



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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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.

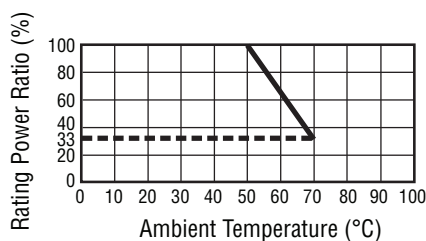
Environmental Characteristics

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

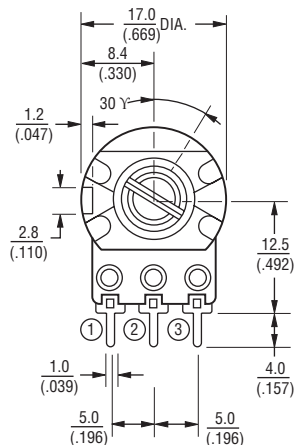
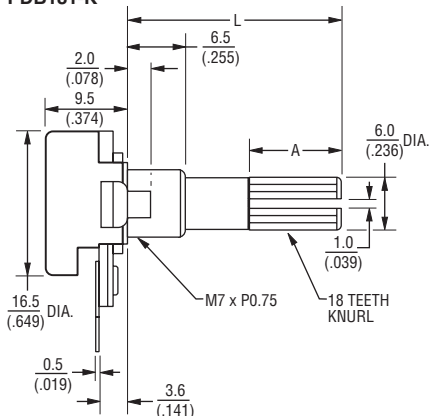
Mechanical Angle 300 ° ± 5 °
Rotational Torque 10 to 150 gf-cm
Detent Torque 150 to 500 g-cm
Stop Strength 5 kg-cm min.
Rotational Life 15,000 cycles
Soldering Condition
..... 260 °C max. within 3 seconds
Hardware One flat washer and
mounting nut supplied per
potentiometer with bushing

Derating Curve



Product Dimensions

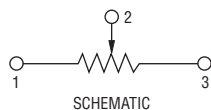
PDB181-K



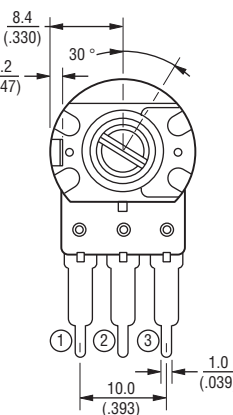
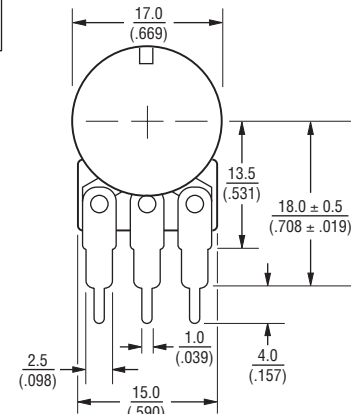
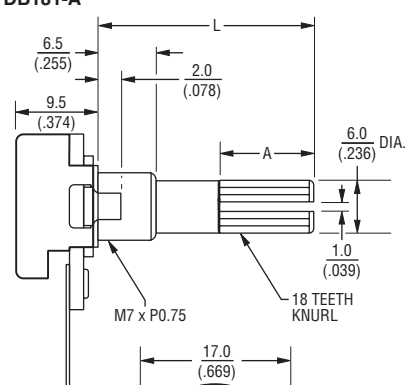
SHAFT SHOWN IN CCW POSITION

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

TOLERANCE: $\frac{<10}{(<.400)} = \frac{\pm 0.3}{(\pm .012)}$
 $\frac{\geq 10}{(\geq .400)} = \frac{\pm 0.5}{(\pm .020)}$



PDB181-A



SHAFT SHOWN IN CCW POSITION



CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant.
See 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

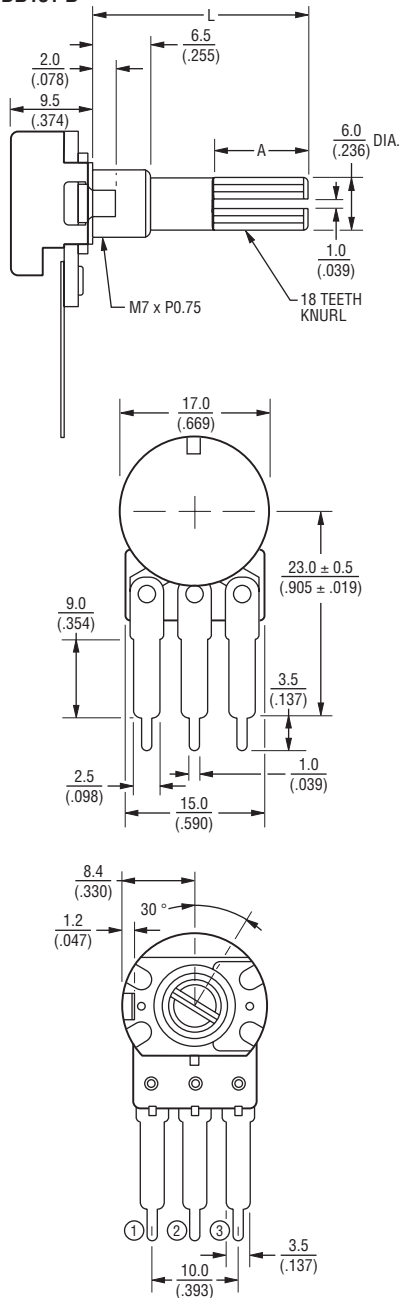
- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

PDB18 Series - 17 mm Rotary Potentiometer

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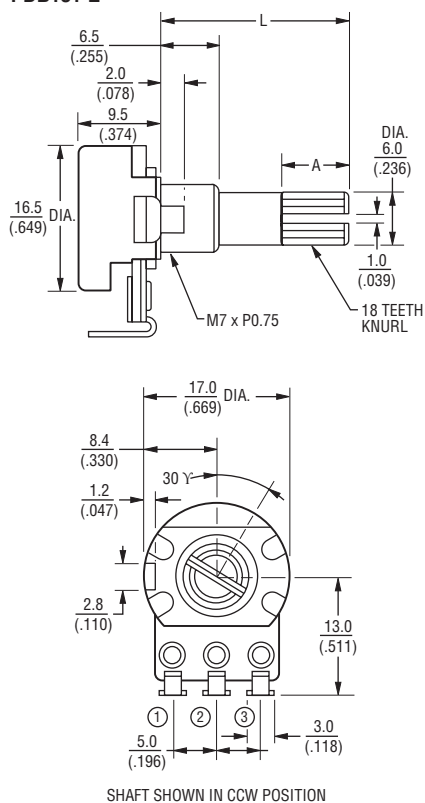
Product Dimensions

PDB181-B



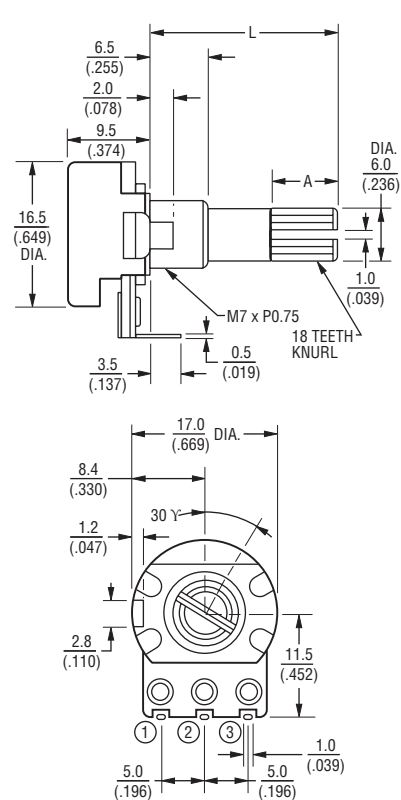
SHAFT SHOWN IN CCW POSITION

PDB181-E



SHAFT SHOWN IN CCW POSITION

PDB181-D



SHAFT SHOWN IN CCW POSITION

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

TOLERANCE: $\frac{<10}{(<.400)} = \frac{\pm 0.3}{(\pm .012)}$
 $\frac{\geq 10}{(\geq .400)} = \frac{\pm 0.5}{(\pm .020)}$

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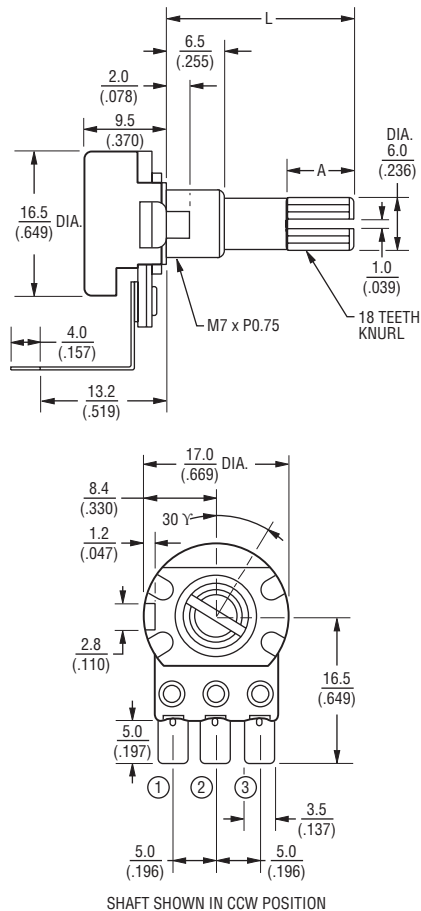
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Product Dimensions

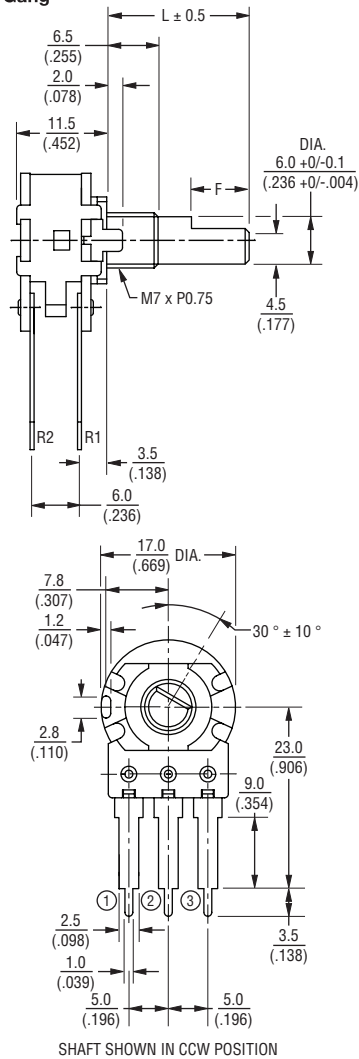
PDB181-P



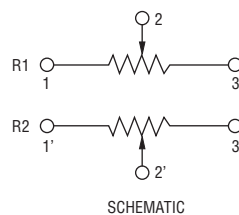
DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

TOLERANCE: $\frac{<10}{(<.400)} = \frac{\pm 0.3}{(\pm .012)}$
 $\frac{\geq 10}{(\geq .400)} = \frac{\pm 0.5}{(\pm .020)}$

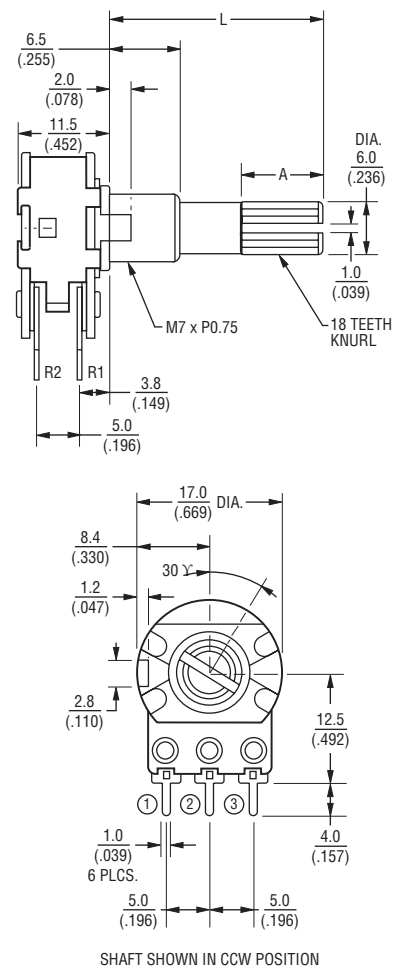
**PDB182-B
Dual Gang**



SHAFT SHOWN IN CCW POSITION



**PDB182-K
Dual Gang**



SHAFT SHOWN IN CCW POSITION

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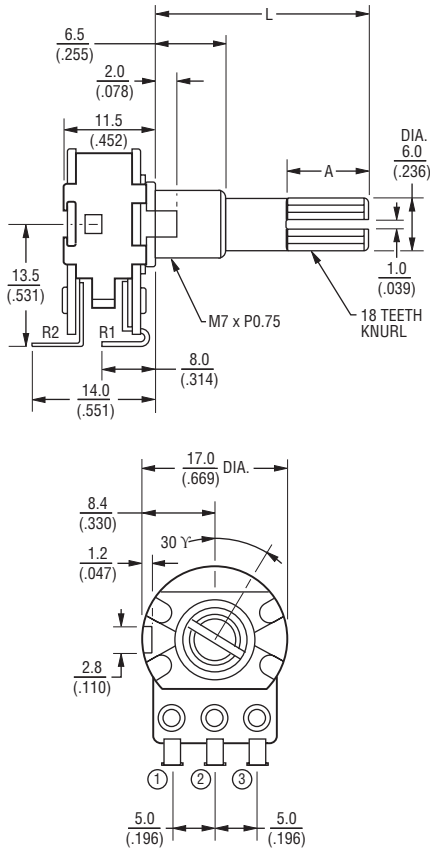
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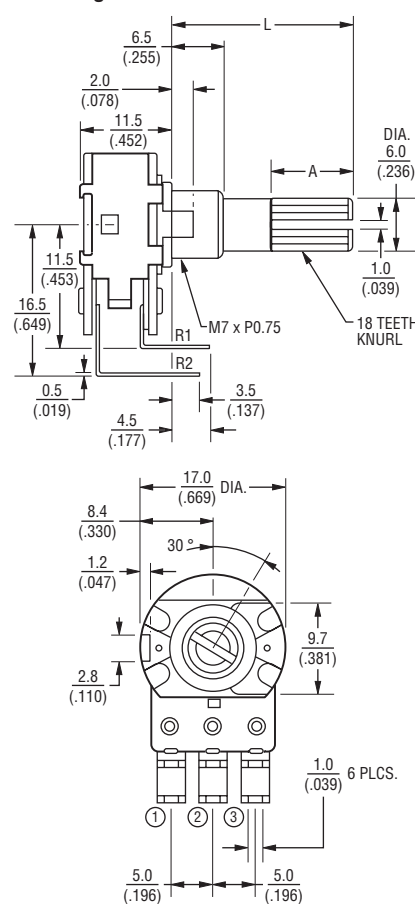
Product Dimensions

PDB182-E
Dual Gang



SHAFT SHOWN IN CCW POSITION

PDB182-D
Dual Gang



SHAFT SHOWN IN CCW POSITION

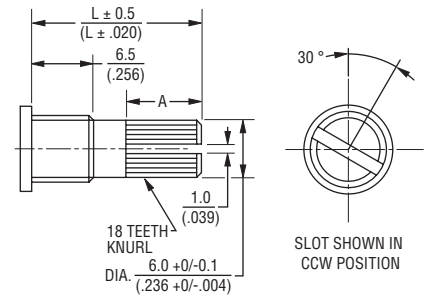
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

TOLERANCE: $\frac{<10}{(<.400)} = \frac{\pm 0.3}{(\pm .012)}$
 $\frac{\geq 10}{(\geq .400)} = \frac{\pm 0.5}{(\pm .020)}$

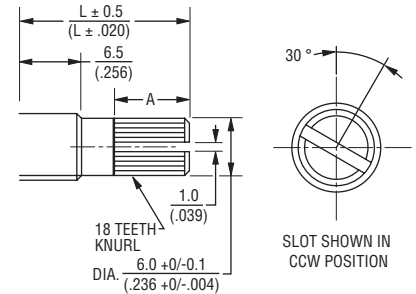
Shaft Styles

K Type

L	15 (.591)	18 (.709)	20 (.787)
A	6.5 (.256)	9.5 (.374)	11.5 (.453)

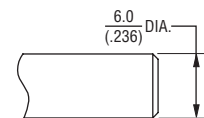


L	25 (.984)	30 (1.181)
A	14 (.551)	20 (.787)



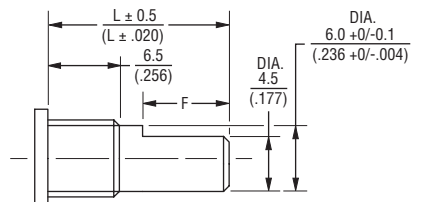
P Type

L	20 (.787)	25 (.984)	30 (1.181)
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F Type

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



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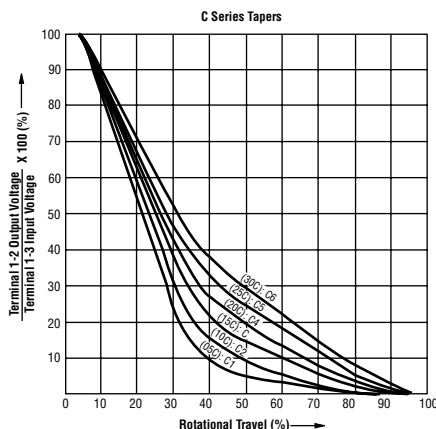
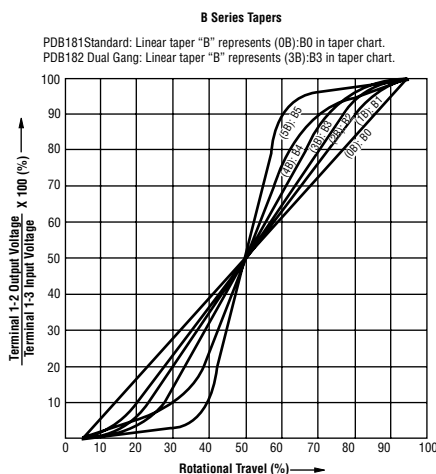
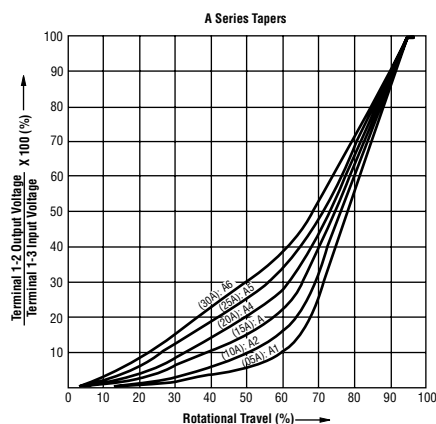
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PDB18 Series - 17 mm Rotary Potentiometer

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. 05/26

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