



BOURNS®

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:



Electrical Characteristics

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

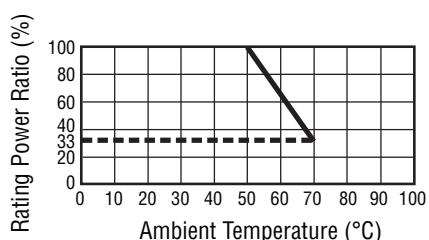
Environmental Characteristics

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

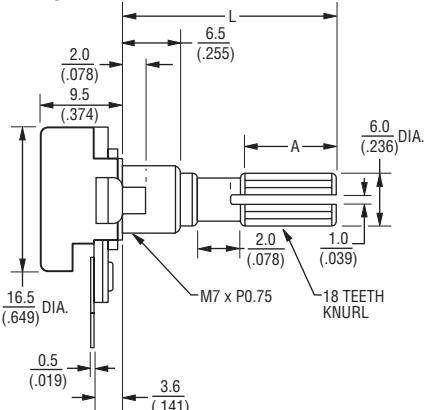
Mechanical Angle	300 ° ±5 °
Rotational Torque	10 to 150 gf-cm
Detent Torque	150 to 500 g-cm
Stop Strength	5 kg-cm min.
Rotational Life	15,000 cycles
Soldering Condition	
.....	260 °C max. within 3 seconds
Hardware	One flat washer and mounting nut supplied per potentiometer with bushing

Derating Curve

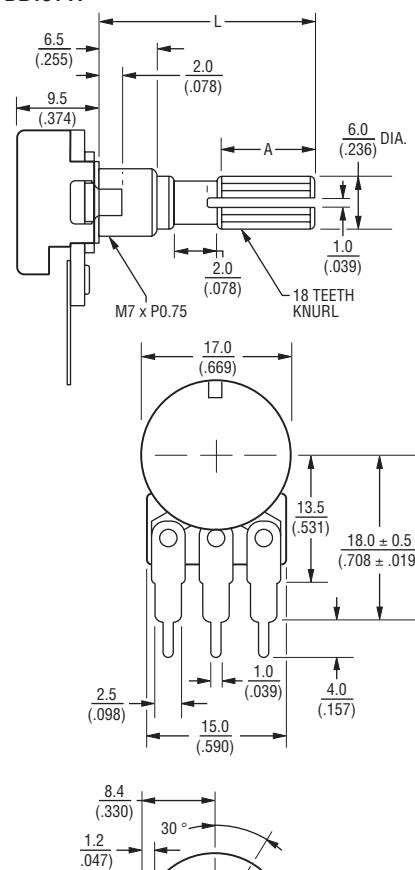


Product Dimensions

PDB181-K

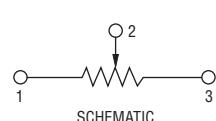


PDB181-A



SHAFT SHOWN IN CCW POSITION

DIMENSIONS: MM
(INCHES)



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

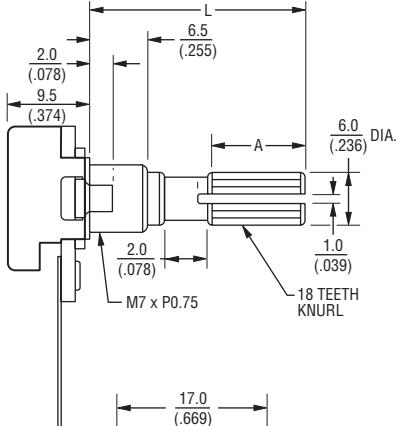
- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

PDB18 Series - 17 mm Rotary Potentiometer

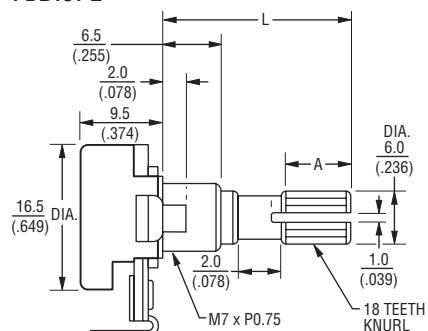
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Product Dimensions

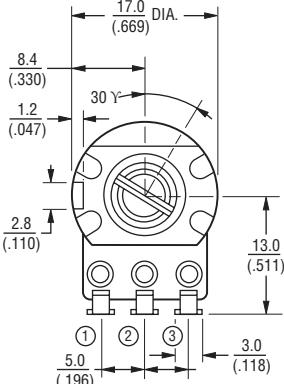
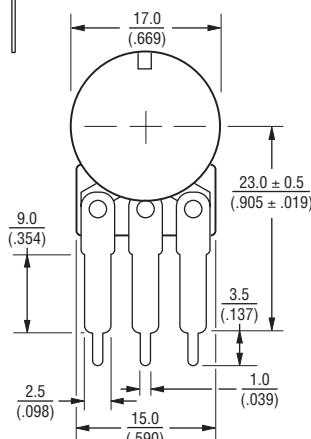
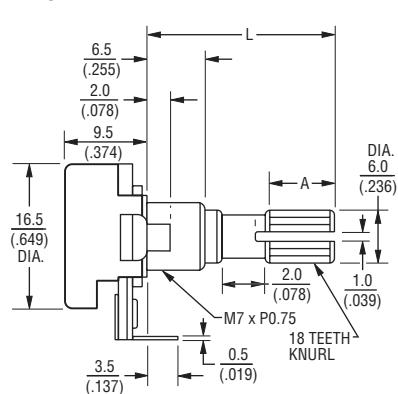
PDB181-B



PDB181-E

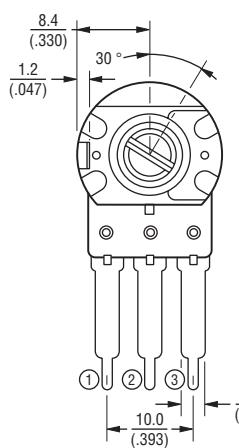


PDB181-D



DIMENSIONS: MM
(INCHES)

SHAFT SHOWN IN CCW POSITION



SHAFT SHOWN IN CCW POSITION

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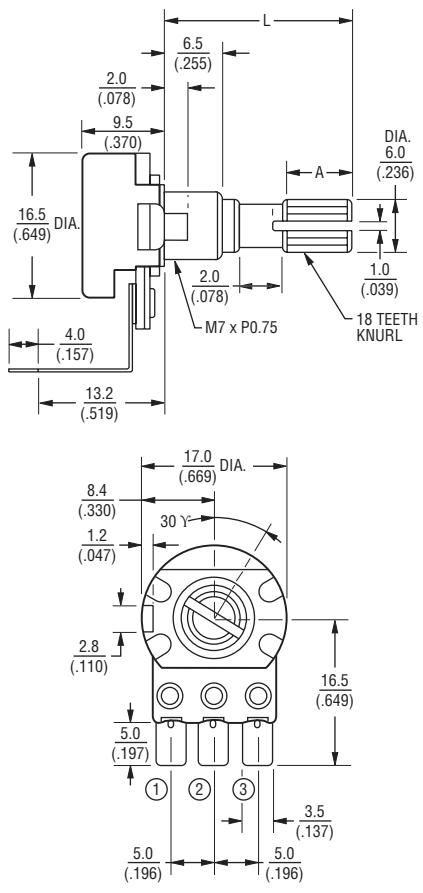
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PDB18 Series - 17 mm Rotary Potentiometer

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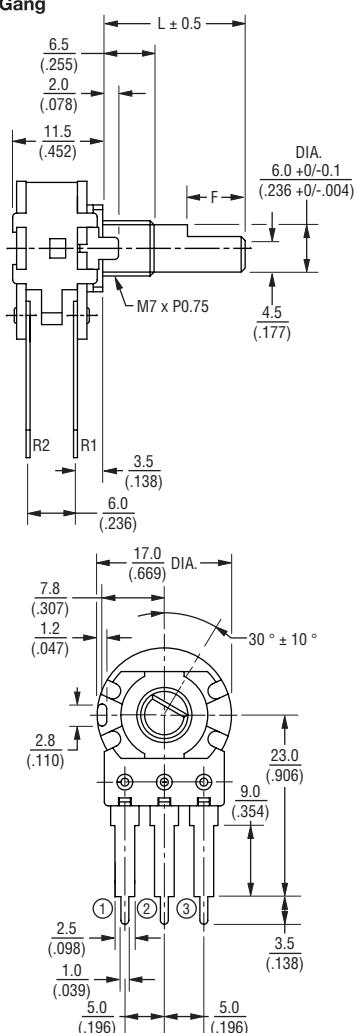
Product Dimensions

PDB181-P



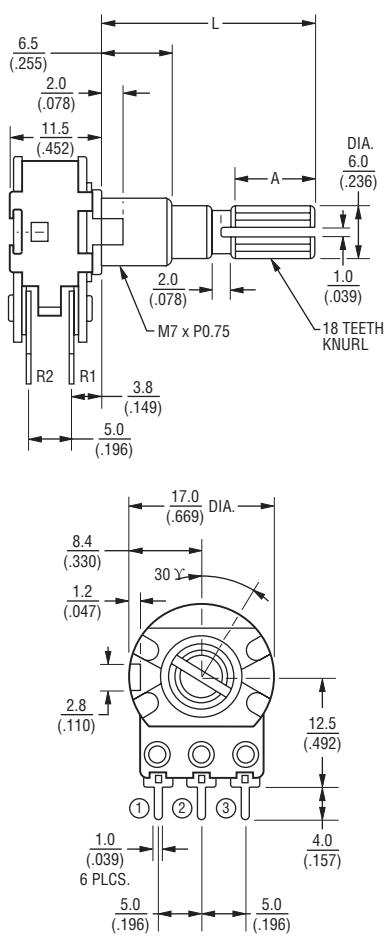
SHAFT SHOWN IN CCW POSITION

PDB182-B
Dual Gang

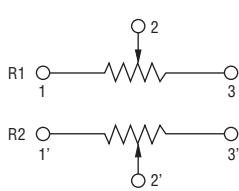


SHAFT SHOWN IN CCW POSITION

PDB182-K
Dual Gang



SHAFT SHOWN IN CCW POSITION



SCHEMATIC

DIMENSIONS: MM
(INCHES)

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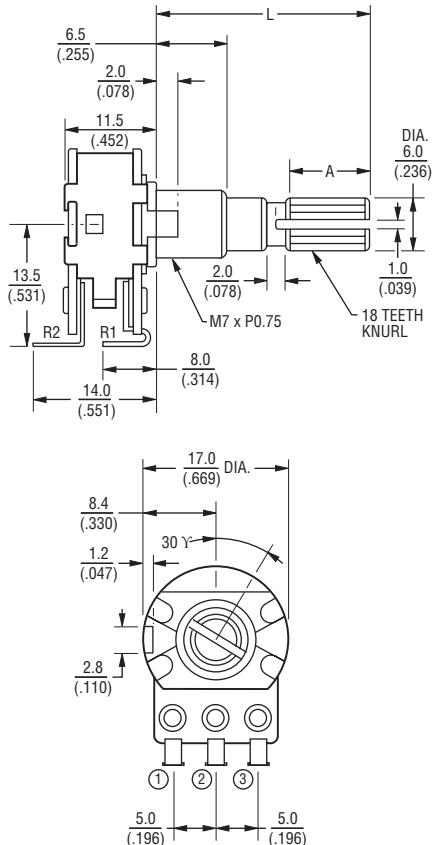
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Product Dimensions

PDB182-E
Dual Gang



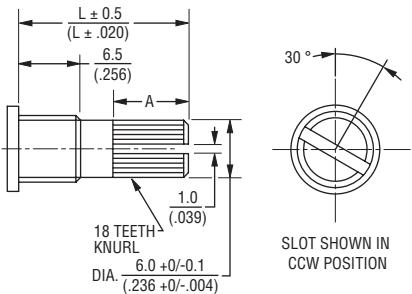
SHAFT SHOWN IN CCW POSITION

DIMENSIONS: MM
(INCHES)

Shaft Styles

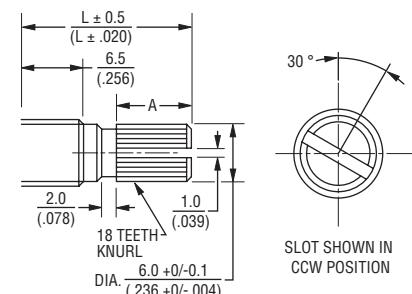
K Type

L	$\frac{15}{(.591)}$	$\frac{18}{(.709)}$	$\frac{20}{(.787)}$
A	$\frac{6.5}{(.256)}$	$\frac{9.5}{(.374)}$	$\frac{11.5}{(.453)}$



SLOT SHOWN IN

L	$\frac{25}{(.984)}$	$\frac{30}{(1.181)}$
A	$\frac{14}{(551)}$	$\frac{19}{(748)}$



SLOT SHOWN IN

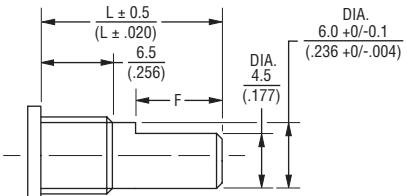
P Type

L	$\frac{20}{(.787)}$	$\frac{25}{(.984)}$	$\frac{30}{(1.181)}$
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F Type

L	$\frac{15}{(.591)}$	$\frac{20}{(.787)}$	$\frac{25}{(.984)}$	$\frac{30}{(1.181)}$	$\frac{35}{(1.378)}$
F	$\frac{7}{(.276)}$	$\frac{12}{(.472)}$	$\frac{12}{(.472)}$	$\frac{12}{(.472)}$	$\frac{12}{(.472)}$



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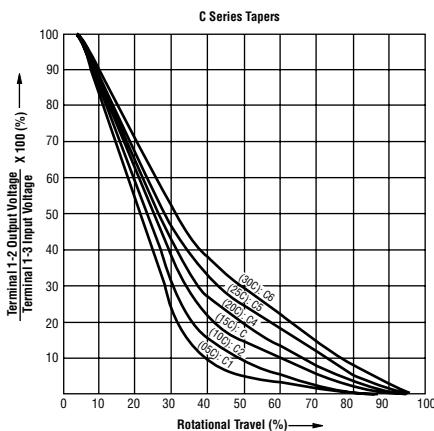
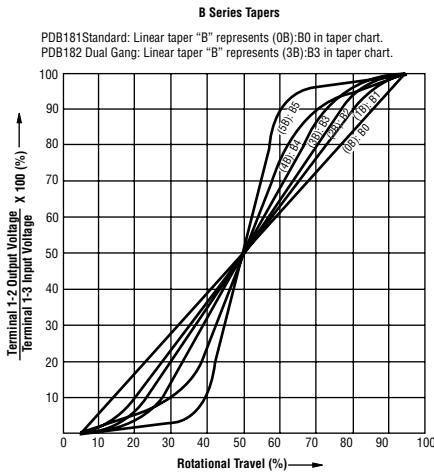
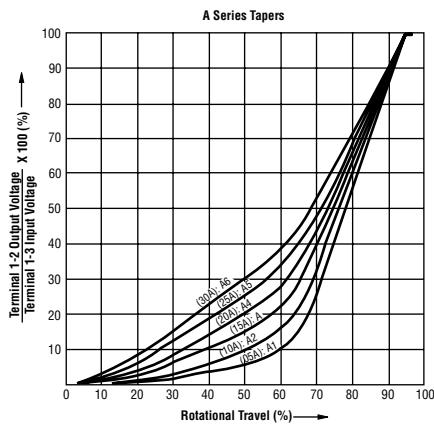
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PDB18 Series - 17 mm Rotary Potentiometer

BOURNS®

Tapers



How To Order

PDB18 1 - K 4 25 K - 103 A1

Model	
Number of Sections	<ul style="list-style-type: none"> • 1 = Single Section • 2 = Dual Section
Terminal Configuration (Pin Layout)	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 15 = 15 mm • 18 = 18 mm • 20 = 20 mm • 25 = 25 mm • 30 = 30 mm
Shaft Style	<ul style="list-style-type: none"> • F = Metal Flattened 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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