



## Features

- Carbon element
- Assortment of resistance tapers
- Push latching shaft
- Flatted, knurled and slotted shaft styles
- Center detent option



## PTP90 Series Panel Control w/Push Latching Shaft

### Electrical Characteristics

|                                 |                          |
|---------------------------------|--------------------------|
| Standard Resistance Range       | .....1K ohms to 1 megohm |
| Standard Resistance Tolerance   |                          |
| R < 250K ohms                   | .....±20 %               |
| R ≥ 250K ohms                   | .....±30 %               |
| End Resistance                  |                          |
| R < 50K ohms                    | .....30 ohms max.        |
| R ≥ 50K ohms                    | .....0.1 % of TR max.    |
| Insulation Resistance @ 250 VDC | .....100 megohms min.    |
| Dielectric Withstanding Voltage | .....300 VAC             |
| Tracking Error (-40 dB to 0 dB) | .....±3 dB               |
| Standard Taper                  | .....Linear, Audio       |
| Power Rating                    |                          |
| Linear                          | .....0.05 watt           |
| Audio                           | .....0.025 watt          |
| Slider Noise                    | .....100 mV max.         |
| Operating Voltage               | .....50 VAC / 10 VDC     |

### Environmental Characteristics

|                             |                       |
|-----------------------------|-----------------------|
| Operational Life            | .....15,000 cycles    |
| TR Shift                    | .....±15 %            |
| Operating Temperature Range | .....-10 °C to +55 °C |
| Resistance to Solder Heat   | .....±5 %             |
| IP Rating                   | .....IP 40            |

### Mechanical Characteristics

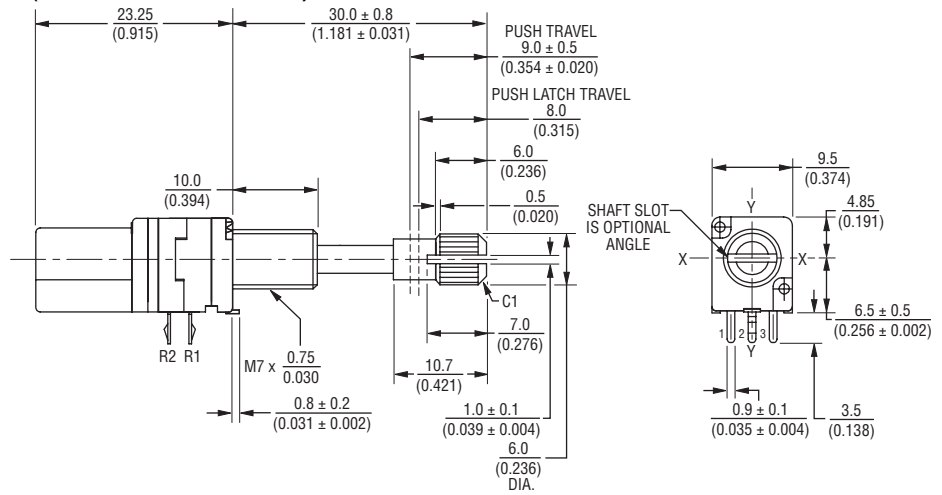
|                           |                                                                            |
|---------------------------|----------------------------------------------------------------------------|
| Mechanical Angle          | .....310 ° max.                                                            |
| Operating Torque          | .....20~250 gf-cm                                                          |
| Stop Strength             | .....4 kgf-cm min.                                                         |
| Mounting Torque           | .....10 kgf-cm max.                                                        |
| Shaft Push Latch Force    | .....40~500 gf                                                             |
| Push Latch Operating Life | .....10,000 cycles                                                         |
| Soldering Condition       |                                                                            |
| Manual                    | .....300 °C ±5 °C for 3 sec.                                               |
| Wave                      | .....260 °C ±5 °C for 5 sec.                                               |
| Wash                      | .....Not recommended                                                       |
| Hardware                  | .....One flat washer and one mounting nut supplied with each potentiometer |

### Standard Resistance Table

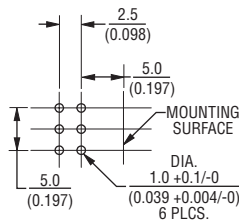
| Resistance (Ohms) | Resistance Code |
|-------------------|-----------------|
| 1,000             | 102             |
| 2,000             | 202             |
| 5,000             | 502             |
| 10,000            | 103             |
| 20,000            | 203             |
| 50,000            | 503             |
| 100,000           | 104             |
| 200,000           | 204             |
| 500,000           | 504             |
| 1,000,000         | 105             |

### Product Dimensions

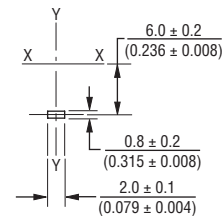
(Shown with Knurled Shaft)



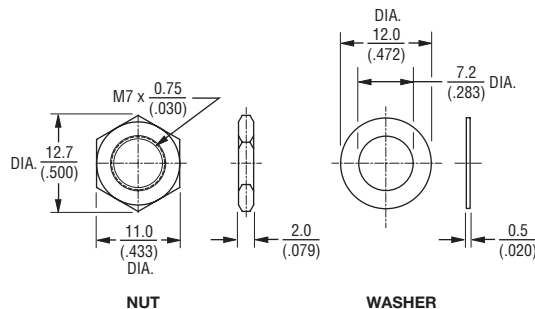
### Mounting Hole Detail



### Locating Lug Detail



### Hardware



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

## Applications

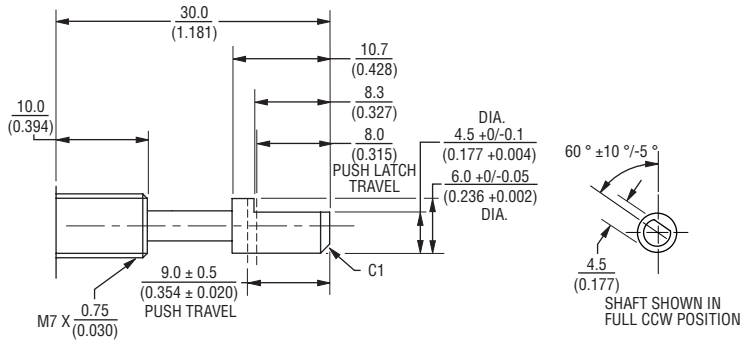
- Multimedia sound systems
- Mixers / drum machines / DJ equipment
- Automotive sound systems
- Portable electronics
- Portable appliances

## PTP90 Series Panel Control w/Push Latching Shaft

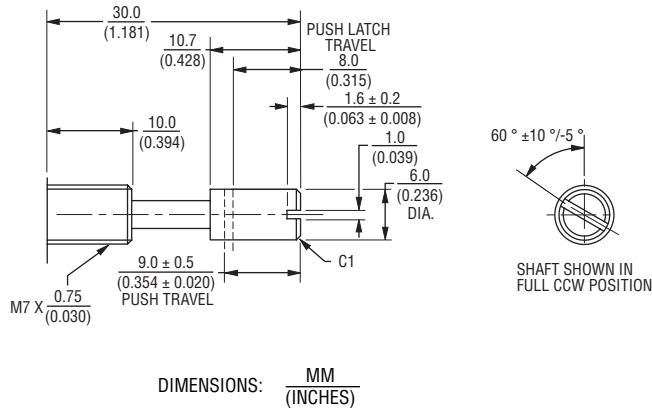
**BOURNS®**

### Additional Shaft Styles

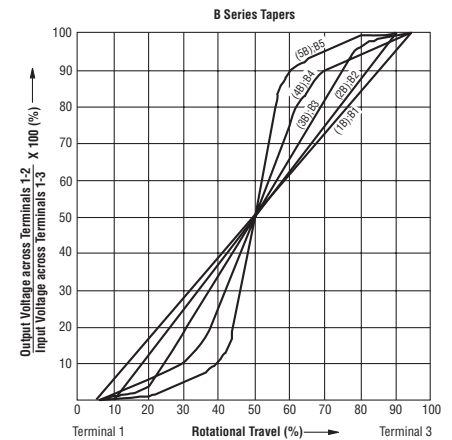
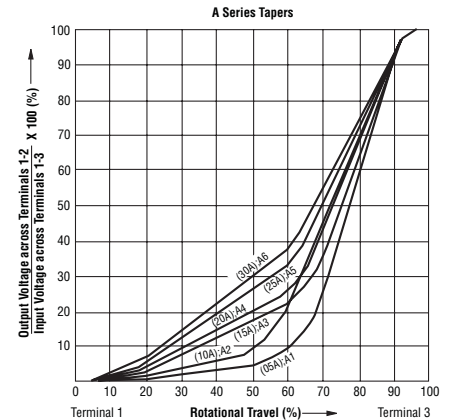
#### Flatted Shaft



#### Slotted Shaft



### Tapers



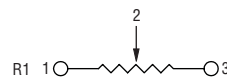
### How To Order

**PTP90 2 - 0 30 K - 103 B2**

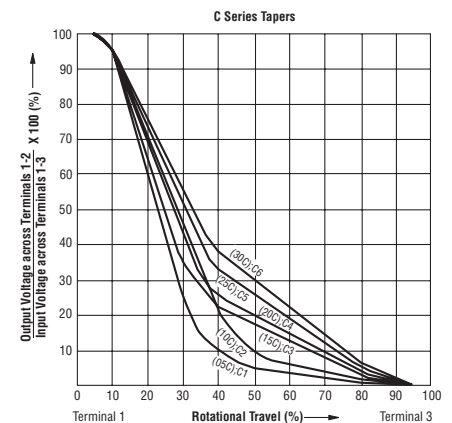
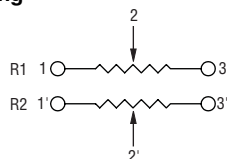
Model Number  
Designator  
PTP90 = Panel Control  
w/Push Latching Shaft  
Number of Sections  
1 = Single Gang  
2 = Dual Gang  
Center Detent  
0 = No Detent  
1 = Center Detent  
Shaft Length (FMS)  
30 = 30 mm  
Shaft Style  
F = Flatted Metal  
K = Knurled (18 tooth serrated)  
S = Slotted Metal  
Resistance Code  
(See Standard Resistance Table)  
Resistance Taper (See Taper Charts)  
Taper Series followed by Curve Number

### Schematics

#### Single Gang



#### Dual Gang



REV. 10/11

Specifications are subject to change without notice.  
Customers should verify actual device performance in their specific applications.