

## 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

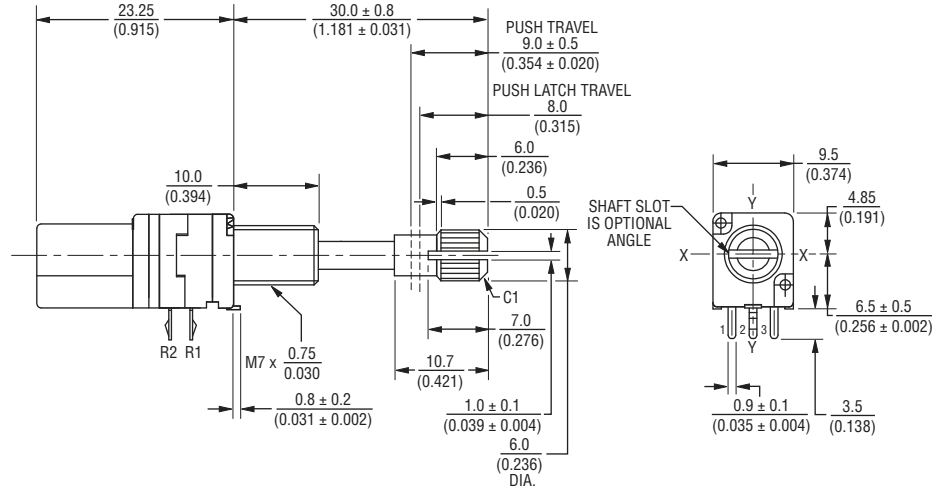
Push Latch Operating Life  
 ..... 10,000 cycles

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

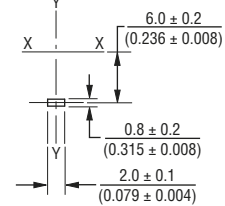
(Shown with Knurled Shaft)



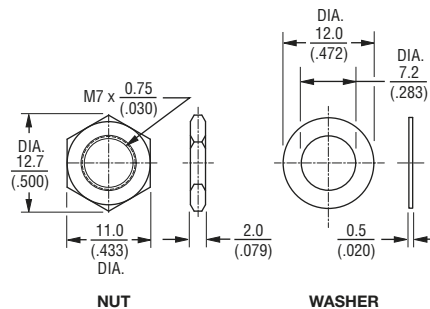
### Mounting Hole Detail



### Locating Lug Detail



### Hardware



NUT

WASHER

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

### 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

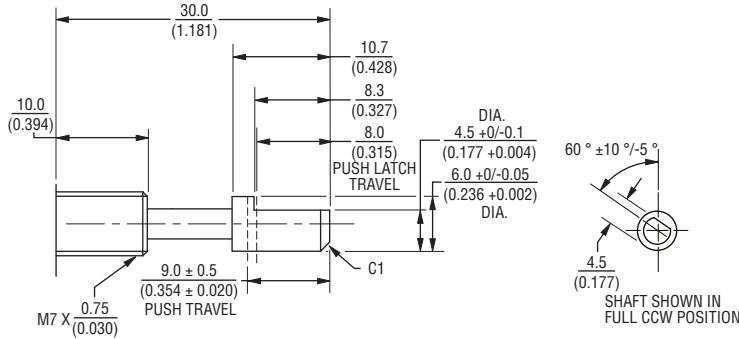
- Multimedia sound systems
- Mixers / drum machines / DJ equipment
- Portable electronics
- Portable appliances

## PTP90 Series Panel Control w/Push Latching Shaft

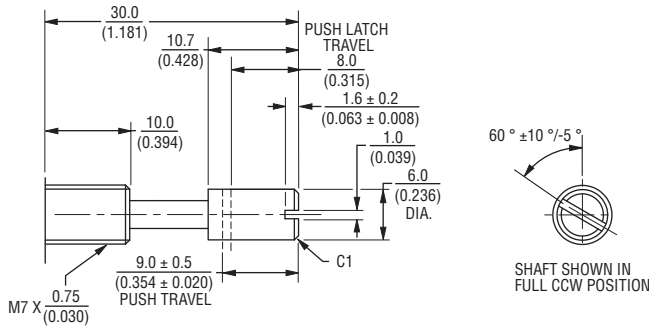


### Additional Shaft Styles

#### 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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### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

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