

## 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

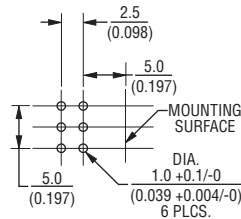
Mechanical Angle ..... 310 ° max.  
 Operating Torque ..... 20~250 gf-cm  
 Stop Strength ..... 4 kgf-cm max.  
 Mounting Torque ..... 10 kgf-cm max.  
 Shaft Push Latch Force ..... 40~500 gf  
 Push Latch Operating Life  
 ..... 10,000 cycles  
 Soldering Condition  
   Manual ..... 300 °C ±5 °C for 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

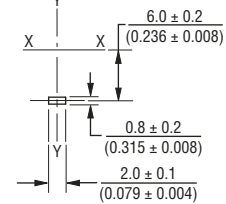
(Shown with Knurled Shaft)



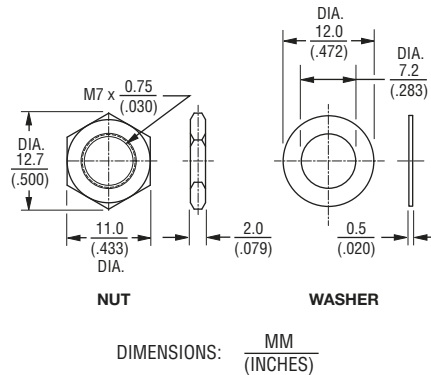
### Mounting Hole Detail



### 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. 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).

# Applications

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

## PTP90 Series Panel Control w/Push Latching Shaft



### Additional Shaft Styles

#### Flatted Shaft



#### Slotted Shaft



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

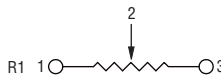
### How To Order

**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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