

\*RoHS COMPLIANT



**BOURNS®**

## Features

- Remote controllable
- Suitable for both motorized and manual operation
- Dual section
- Smooth manual operating feel
- Various taper options
- RoHS compliant\*



## PRM16 Series - 16 mm Motorized Potentiometer

### Electrical Characteristics

|                                    |                      |
|------------------------------------|----------------------|
| Taper.....                         | Linear, audio        |
| Standard Resistance Range.....     | 1K ohms to 1 megohm  |
| Standard Resistance Tolerance..... | ±20 %                |
| Power Rating                       |                      |
| B3 Taper.....                      | 0.1 watt             |
| Other Tapers .....                 | 0.05 watt            |
| Maximum Operating Voltage.....     | 150 Vac              |
| Attenuation                        |                      |
| R≥100K ohms .....                  | 100 dB min.          |
| 100K ohms>R≥50K ohms.....          | 90 dB min.           |
| 50K ohms>R≥10K ohms.....           | 80 dB min.           |
| 10K ohms>R≥5K ohms.....            | 70 dB min.           |
| 5K ohms>R≥1K ohms.....             | 60 dB min.           |
| 1K ohms>R≥500 ohms .....           | 50 dB min.           |
| Voltage Proof.....                 | 500 VDC for 1 minute |
| Motor Voltage.....                 | 4.5 VDC              |
| Motor Current (@ 4.5 VDC).....     | 100 mA max.          |

### Environmental Characteristics

|                                   |                  |
|-----------------------------------|------------------|
| Operating Temperature Range ..... | -10 °C to +70 °C |
| Sliding Noise .....               | 47 mV max.       |

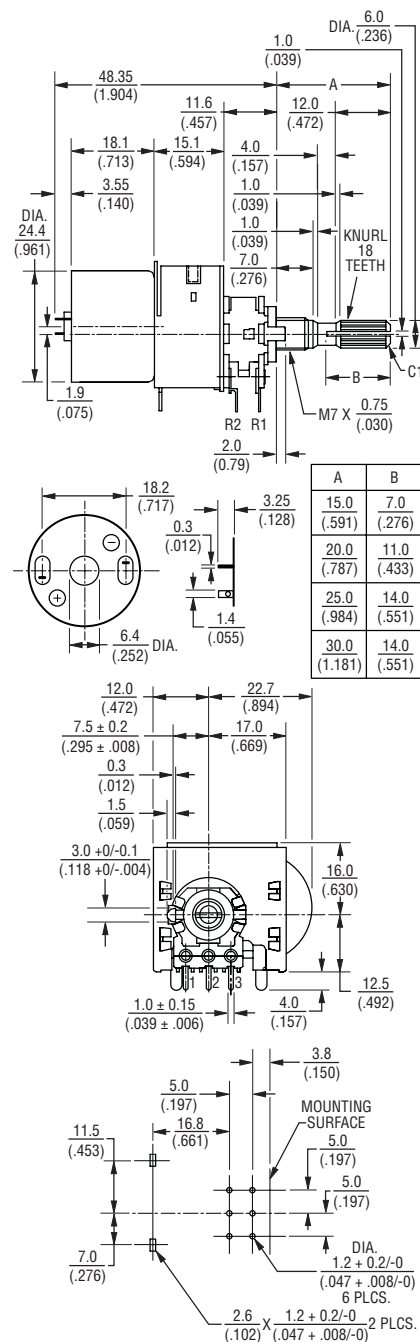
### Mechanical Characteristics

|                          |                                                                          |
|--------------------------|--------------------------------------------------------------------------|
| Mechanical Angle.....    | 300 ° ±5 °                                                               |
| Rotational Speed.....    | 12 ±3 seconds                                                            |
| Rotational Torque .....  | 150 to 450 g-cm                                                          |
| Stop Strength .....      | 9 kg-cm max.                                                             |
| Push-pull Strength.....  | 10 kg max. for 10 seconds                                                |
| Rotational Life.....     | 15,000 cycles                                                            |
| Soldering Condition..... | 260 °C within 5 seconds or 300 °C within 3 seconds                       |
| Hardware .....           | One flat washer and mounting nut supplied per potentiometer with bushing |

### 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             |
| 500,000           | 504             |
| 1,000,000         | 105             |

### Product Dimensions



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

TOLERANCES UNLESS OTHERWISE NOTED:

$\leq \frac{10.0}{(.394)} = \pm 0.3$   $> \frac{10.0}{(.394)} = \pm 0.5$   
 $(\pm 0.12)$   $(\pm 0.20)$

\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

## Applications

- Guitar amplifiers
- Mixing consoles
- Amplifiers, CD players, karaoke volume controls
- Servo tracks

## PRM16 Series - 16 mm Motorized Potentiometer

**BOURNS®**

### How To Order

**P R M 1 6 2 - K 4 1 5 K - 1 0 3 B 3**

| MODEL DESIGNATOR |                               |
|------------------|-------------------------------|
| Code             | Description                   |
| PRM16            | 16 mm Motorized Potentiometer |

| NUMBER OF SECTIONS |              |
|--------------------|--------------|
| Code               | Description  |
| 2                  | Dual Section |

| TERMINAL CONFIG. (PIN LAYOUT) |                              |
|-------------------------------|------------------------------|
| Code                          | Description                  |
| K                             | PC Pins Vertical/Down Facing |

| DETENT OPTION |             |
|---------------|-------------|
| Code          | Description |
| 4             | No Detents  |

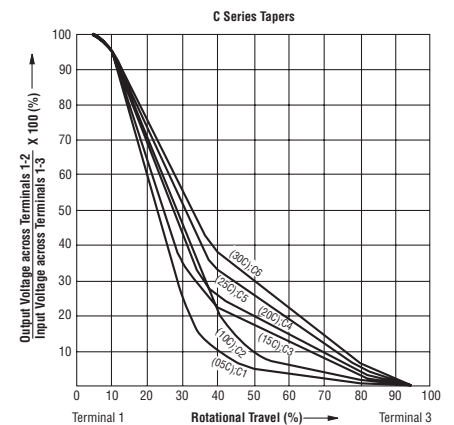
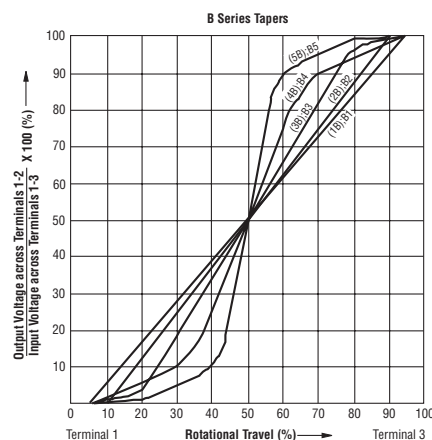
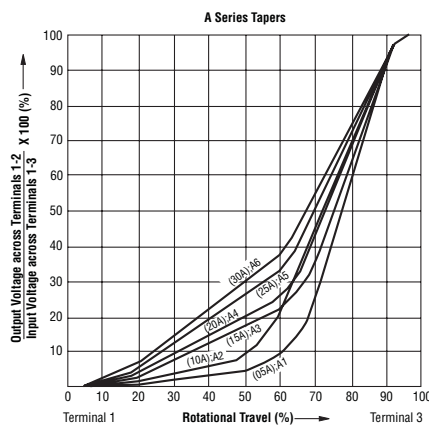
| STANDARD SHAFT LENGTH |             |
|-----------------------|-------------|
| Code                  | Description |
| 15                    | 15 mm       |
| 20                    | 20 mm       |
| 25                    | 25 mm       |
| 30                    | 30 mm       |

| SHAFT STYLE |                             |
|-------------|-----------------------------|
| Code        | Description                 |
| K           | Knurled (18 Tooth Serrated) |

| RESISTANCE TAPER<br>(SEE TAPER CHARTS) |  |
|----------------------------------------|--|
| Taper Series followed by Curve Number  |  |

| RESISTANCE CODE |               |
|-----------------|---------------|
| Code            | Value in Ohms |
| 102             | 1,000         |
| 202             | 2,000         |
| 502             | 5,000         |
| 103             | 10,000        |
| 203             | 20,000        |
| 503             | 50,000        |
| 104             | 100,000       |
| 204             | 200,000       |
| 504             | 500,000       |
| 105             | 1,000,000     |

### Tapers



REV. 02/10

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