

## 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

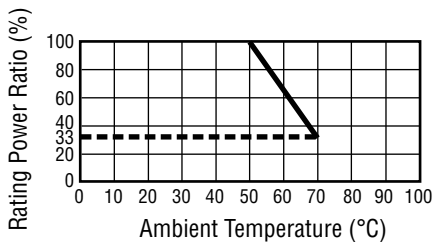
### Environmental Characteristics

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

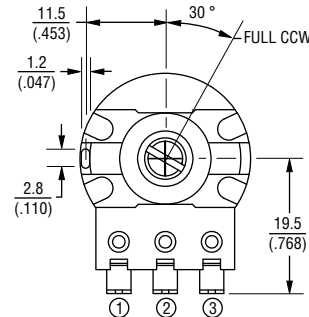
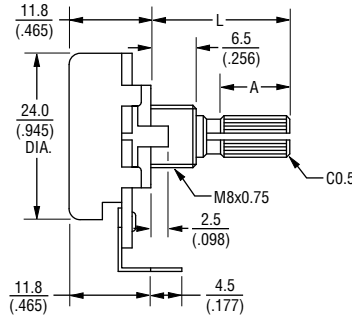
Mechanical Angle ..... 300 ° ±5 °  
 Rotational Torque ..... 20 to 200 g-cm  
 Stop Strength ..... 8 kg-cm min.  
 Rotational Life  
 Standard ..... 15,000 cycles min.  
 High ..... 500,000 cycles min.  
 Soldering Condition  
 Manual Soldering  
 ..... 300 °C within 3 seconds  
 Wave Soldering  
 .....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

### Derating Curve

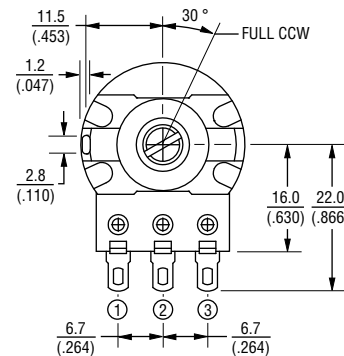
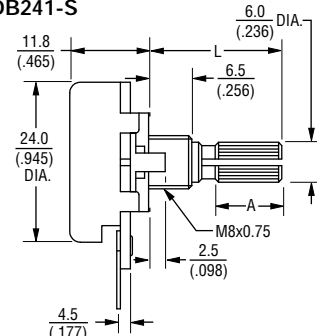


### Product Dimensions

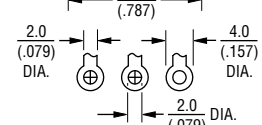
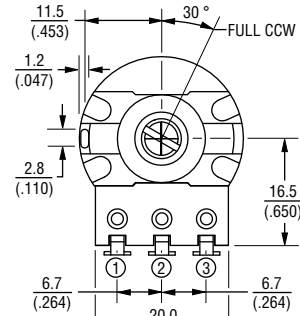
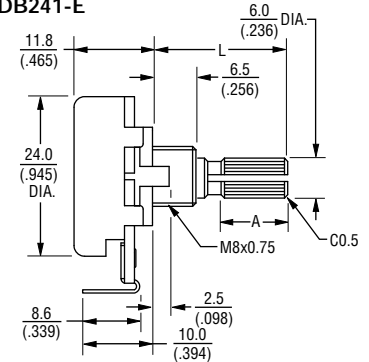
#### PDB241-D



#### PDB241-S

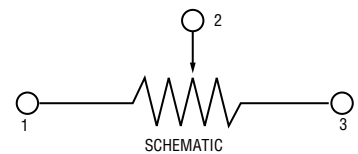


#### PDB241-E



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

TOLERANCES:  
 UNDER 10.0  $\frac{\text{MM}}{\text{(INCHES)}} = \pm 0.3$   
 (.394)  $\frac{\text{MM}}{\text{(INCHES)}} = (\pm 0.12)$   
 10.0 - 100  $\frac{\text{MM}}{\text{(INCHES)}} = \pm 0.5$   
 (.394 - 3.937)  $\frac{\text{MM}}{\text{(INCHES)}} = (\pm 0.20)$



**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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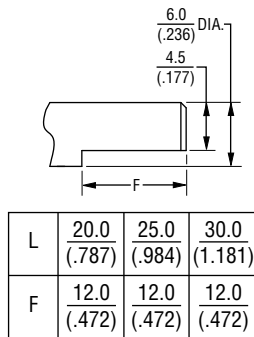
# Applications

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

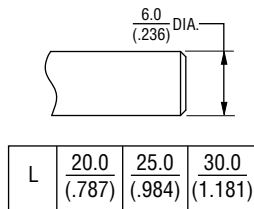
## PDB24 Series - 24 mm Rotary Potentiometer **BOURNS®**

### Product Dimensions

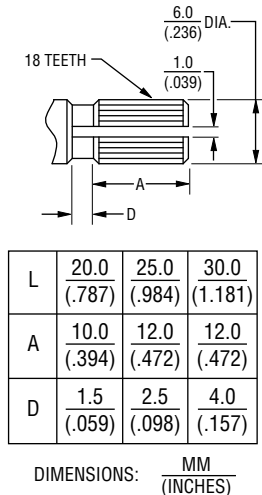
#### F Type



#### 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)

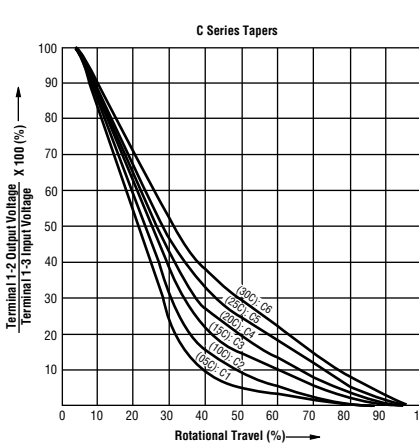
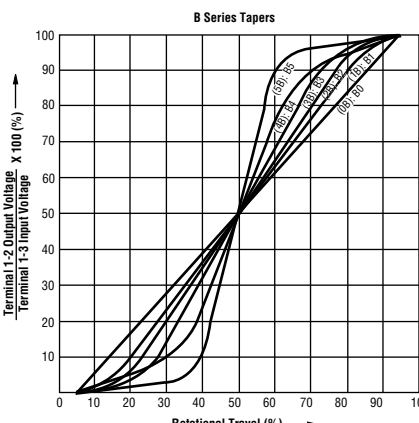
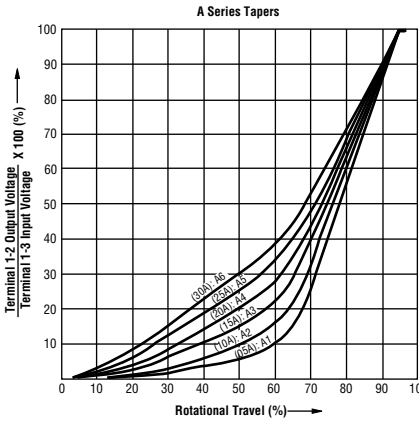
Taper Series followed by Curve Number

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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