

## Features

- High rotational life
- Metal shaft styles
- Carbon element
- Center detent option
- Wide range of resistance tapers
- RoHS compliant\*



## PDB24 Series - 24 mm Rotary Potentiometer

### Electrical Characteristics

Taper..... Linear, audio  
 Standard Resistance Range ..... 1 K ohms to 1 M ohms  
 Standard Resistance Tolerance..... ±20 %  
 Residual Resistance  
 R < 500K ohms ..... 10 ohms max.  
 R > 500K ohms ..... 0.1 % max.  
 total resistance

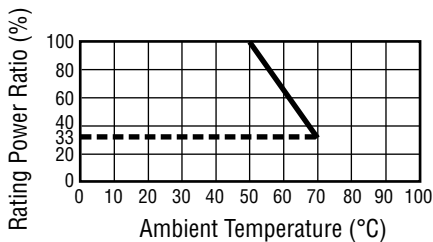
### Environmental Characteristics

Operating Temperature ..... -10 °C to +70 °C  
 Power Rating  
 Linear ..... 0.5 watt  
 Audio ..... 0.25 watt  
 Maximum Operating Voltage  
 Linear ..... 500 V  
 Audio ..... 250 V  
 Rotational Noise ..... 150 mV max.

### Mechanical Characteristics

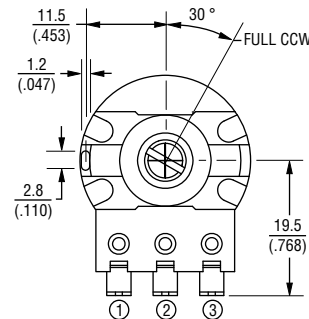
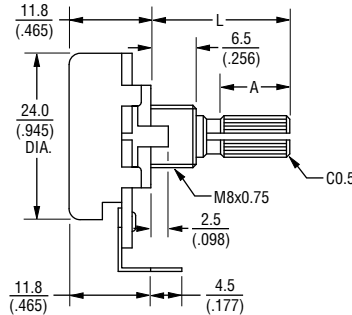
Mechanical Angle ..... 300 ° ±5 °  
 Rotational Torque ..... 20 to 200 g-cm  
 Stop Strength ..... 8 kg-cm min.  
 Rotational Life  
 Standard ..... 15,000 cycles min.  
 High ..... 500,000 cycles min.  
 Soldering Condition  
 Manual Soldering  
 ..... 300 °C within 3 seconds  
 Wave Soldering  
 ..... 260 °C within 3 seconds  
 Hardware ..... One flat washer and  
 mounting nut supplied per  
 potentiometer with bushing

### Derating Curve

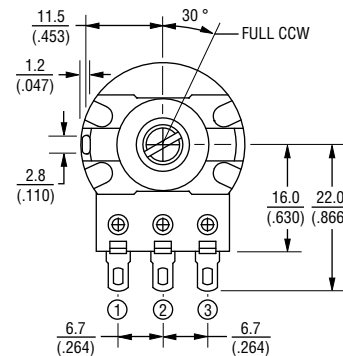
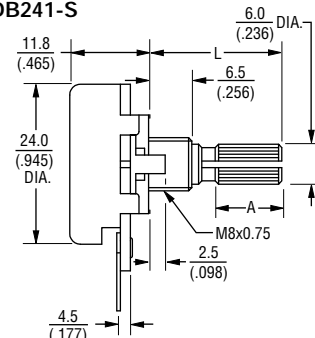


### Product Dimensions

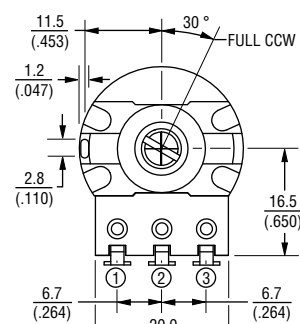
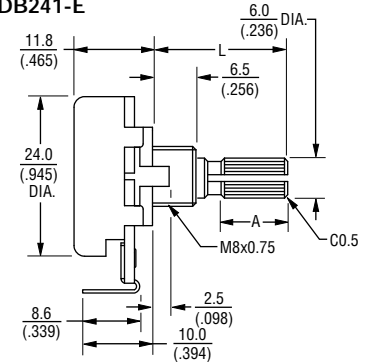
#### PDB241-D



#### PDB241-S

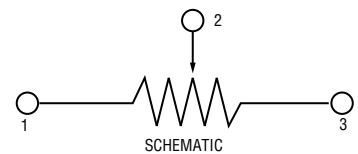


#### PDB241-E



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

TOLERANCES:  
 UNDER 10.0 = ±0.3  
 (.394) = (±0.12)  
 10.0 - 100 = ±0.5  
 (.394 - 3.937) = (±0.20)



**WARNING**  
 Cancer and Reproductive Harm  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

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## Applications

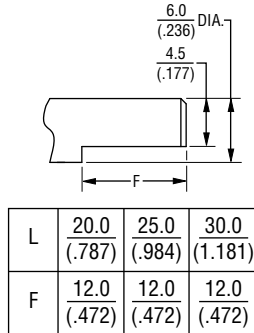
- Various commercial applications
- Electric guitars
- Sound processing equipment
- Guitar and sound system amplifiers
- Appliances

# PDB24 Series - 24 mm Rotary Potentiometer

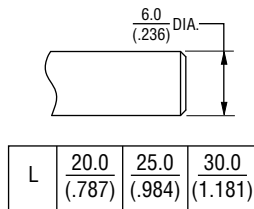
# BOURNS®

## Product Dimensions

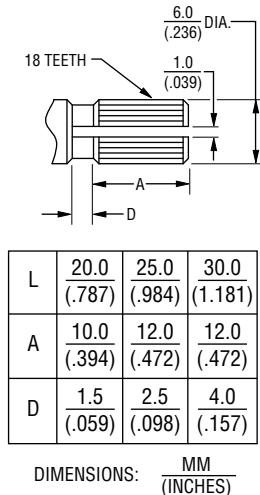
### F Type



### P Type



### K Type



## How To Order

**PDB24 1 - E 4 25 K - 103 A2**

Model

No. of Sections

- 1 = Single Section/Standard Rotational Life
- 2 = Single Section/High Rotational Life

Terminal Configuration (Pin Layout) (see individual drawings)

- E = Solder Lugs Rear Facing
- S = Solder Lugs Down Facing
- D = PC Pins Front Facing

Detent Option

- 2 = Center Detent
- 4 = No Detents

Standard Shaft Length

- 20 = 20 mm
- 25 = 25 mm
- 30 = 30 mm

Shaft Style

- K = Metal Knurled Type Shaft 18 Toothed Serration Type
- F = Metal Flatted Shaft
- P = Metal Plain Shaft

Resistance Code (See Table)

Resistance Taper (See Taper Chart)

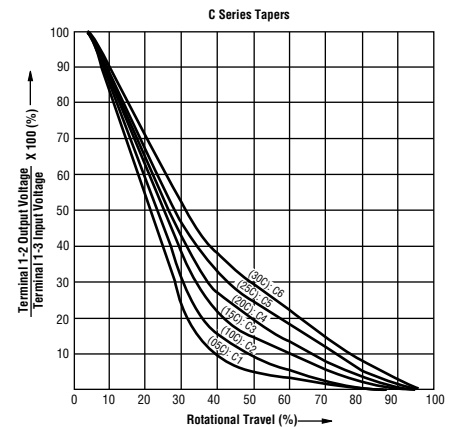
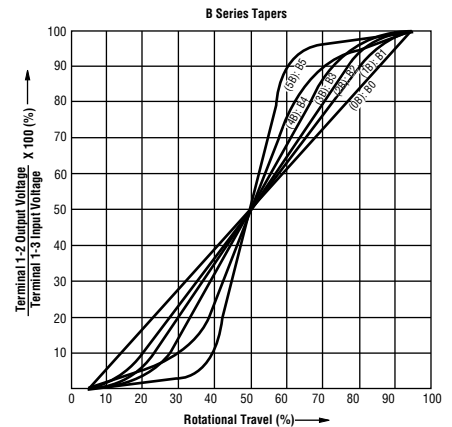
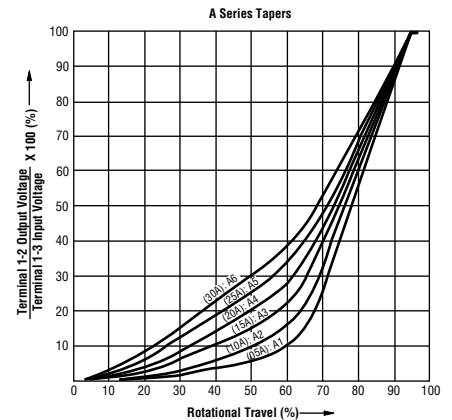
Taper Series followed by Curve Number

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             |
| 250,000           | 254             |
| 500,000           | 504             |
| 1,000,000         | 105             |

## Tapers



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REV. 10/19

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