

#### **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**

Click these links for more information:











PRODUCT TECHNICAL INVENTORY SAMPLES

#### **Electrical Characteristics**

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

#### **Environmental Characteristics**

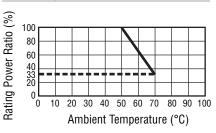
Operating Temperature ... -10 °C to +50 °C Power Rating Linear ......0.2 watt Dual Section......0.125 watt Audio......0.1 watt Dual Section......0.06 watt Maximum Operating Voltage Linear ...... 200 V Audio......150 V Sliding Noise ...... 47 mV max.

#### **Mechanical Characteristics**

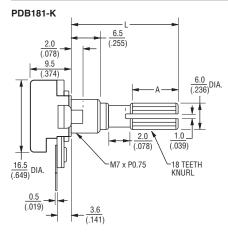
Mechanical Angle......300 ° ±5 ° Rotational Torque .......... 10 to 150 gf-cm Detent Torque ...... 150 to 500 g-cm Stop Strength ......5 kg-cm min. Rotational Life ......15,000 cycles Soldering Condition

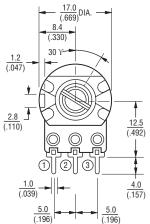
.....260 °C max. within 3 seconds Hardware.....One flat washer and mounting nut supplied per potentiometer with bushing

#### **Derating Curve**



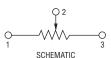
#### **Product Dimensions**



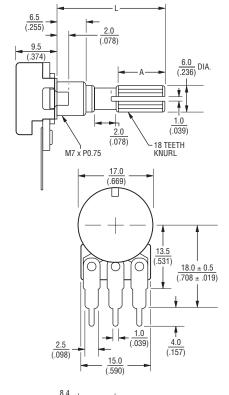


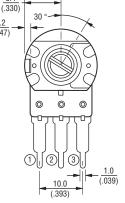
SHAFT SHOWN IN CCW POSITION

DIMENSIONS:



#### PDB181-A





SHAFT SHOWN IN CCW POSITION



#### WARNING Cancer and Reproductive Harm - 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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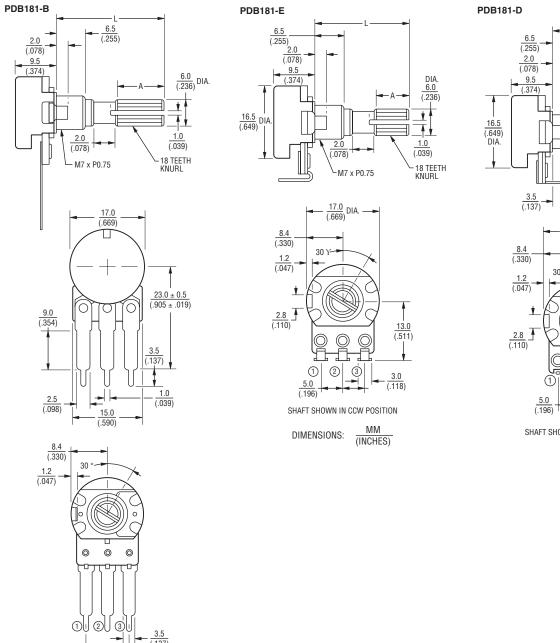
### **Applications**

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

# PDB18 Series - 17 mm Rotary Potentiometer

## **BOURNS**®

#### **Product Dimensions**



(.078)M7 x P0.75 18 TEETH 0.5 (.019) 17.0 (.669) DIA. -3

SHAFT SHOWN IN CCW POSITION

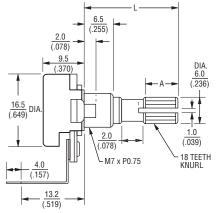
(.039)

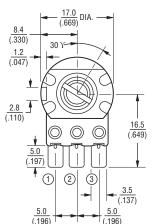
SHAFT SHOWN IN CCW POSITION

# PDB18 Series - 17 mm Rotary Potentiometer

#### **Product Dimensions**

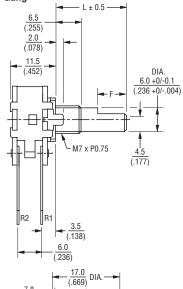
#### PDB181-P

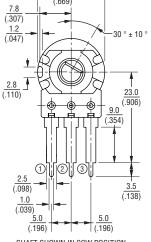




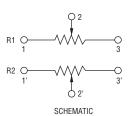
SHAFT SHOWN IN CCW POSITION

# PDB182-B Dual Gang



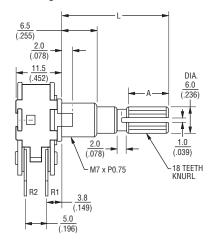


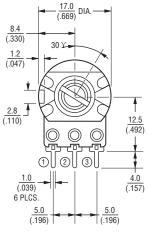
SHAFT SHOWN IN CCW POSITION



MM DIMENSIONS: (INCHES)

#### PDB182-K **Dual Gang**





SHAFT SHOWN IN CCW POSITION

# PDB18 Series - 17 mm Rotary Potentiometer

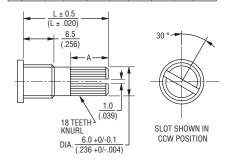
## BOURNS

#### **Product Dimensions** PDB182-E PDB182-D Dual Gang Dual Gang $\frac{6.5}{(.255)}$ $\frac{2.0}{(.078)}$ (.078) DIA. 6.0 (.236) (.452)(.452) $\frac{6.0}{(.236)}$ 11.5 (.453) 1.0 2.0 1.0 13.5 (.531) (.078) (.039)(.039)16.5 (.649) (.078)18 TEETH KNURL -M7 x P0.75 · 18 TEETH KNURL -M7 x P0.75 IR2 (.314)<u>0.5</u> (.019) 14.0 (.551) 3.5 (.137) 17.0 (.669) DIA. – 17.0 (.669) DIA. $\frac{8.4}{(.330)}$ 8.4 (.330) 1.2 (.047) 9.7 2.8 (.110) $\frac{1.0}{(.039)}$ 6 PLCS. 1) 2 3 SHAFT SHOWN IN CCW POSITION SHAFT SHOWN IN CCW POSITION MM DIMENSIONS: (INCHES)

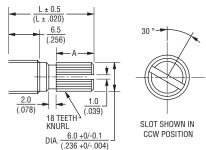
#### **Shaft Styles**

#### K Type

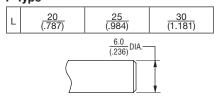
L	15	18	20
	(.591)	(.709)	(.787)
А	<u>6.5</u>	9.5	11.5
	(.256)	(.374)	(.453)



L	<u>25</u> (.984)	30 (1.181)
Α	14 (.551)	<u>19</u> (.748)

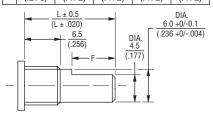


#### Р Туре



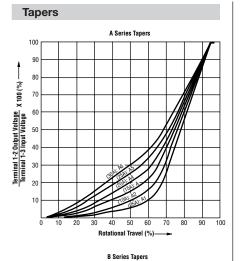
#### F Type

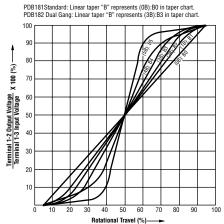
L	<u>15</u>	<u>20</u>	<u>25</u>	30	35
	(.591)	(.787)	(.984)	(1.181)	(1.378)
F	<u>7</u> (.276)	<u>12</u> (.472)	<u>12</u>	<u>12</u> (.472)	<u>12</u> (.472)

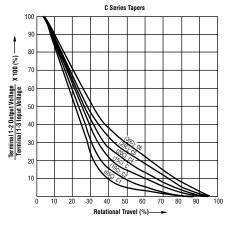


# PDB18 Series - 17 mm Rotary Potentiometer

### BOURNS







#### **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) PC Pins vertical/

Down Facing (12.5 mm) PC Pins vertical/

Down Facing (18.0 mm) PC Pins vertical Down Facing

(23.0 mm) Solder Lugs

Rear Facing

Rear Facing 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

Metal Flatted Shaft

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

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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