

## Features

- Various metal shaft options
- Horizontal & vertical mount option
- Dual-potentiometer
- Audio & linear tapers
- PC pin layout for board mount
- RoHS compliant\*

## PRS12R - 12 mm Rotary Metal Shaft Dual-Potentiometer

### Additional Information

Click these links for more information:



[PRODUCT](#) [TECHNICAL LIBRARY](#) [INVENTORY](#) [SAMPLES](#) [CONTACT](#)

### Electrical Characteristics

Taper..... Audio, Linear  
 Standard Resistance ... 5k ohms to 500k ohms  
 Standard Resistance Tolerance  
   R < 250k ohms .....  $\pm 20\%$   
   R  $\geq$  250k ohms .....  $\pm 30\%$   
 Residual Resistance ..... 0.6 % max.  
 Insulation Resistance  
   ..... 100 megohms minimum @ 250V DC  
 Dielectric Withstanding Voltage  
   Sea Level ..... 300 V AC min.  
 Power Rating ..... 0.05 W  
 Maximum Operating Voltage  
   ..... 50 V AC / 10 V DC  
 Sliding Noise ..... 100 mV max.

### Environmental Characteristics

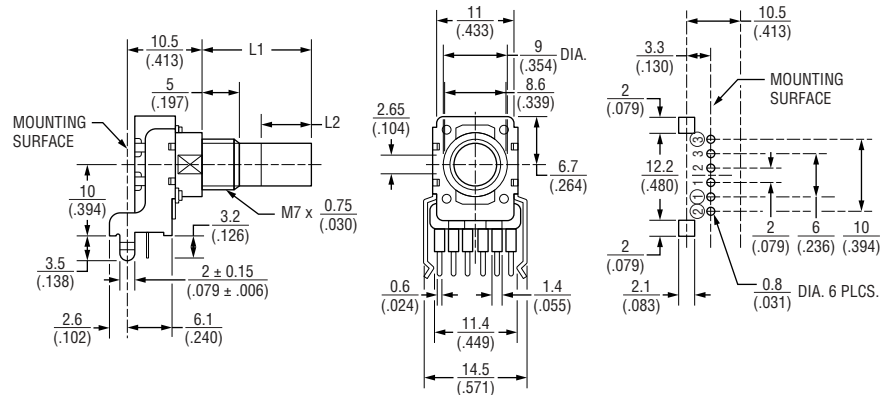
Operating Temperature ..... -10 °C to +70 °C  
 Storage Temperature ..... -40 °C to +70 °C  
 Soldering Condition  
   Wave Soldering ..... 260 °C for 5 s  
   Manual Soldering ..... 350 °C for 3 s

### Mechanical Characteristics

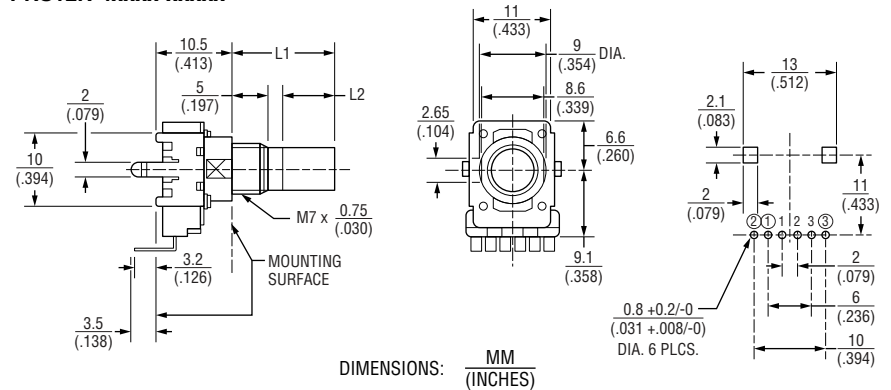
Mechanical Angle .....  $300^\circ \pm 5^\circ$  max.  
 Torque  
   Starting & Running ..... 10-150 gf-cm  
   Detent ..... 20-200 gf-cm  
   Mounting ..... 12 kgf-cm max.  
   Stop Strength ..... 3.5 kgf-cm min.  
 Rotational Life ..... 10,000 cycles min.  
 Hardware ..... One flat washer and one hex nut supplied with threaded bushing versions

### Product Dimensions

#### PRS12R-2xxxx-xxxxx

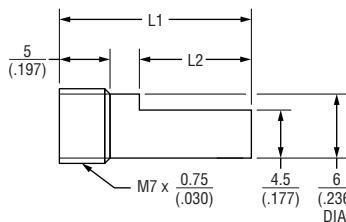


#### PRS12R-4xxxx-xxxxx



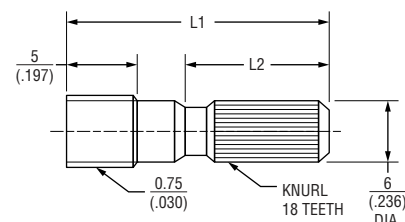
### Shaft & Bushing Dimensions

#### FLAT SHAFT



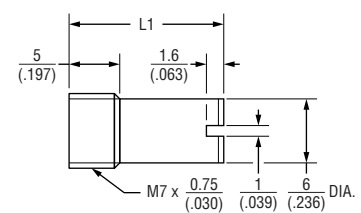
L1	$\frac{15}{(.591)}$	$\frac{20}{(.787)}$	$\frac{25}{(.984)}$
L2	$\frac{7}{(.276)}$	$\frac{12}{(.472)}$	$\frac{12}{(.472)}$

#### KNURLED SHAFT



L1	$\frac{15}{(.591)}$	$\frac{20}{(.787)}$	$\frac{25}{(.984)}$
L2	$\frac{7}{(.276)}$	$\frac{11}{(.433)}$	$\frac{14}{(.551)}$

#### SLOT SHAFT



L1	$\frac{15}{(.591)}$	$\frac{20}{(.787)}$	$\frac{25}{(.984)}$
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DIMENSIONS:  $\frac{\text{MM}}{(\text{INCHES})}$



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

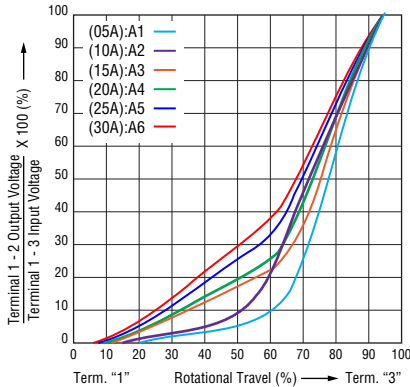
\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.  
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# PRS12R - 12 mm Rotary Metal Shaft Dual-Potentiometer

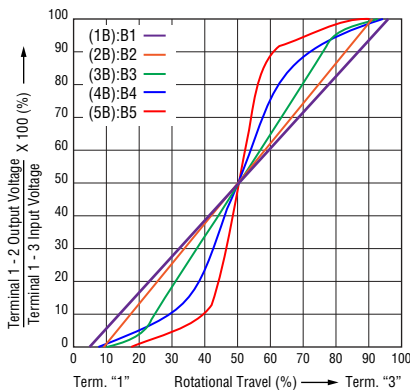
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## Tapers

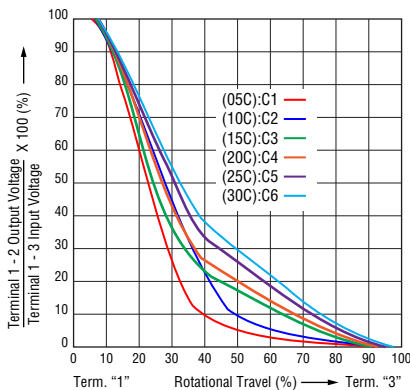
### A Series



### B Series



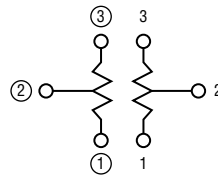
### C Series



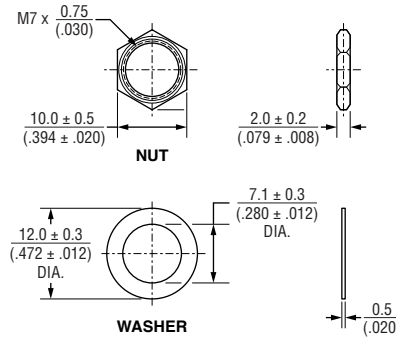
## Resistance Table

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

## Circuit



## Hardware



## How To Order

**PRS12R - 4015 F - 103 B1**

Model \_\_\_\_\_

Orientation \_\_\_\_\_  
 2 = PC Pins  
 vertical / side facing  
 4 = PC Pins  
 horizontal /  
 rear facing

Detent Configuration \_\_\_\_\_  
 0 = No Detent  
 1 = Center Detent

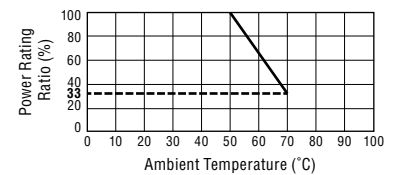
Shaft Length \_\_\_\_\_  
 15 = 15 mm  
 20 = 20 mm  
 25 = 25 mm

Shaft Style \_\_\_\_\_  
 F = Flatted  
 K = Knurled  
 S = Slotted

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

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

## Derating Curve



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