

## **Features**

- Carbon element
- Insulated shaft
- Wide variety of mounting styles
- Center detent option
- RoHS compliant\*

## Additional Information

Click these links for more information:











## SELECTOR

TECHNICAL

INVENTORY

# PTV09 Series - 9 mm Potentiometer

### **Electrical Characteristics**

Taper.....Linear, audio Standard Resistance Range .....1 K ohms to 1 M ohms Standard Resistance Tolerance......±20 % Residual Resistance .....500 ohms or ±1 % max.

### **Environmental Characteristics**

Operating Temperature....-10 °C to +50 °C **Power Rating** (Linear and Audio)......0.05 watt Maximum Operating Voltage (Linear and Audio)...... 20 VDC, 50 VAC Sliding Noise ...... 100 mV max.

#### **Mechanical Characteristics**

Mechanical Angle ......280 ° ±10 ° Rotational Torque ......10 to 100 g-cm Detent Torque ......20 to 200 gf-cm Stop Strength ...... 2 kg-cm min. Rotational Life ...... 10,000 cycles Soldering Condition

.....300 °C max. within 3 seconds Hardware..... One flat washer and one hex nut supplied with bushing version

#### **How To Order**

### PTV09A - 2 0 20 F - B 203

Model Terminal Configuration (Pin Layout) 1 = Horizontal/Rear Mount

- w/Sleeve Bushina
- 2 = Vertical/Side Mount, Bushingless, 10 mm Height
- 3 = Vertical/Side Mount, Bushingless, 6.5 mm Height
- 4 = Horizontal/Rear Mount, Bushingless 5 = Horizontal/Rear Mount
- w/Plastic Plain Bushing 6 = Horizontal/Rear Mount w/Metal Threaded
- Bushing 7 = Vertical/Side Mount w/Sleeve Bushing, 6.5 mm Height
- 8 = Vertical/Side Mount w/Sleeve Bushing, 10 mm height

0 = No Detent 2 = Center

Standard Shaft Length 15 = 15 mm\*\* 25 = 25 mm 20 = 20 mm 30 = 30 mm

Shaft Style

- F = Flat Type Insulated Shaft
- S = Insulated Knurled (18 Teeth)
- U = Insulated Knurled (40 Teeth)

Resistance Taper

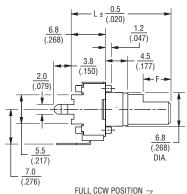
Taper Serie's followed by Curve Number

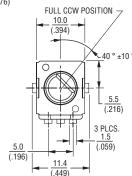
Resistance Code (See Table) Other styles available.

Bushingless version only

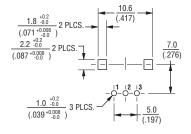
### **Product Dimensions**

# (Horizontal/Rear Mount w/Sleeve Bushing)



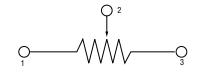


## RECOMMENDED PCB LAYOUT (HORIZONTAL/REAR MOUNT)



MM DIMENSIONS: (INCHES)

#### **Schematic**

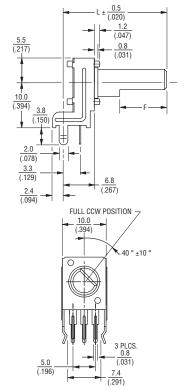


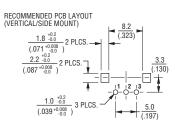


WARNING Cancer and Reproductive Harm www.P65Warnings.ca.gov

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

#### PTV09A-2 (Vertical/Side Mount, Bushingless, 10 mm Height)





## **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

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.

## **Applications**

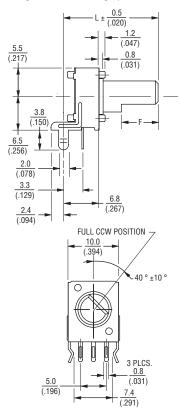
- Commercial communications equipment
- Portable electronics
- Amplifiers/mixers/drum machines/synthesizers
- Consumer goods
- Commercial appliances

# PTV09 Series - 9 mm Potentiometer

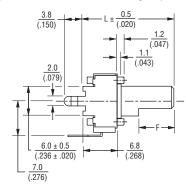
## **BOURNS**®

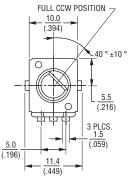
### **Product Dimensions (Continued)**

PTV09A-3 (Vertical/Side Mount, Bushingless, 6.5 mm Height)



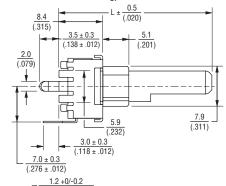
#### PTV09A-4 (Horizontal/Rear Mount, Bushingless)

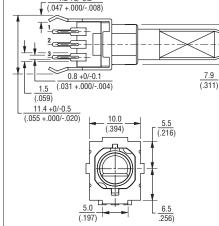




MM **DIMENSIONS:** (INCHES)

#### PTV09A-5 (Horizontal/Rear Mount w/Plastic Plain Bushing)

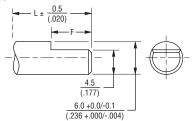




SHAFT SHOWN IN CENTER POSITION

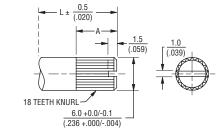
## **Shaft Styles**

### F-Type

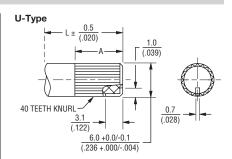


L	<u>15</u> (.591)	20 (.787)	<u>25</u> (.984)	30 (1.181)
F	<u>6</u> (.236)	7 (.275)	12 (.472)	12 (.472)

#### S-Type



L	<u>15</u> (.591)	20 (.787)	25 (.984)	30 (1.181)
А	<del>7</del> (.275)	<del>7</del> (.275)	<del>7</del> (.275)	<del>7</del> (.275)



L	15	20	25	30
	(.591)	(.787)	(.984)	(1.181)
А	<u>6</u> (.236)	<del>7</del> (.275)	<del>7</del> (.275)	<del>7</del> (.275)

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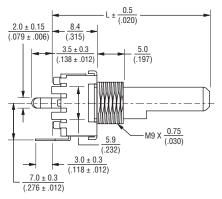
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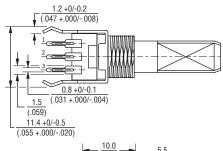
# PTV09 Series - 9 mm Potentiometer

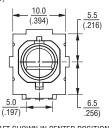
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### **Product Dimensions (Continued)**

#### PTV09A-6 (Horizontal/Rear Mount w/Metal Threaded Bushing)

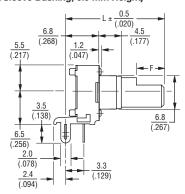


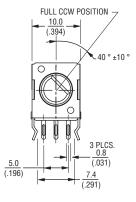




SHAFT SHOWN IN CENTER POSITION

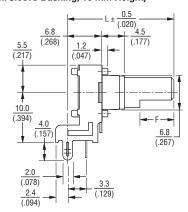
#### PTV09A-7 (Vertical/Side Mount w/Sleeve Bushing, 6.5 mm Height)

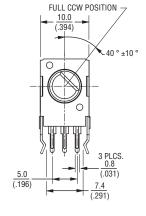




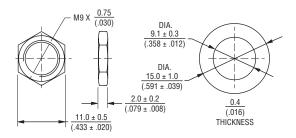
MM DIMENSIONS: (INCHES)

#### PTV09A-8 (Vertical/Side Mount w/Sleeve Bushing, 10 mm Height)





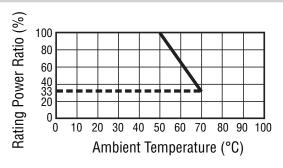
## **Mounting Hardware**



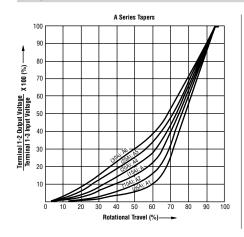
# PTV09 Series - 9 mm Potentiometer

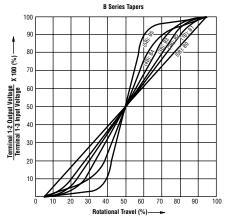
## BOURNS

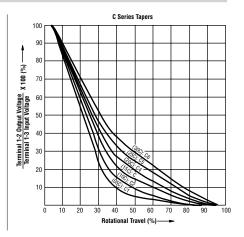
## **Derating Curve**



## **Tapers**







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