

## Features

- Flatted plastic shaft option
- Horizontal & vertical mount option
- Dual-potentiometer
- Center tap option
- Audio & linear tapers
- PC pin layout for board mount
- RoHS compliant\*

## PRS14R - 14 mm Rotary Plastic Shaft Dual-Potentiometer

### Additional Information

Click these links for more information:



### Electrical Characteristics

Taper..... Audio, Linear  
 Standard Resistance ... 5k ohms to 500k ohms  
 Standard Resistance Tolerance..... ±20 %  
 Residual Resistance..... 0.6 % max.  
 Insulation Resistance  
 ..... 100 megohms minimum @ 250V DC  
 Dielectric Withstanding Voltage  
 Sea Level..... 300 V AC min.  
 Tap Residual Resistance .....100 ohms  
 Power Rating .....0.05 W  
 Maximum Operating Voltage ..... 50 V AC  
 Sliding Noise..... 100 mV max.

### Environmental Characteristics

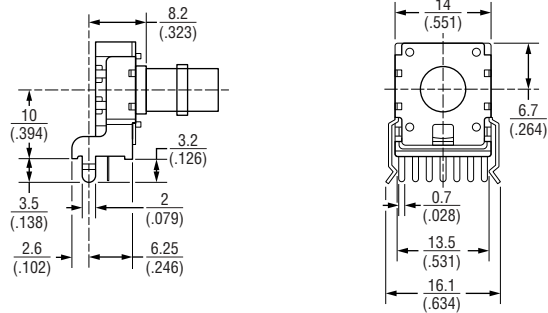
Operating Temperature..... -10 °C to +70 °C  
 Storage Temperature..... -30 °C to +70 °C  
 Soldering Condition  
 Wave Soldering ..... 260 °C for 5 s  
 Manual Soldering..... 350 °C for 3 s  
 IP Rating..... IP 40

### Mechanical Characteristics

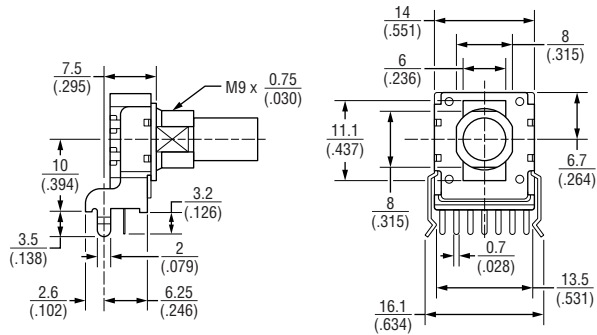
Mechanical Angle .....300 ° ± 5 ° max.  
 Torque  
 Starting & Running ..... 30-200 gf-cm  
 Detent ..... 30-300 gf-cm  
 Mounting..... 10 kgf-cm max.  
 Stop Strength..... 5 kgf-cm min.  
 Rotational Life..... 15,000 cycles min.  
 Hardware...One flat washer and one hex nut  
 supplied with threaded bushing versions

### Product Dimensions

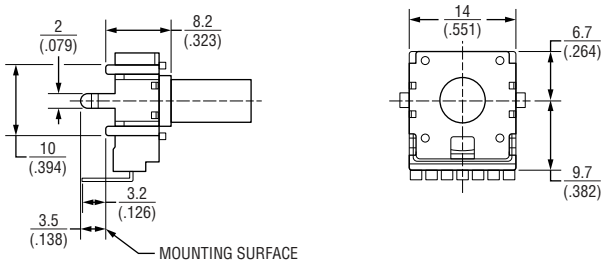
#### PRS14R-1xxxx-xxxxx



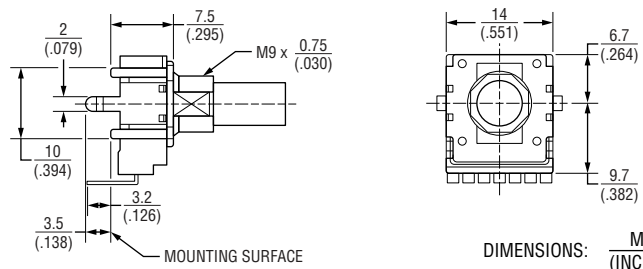
#### PRS14R-2xxxx-xxxxx



#### PRS14R-3xxxx-xxxxx



#### PRS14R-4xxxx-xxxxx



**WARNING**  
 Cancer and Reproductive Harm  
[www.P65Warnings.ca.gov](http://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](http://www.bourns.com/docs/legal/disclaimer.pdf).

# PRS14R - 12 mm Rotary Plastic Shaft Dual-Potentiometer

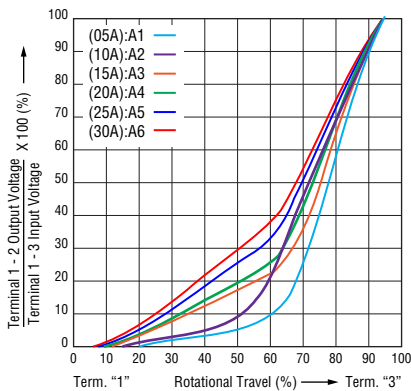
# BOURNS®

## Shaft & Bushing Dimensions

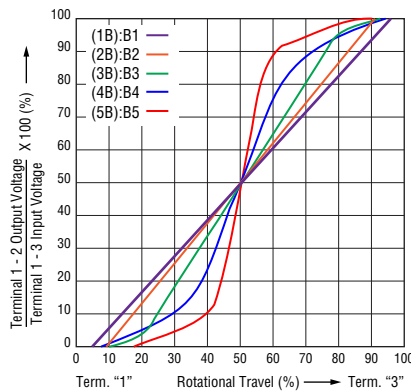
| Without Bushing |                      |                     |                     |                      | With Bushing |                       |                     |                       |                     |                       |                     |                      |
|-----------------|----------------------|---------------------|---------------------|----------------------|--------------|-----------------------|---------------------|-----------------------|---------------------|-----------------------|---------------------|----------------------|
| Horizontal      |                      | Vertical            |                     |                      | Horizontal   |                       |                     |                       | Vertical            |                       |                     |                      |
|                 |                      |                     |                     |                      |              |                       |                     |                       |                     |                       |                     |                      |
| <b>LM1</b>      | $\frac{15}{(.591)}$  | $\frac{20}{(.787)}$ | $\frac{25}{(.984)}$ | $\frac{30}{(1.181)}$ | <b>L1</b>    | $\frac{12.5}{(.492)}$ | $\frac{15}{(.591)}$ | $\frac{17.5}{(.689)}$ | $\frac{20}{(.787)}$ | $\frac{22.5}{(.886)}$ | $\frac{25}{(.984)}$ | $\frac{30}{(1.181)}$ |
| <b>Q1</b>       | $\frac{4.5}{(.177)}$ | $\frac{7}{(.276)}$  | $\frac{12}{(.472)}$ | $\frac{12}{(.472)}$  | <b>Q1</b>    | $\frac{7}{(.276)}$    | $\frac{7}{(.276)}$  | $\frac{12}{(.472)}$   | $\frac{12}{(.472)}$ | $\frac{12}{(.472)}$   | $\frac{12}{(.472)}$ | $\frac{12}{(.472)}$  |
| —               | —                    | —                   | —                   | —                    | <b>LB</b>    | $\frac{5}{(.197)}$    | $\frac{5}{(.197)}$  | $\frac{5}{(.197)}$    | $\frac{5}{(.197)}$  | $\frac{5}{(.197)}$    | $\frac{5}{(.197)}$  | $\frac{5}{(.197)}$   |

## Tapers

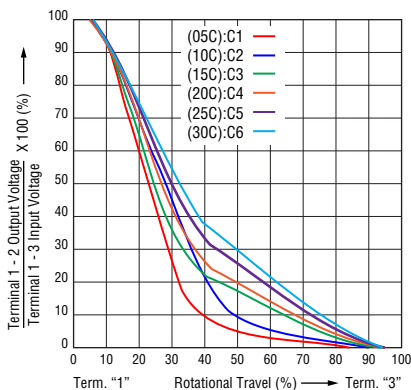
### A Series



### B Series



### C Series



## Resistance Table

| Resistance (Ohms) | Resistance Code |
|-------------------|-----------------|
| 5,000             | 502             |
| 10,000            | 103             |
| 20,000            | 203             |
| 50,000            | 503             |
| 100,000           | 104             |
| 250,000           | 254             |
| 500,000           | 504             |

## How To Order

### PRS14R - 40015 - 103 B1

Model \_\_\_\_\_

Orientation \_\_\_\_\_

- 1 = PC Pins vertical / side facing
- 2 = PC Pins vertical / side facing bushing
- 3 = PC Pins horizontal / rear facing
- 4 = PC Pins horizontal / rear facing bushing

Detent Configuration \_\_\_\_\_

- 0 = No Detent
- 1 = Center Detent

Center Tap \_\_\_\_\_

- 0 = No Tap
- 1 = Center Tap

Shaft Length \_\_\_\_\_

- 12 = 12 mm (bushing version only)
- 15 = 15 mm
- 17.5 = 17.5 mm (bushing version only)
- 20 = 20 mm
- 22 = 22.5 mm (bushing version only)
- 25 = 25 mm
- 30 = 30 mm

Resistance Code (see table) \_\_\_\_\_

Resistance Taper (see Taper charts) \_\_\_\_\_

Specifications are subject to change without notice.

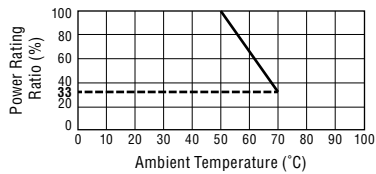
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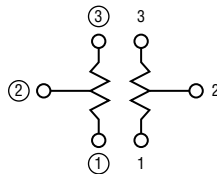
# PRS14R - 12 mm Rotary Plastic Shaft Dual-Potentiometer

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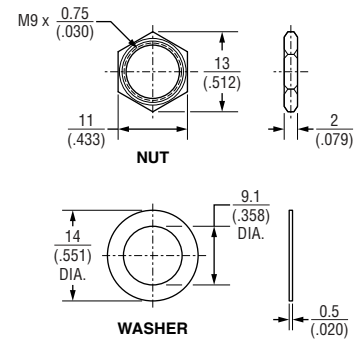
## Derating Curve



## Circuit



## Hardware



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