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

BOURNS® PRO AUDIO

PDB18 Series - 17 mm Rotary Potentiometer

Electrical Characteristics

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

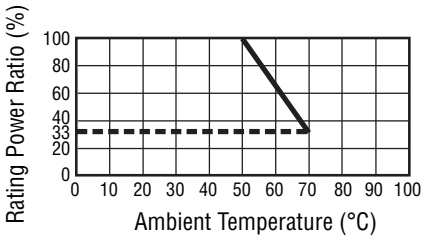
Environmental Characteristics

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

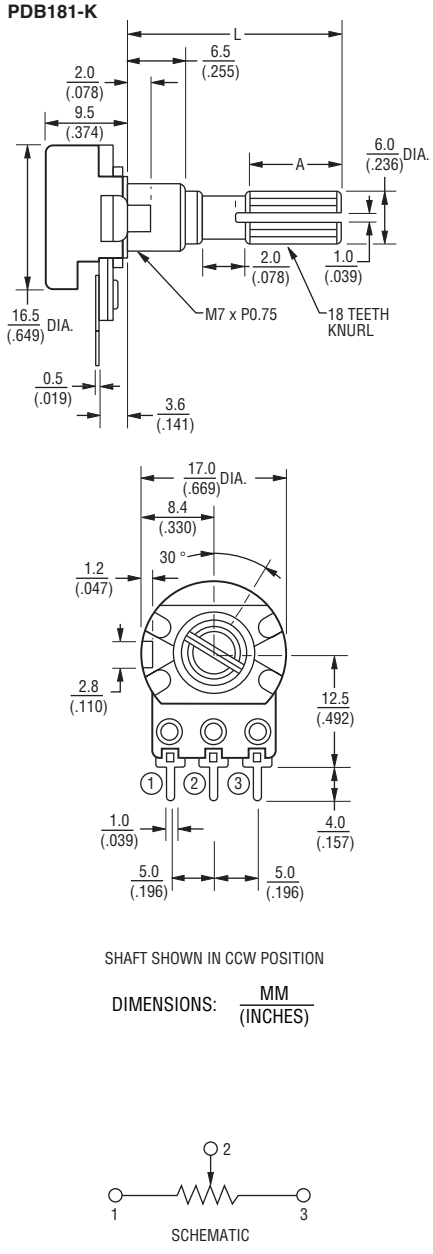
Mechanical Angle ..... 300 ° ±5 °
Rotational Torque ..... 10 to 150 gf-cm
Detent Torque ..... 150 to 500 g-cm
Stop Strength ..... 5 kg-cm min.
Rotational Life ..... 15,000 cycles
Soldering Condition
..... 260 °C max. within 3 seconds
Hardware ..... One flat washer and mounting nut supplied per potentiometer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

Derating Curve



Product Dimensions

PDB181-K

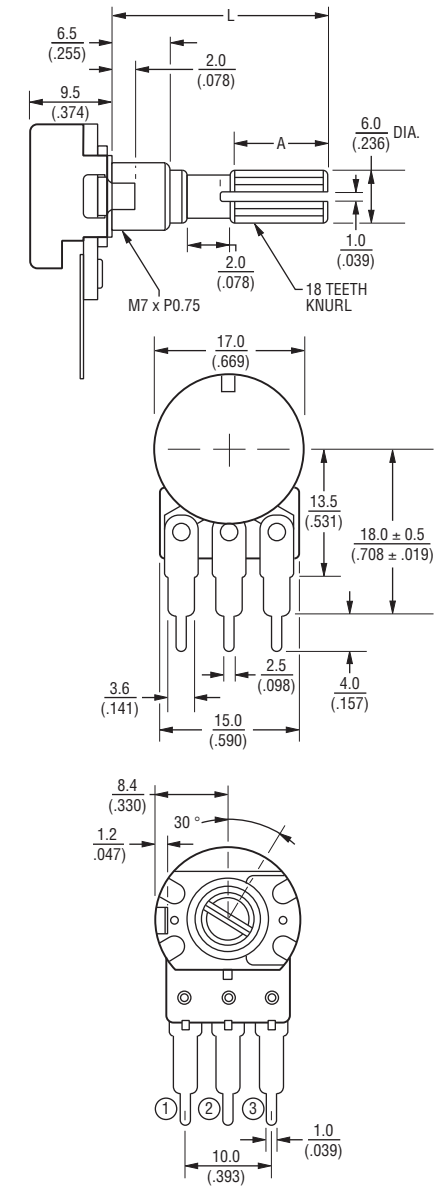


SHAFT SHOWN IN CCW POSITION

DIMENSIONS: MM / (INCHES)

SCHEMATIC

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.

Additional Features

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

Applications

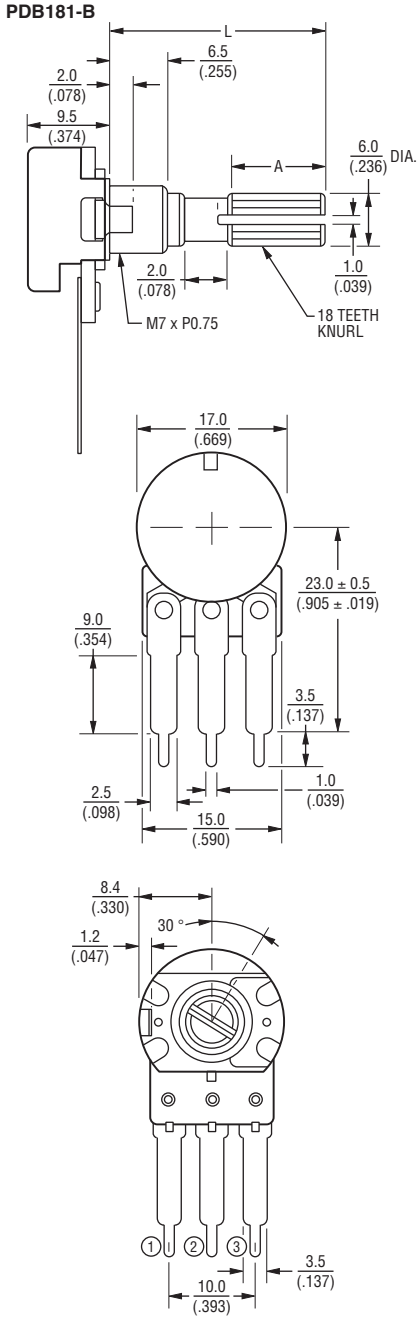
- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/ synthesizers
- PCs/monitors
- Appliances

PDB18 Series - 17 mm Rotary Potentiometer

BOURNS®

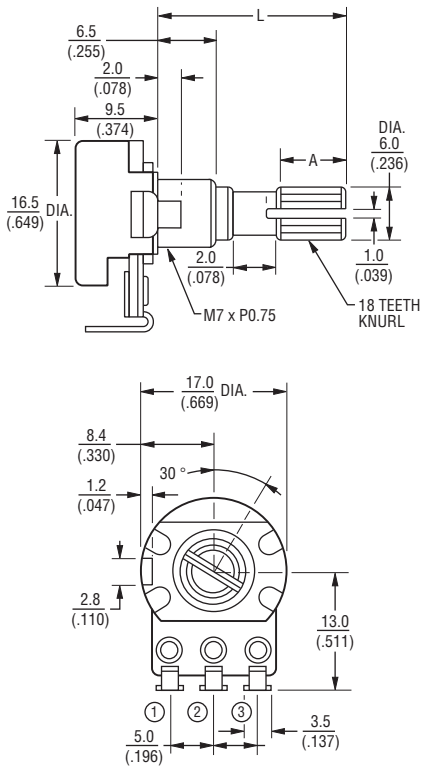
Product Dimensions

PDB181-B



SHAFT SHOWN IN CCW POSITION

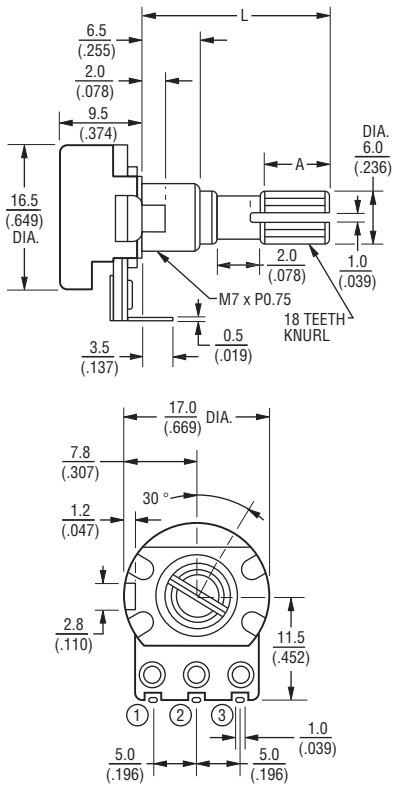
PDB181-E



SHAFT SHOWN IN CCW POSITION

DIMENSIONS: MM / (INCHES)

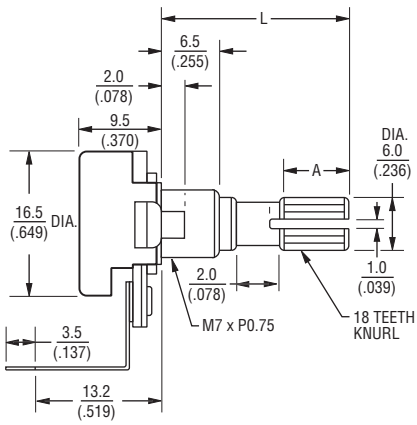
PDB181-D

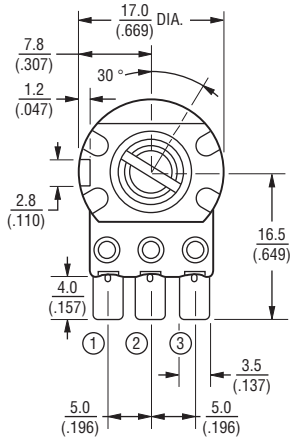


SHAFT SHOWN IN CCW POSITION

Product Dimensions

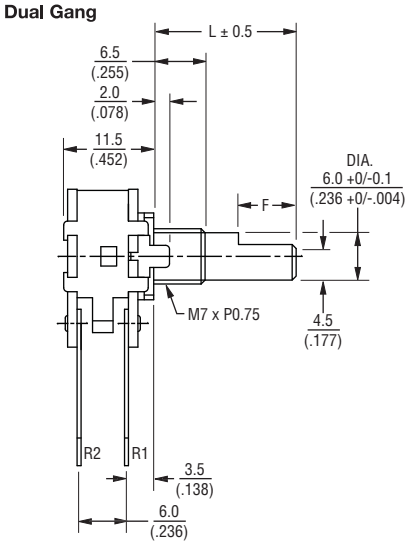
PDB181-P

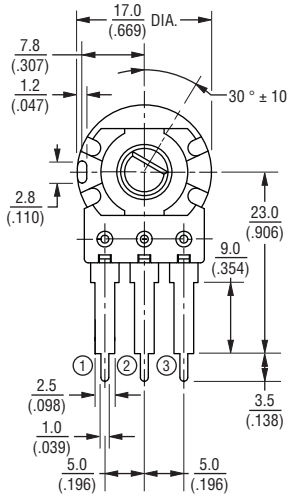




SHAFT SHOWN IN CCW POSITION

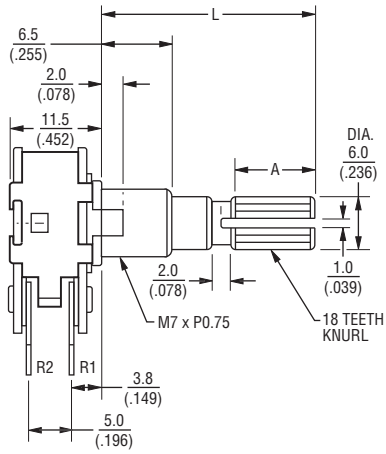
PDB182-B
Dual Gang

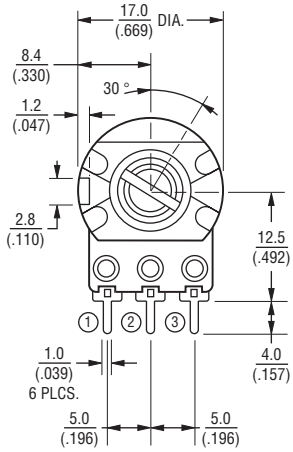




SHAFT SHOWN IN CCW POSITION

PDB182-K
Dual Gang





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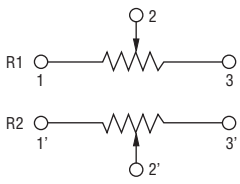


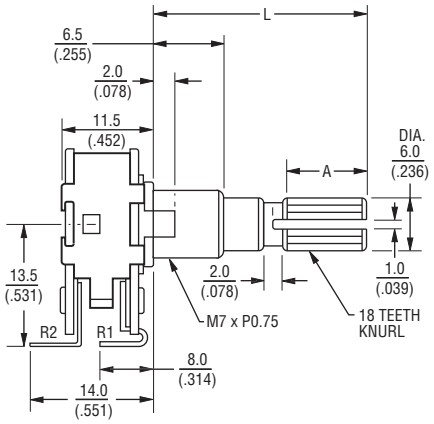
SCHEMATIC

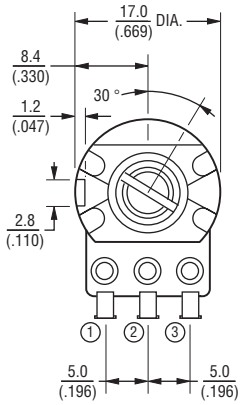
DIMENSIONS: MM (INCHES)

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.

Product Dimensions

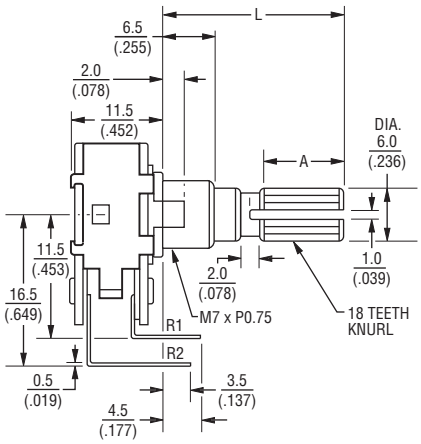
PDB182-E
Dual Gang

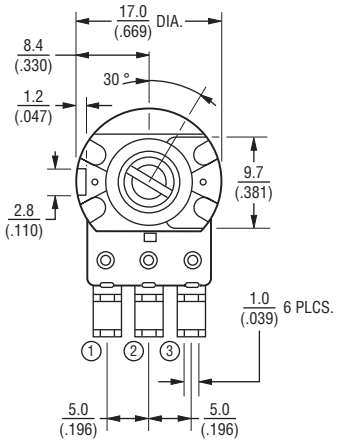




SHAFT SHOWN IN CCW POSITION

PDB182-D
Dual Gang





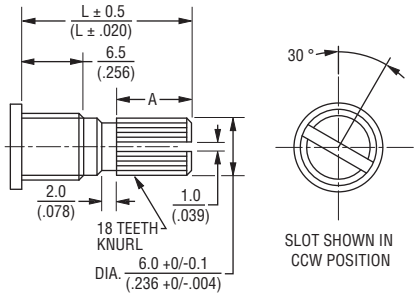
SHAFT SHOWN IN CCW POSITION

DIMENSIONS: MM / (INCHES)

Shaft Styles

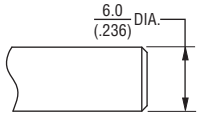
K Type

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



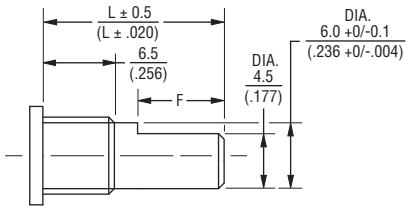
P Type

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



F Type

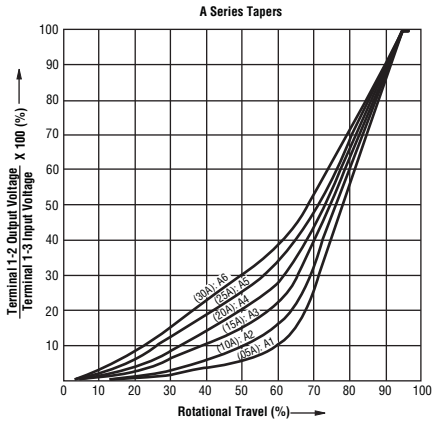
L	15 (.591)	20 (.787)	25 (.984)	30 (1.181)	35 (1.378)
F	7 (.276)	12 (.472)	12 (.472)	12 (.472)	12 (.472)

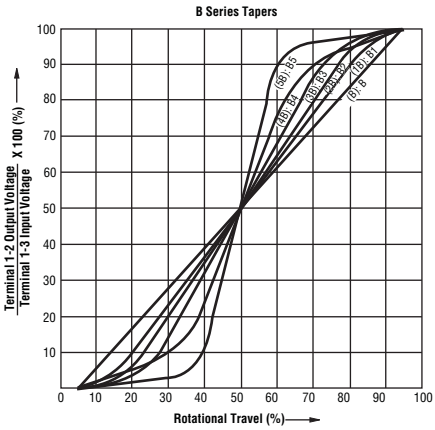


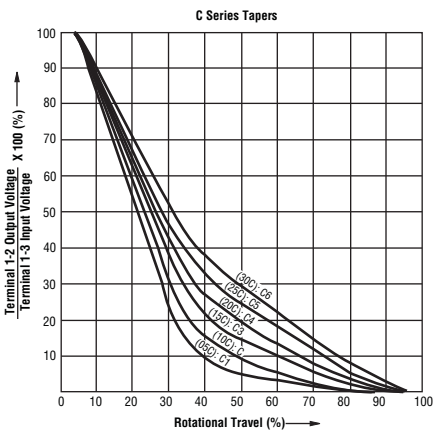
PDB18 Series - 17 mm Rotary Potentiometer

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Bourns:

PDB181-K PDB182-K230K-104A PDB182-K230K-104B PDB181-E420F-503B PDB181-E420K-102B PDB181-E420K-103B PDB181-E420K-104B PDB181-E420K-105B PDB181-E420K-502B PDB181-E420K-504B PDB181-K220K-102B PDB181-K220K-103B PDB181-K220K-104B PDB181-K220K-502B PDB181-K220K-503B PDB181-K415K-102A PDB181-K420K-102A PDB181-K420K-102B PDB181-K420K-103A PDB181-K420K-103B PDB181-K420K-104A PDB181-K420K-105A PDB181-K420K-105B PDB181-K420K-202A PDB181-K420K-203A PDB181-K420K-203B PDB181-K420K-204A PDB181-K420K-204B PDB181-K420K-502A PDB181-K420K-502B PDB181-K420K-503A PDB181-K420K-504A PDB181-K425K-104B PDB182-K220K-102B PDB182-K220K-103B PDB182-K220K-104B PDB182-K220K-502B PDB182-K220K-503A PDB182-K420K-203B PDB182-K420K-504A PDB182-K420K-504B PDB181-A420K-103B PDB181-A425K-203A PDB181-A425K-203B PDB181-K420K-104B PDB182-B230K-104A PDB182-D420K-503A PDB182-E420K-103A PDB182-K425K-103A PDB182-K430K-104A PDB182-K430K-503A PDB182-K420K-103B PDB181-K420K-204A2 PDB181-K420K-203A2 PDB182-K420K-103A PDB181-E415K-204B PDB181-E420P-103B PDB181-E415K-102B PDB181-K418K-104B PDB182-K418F-105B PDB181-E415P-104A2 PDB181-E415F-103A2 PDB181-E420K-503B PDB181-K420K-502A2 PDB181-K420K-103C PDB181-E420F-103B1 PDB181-E415F-105A2 PDB182-E425K-254A2 PDB181-K420P-105A2 PDB181-K420K-103A2 PDB181-K415K-103B PDB181-E415P-105A2 PDB181-K420P-104B PDB181-E415P-504A2 PDB181-K215P-503B PDB181-E418F-105B PDB181-P415F-504A1 PDB181-K420P-105C PDB181-P425F-103B PDB181-A425K-203A2 PDB181-E420K-204A2 PDB181-K415K-102A2 PDB181-E415P-203B PDB181-K420K-504B PDB181-E415F-503A2 PDB181-E415F-504A2 PDB181-A420K-104B PDB181-K420K-105A2 PDB182-K415K-102B PDB181-E415K-103A1 PDB181-E420K-203B PDB181-A420K-503A2 PDB181-E415P-103A2 PDB181-K425K-103B PDB182-K425K-503A PDB181-K420F-103A2 PDB181-K420K-202A2 PDB181-E415F-203B PDB181-E415F-104B PDB181-E415P-503A2