

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

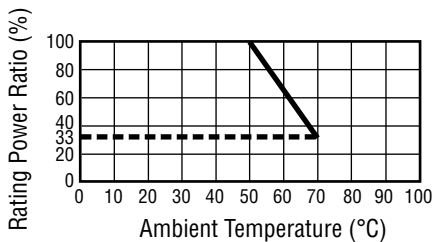
Environmental Characteristics

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

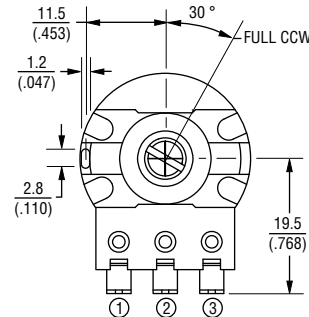
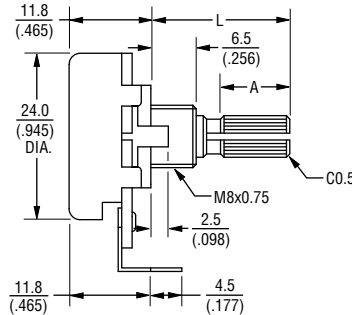
Mechanical Angle 300 ° ± 5 °
 Rotational Torque 20 to 200 g-cm
 Stop Strength 8 kg-cm min.
 Rotational Life
 Standard 15,000 cycles min.
 High 500,000 cycles min.
 Soldering Condition
 Manual Soldering 300 °C within 3 seconds
 Wave Soldering 260 °C within 3 seconds
 Hardware One flat washer and mounting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

Derating Curve

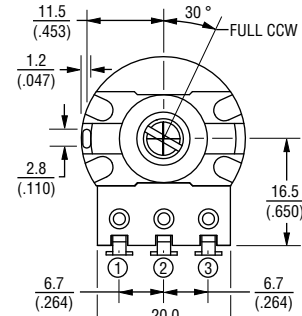
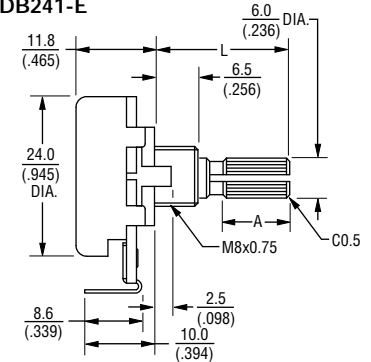


Product Dimensions

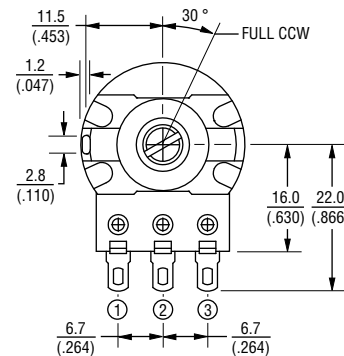
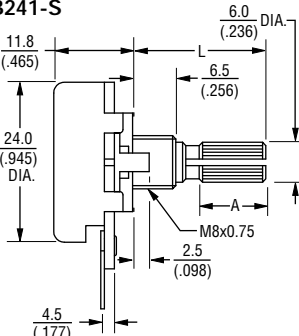
PDB241-D



PDB241-E

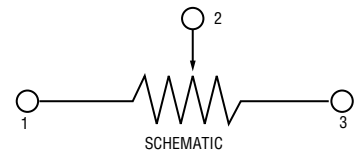


PDB241-S



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

TOLERANCES:
 UNDER 10.0 $\frac{\text{MM}}{\text{(INCHES)}} = \pm 0.3$
 (0.394) $\frac{\text{MM}}{\text{(INCHES)}} = (\pm 0.12)$
 10.0 - 100 $\frac{\text{MM}}{\text{(INCHES)}} = \pm 0.5$
 (3.94 - 3.937) $\frac{\text{MM}}{\text{(INCHES)}} = (\pm 0.20)$



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. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf

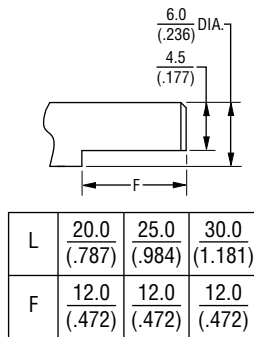
Applications

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

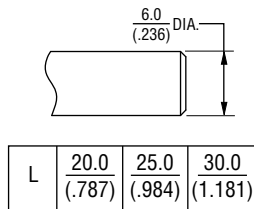
PDB24 Series - 24 mm Rotary Potentiometer **BOURNS®**

Product Dimensions

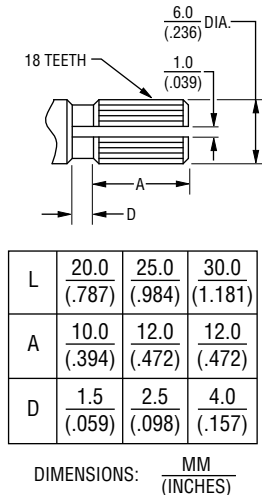
F Type



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)

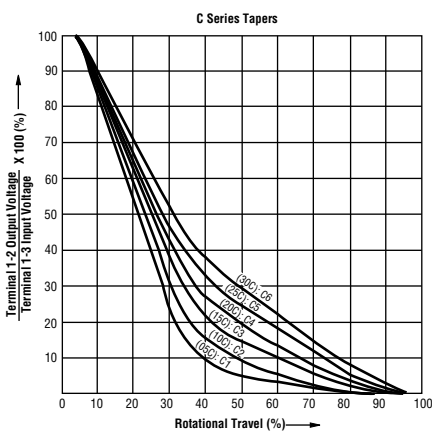
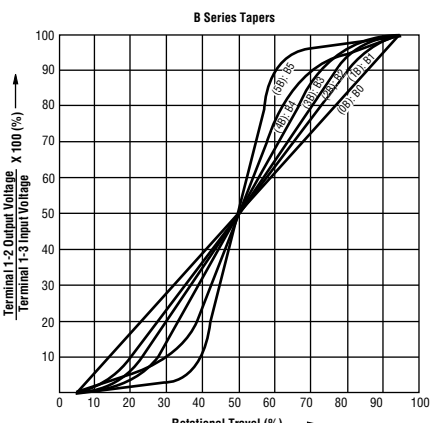
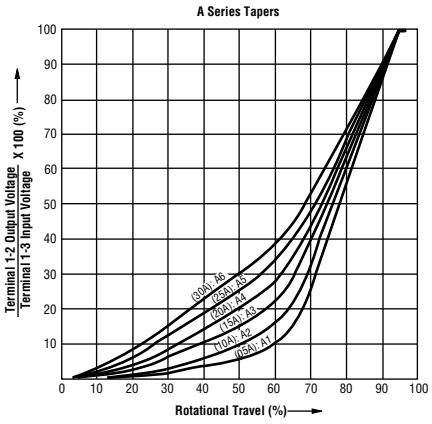
Taper Series followed by Curve Number

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



BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com
 EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com
 The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com
www.bourns.com

REV. 10/19

Specifications are subject to change without notice.
 Users should verify actual device performance in their specific applications.
 The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.