



## 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 %  
 ≥ 250K ohms ..... ±30 %  
 End Resistance  
 R < 50K ohms ..... 30 ohms max.  
 ≥ 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  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM) ..... N/A

### Mechanical Characteristics

Mechanical Angle ..... 310 ° max.  
 Operating Torque ..... 20~250 gf-cm  
 Stop Strength ..... 4 kgf-cm max.  
 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

### Product Dimensions

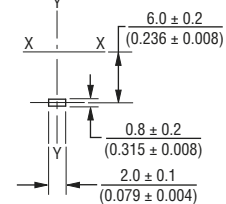
(Shown with Knurled Shaft)



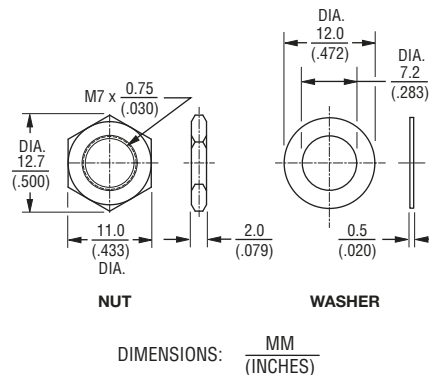
### Mounting Hole Detail



### Locating Lug Detail



### Hardware



### 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



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

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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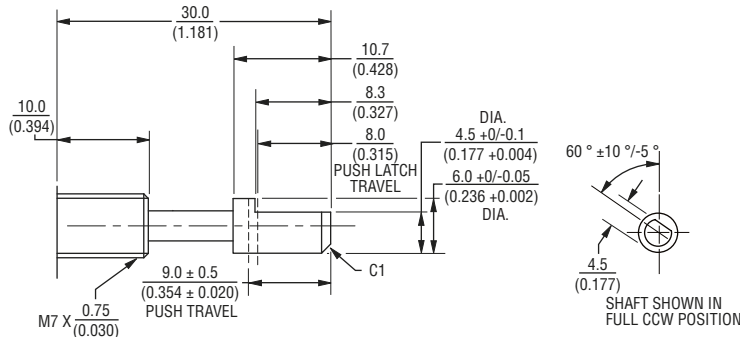
# Applications

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

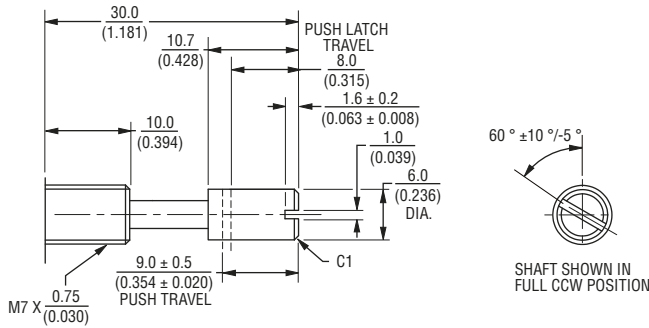
## PTP90 Series Panel Control w/Push Latching Shaft **BOURNS®**

### Additional Shaft Styles

#### Flatted Shaft



#### Slotted Shaft



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

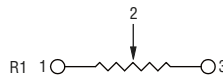
### How To Order

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

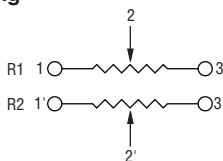
- Model Number \_\_\_\_\_
- Designator \_\_\_\_\_  
PTP90 = Panel Control w/Push Latching Shaft
- Number of Sections \_\_\_\_\_  
1 = Single Gang  
2 = Dual Gang
- Center Detent \_\_\_\_\_  
0 = No Detent  
1 = Center Detent
- Shaft Length (FMS) \_\_\_\_\_  
30 = 30 mm
- Shaft Style \_\_\_\_\_  
F = 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

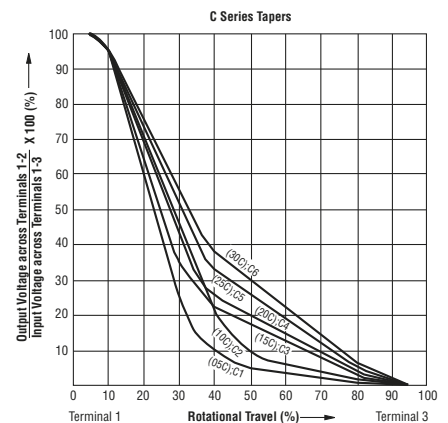
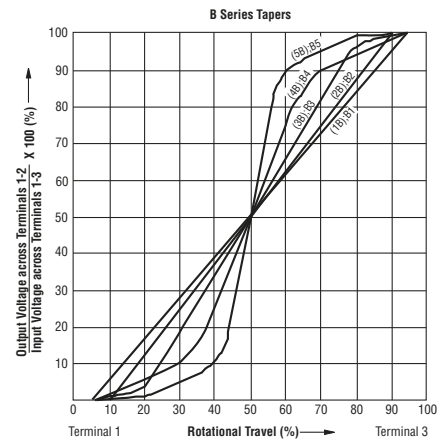
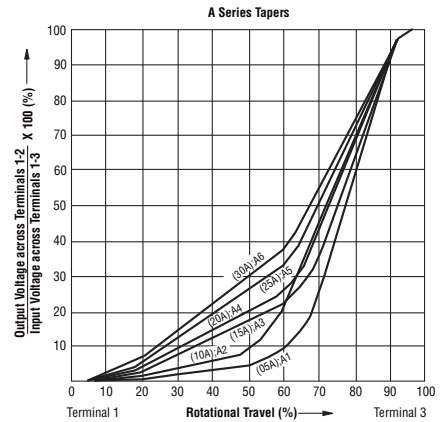
#### Single Gang



#### Dual Gang



### Tapers



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