------------|--------------|---------------|
| L | 15<br>(.591)  | 18<br>(.709)  | 20<br>(.787)   | 25<br>(.984) | 30<br>(1.181) |
| A | 6.5<br>(.256) | 6.5<br>(.256) | 11.5<br>(.453) | 14<br>(.551) | 19<br>(.748)  |



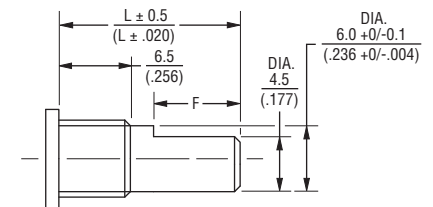
### P Type

|   |              |              |               |
|---|--------------|--------------|---------------|
| 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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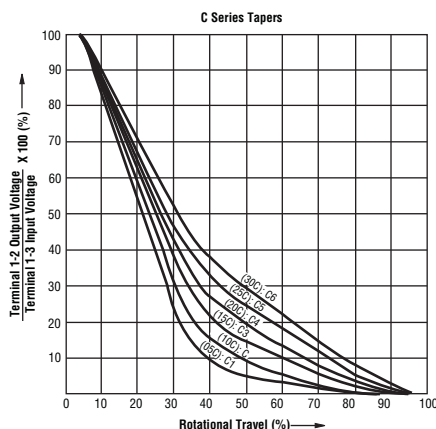
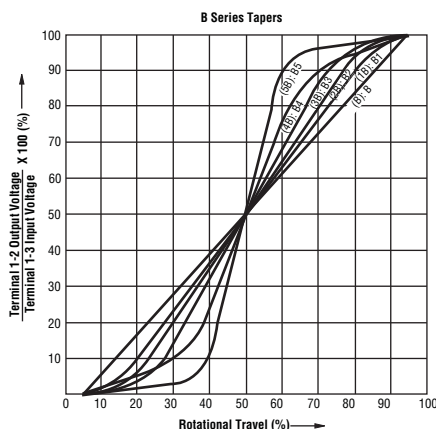
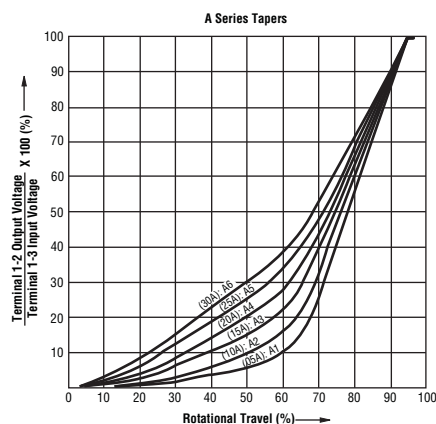
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# PDB18 Series - 17 mm Rotary Potentiometer

**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. 03/13

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