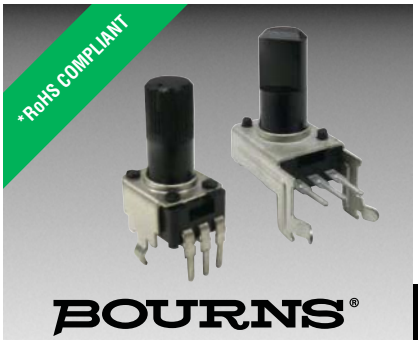


Features

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

BOURNS® PRO AUDIO

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 Bushing
- 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

Option
- 0 = No Detent
- 2 = Center

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

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

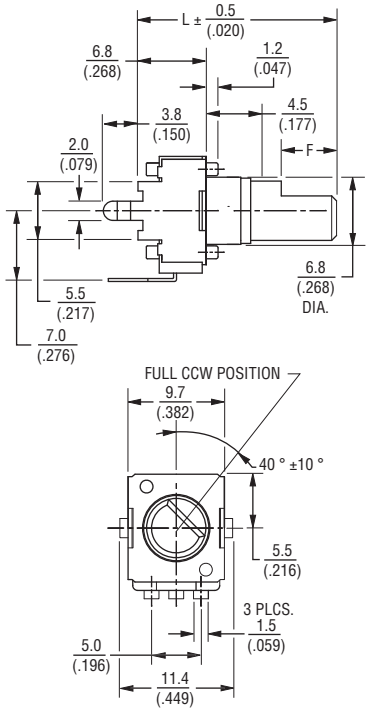
Resistance Taper
Taper Series followed by Curve Number

Resistance Code (See Table)

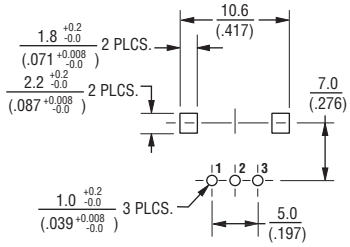
Other styles available.
** Bushingless version only.

Product Dimensions

PTV09A-1
(Horizontal/Rear Mount w/Sleeve Bushing)

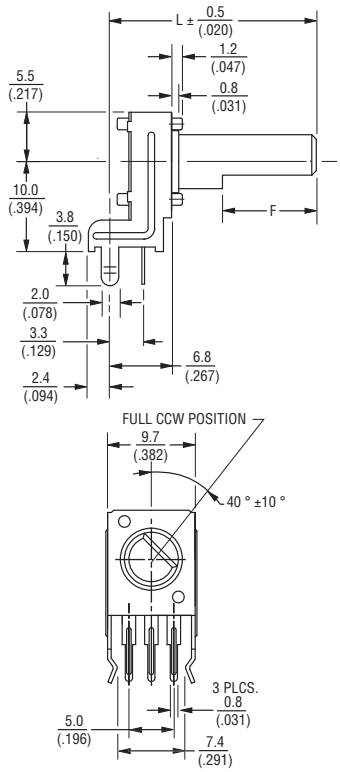


RECOMMENDED PCB LAYOUT
(HORIZONTAL/REAR MOUNT)

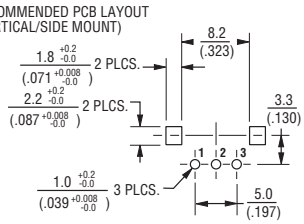


DIMENSIONS: MM / (INCHES)

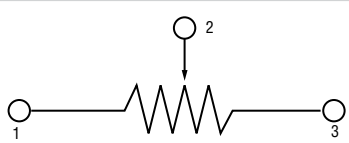
PTV09A-2
(Vertical/Side Mount, Bushingless, 10 mm Height)



RECOMMENDED PCB LAYOUT
(VERTICAL/SIDE MOUNT)



Schematic



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

*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.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

Applications

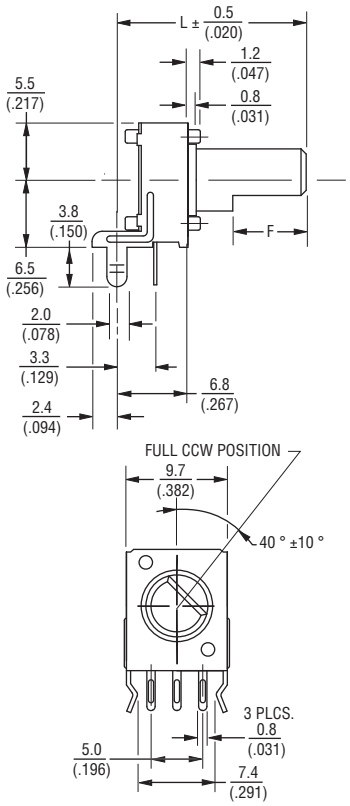
- Commercial communications equipment
- Portable electronics
- Amplifiers/mixers/drum machines/synthesizers
- Consumer goods
- Commercial appliances

PTV09 Series - 9 mm Potentiometer

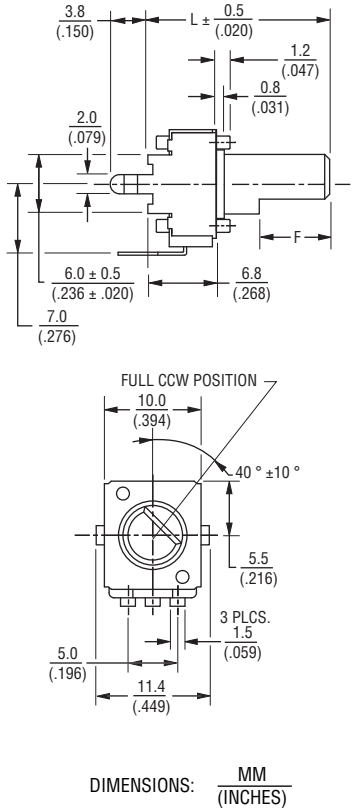
BOURNS®

Product Dimensions (Continued)

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

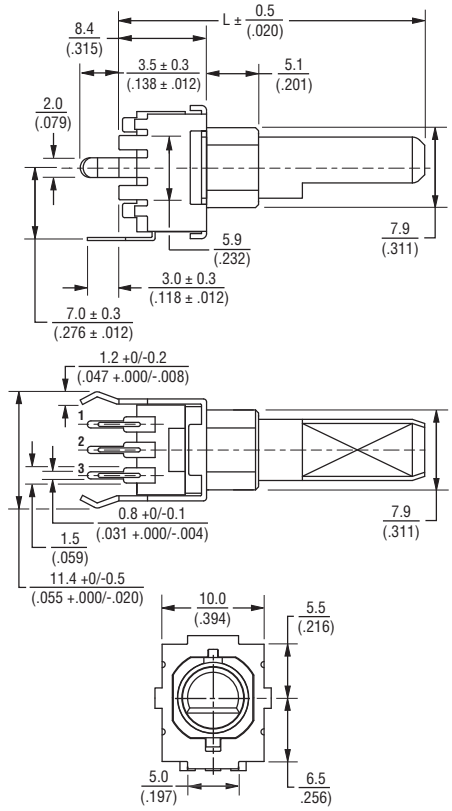


PTV09A-4
(Horizontal/Rear Mount, Bushingless)



DIMENSIONS: MM / (INCHES)

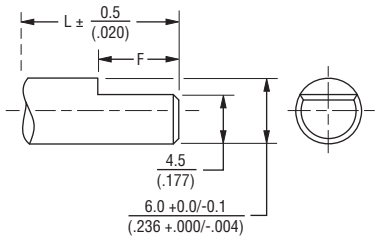
PTV09A-5
(Horizontal/Rear Mount w/Plastic Plain Bushing)



SHAFT SHOWN IN CENTER POSITION

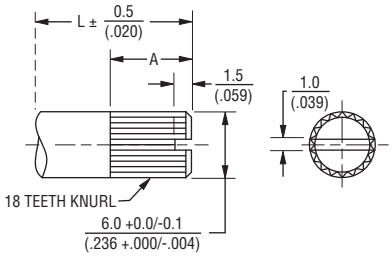
Shaft Styles

F-Type



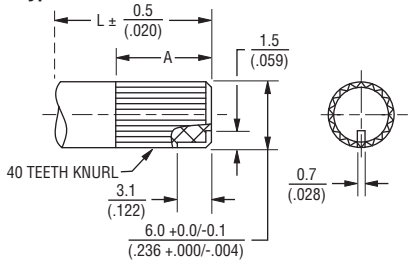
L	15 (.591)	20 (.787)	25 (.984)	30 (1.181)
F	6 (.236)	7 (.275)	12 (.472)	12 (.472)

S-Type



L	15 (.591)	20 (.787)	25 (.984)	30 (1.181)
A	7 (.275)	7 (.275)	7 (.275)	7 (.275)

U-Type



L	15 (.591)	20 (.787)	25 (.984)	30 (1.181)
A	6 (.236)	7 (.275)	7 (.275)	7 (.275)

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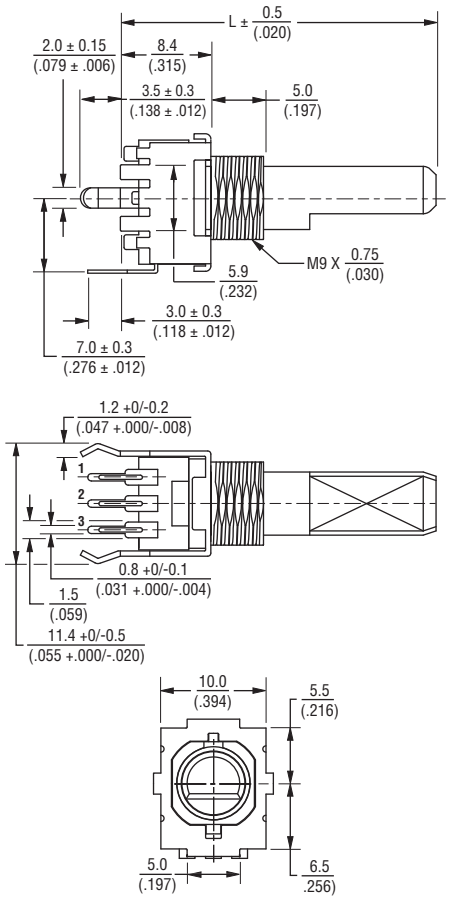
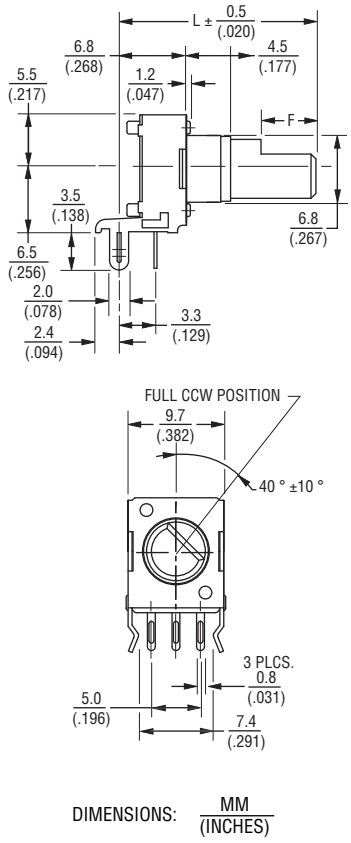
Product Dimensions (Continued)

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



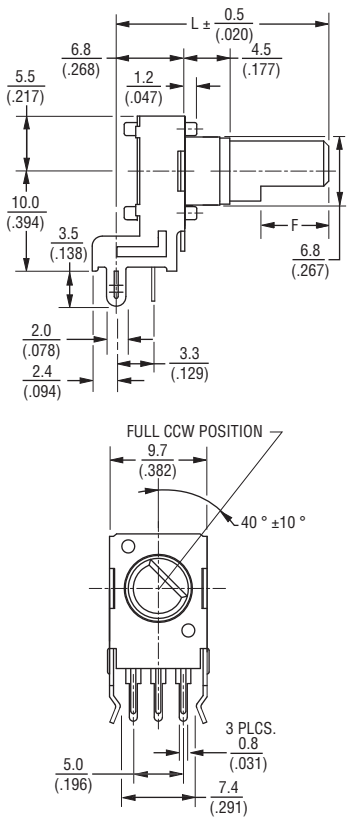
SHAFT SHOWN IN CENTER POSITION

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

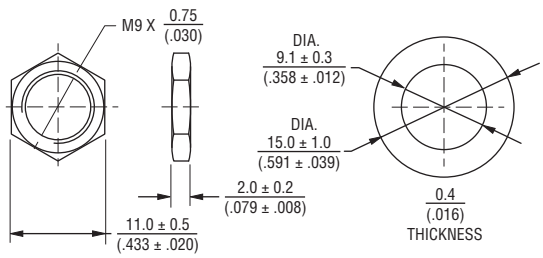


DIMENSIONS: MM / (INCHES)

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



Mounting Hardware



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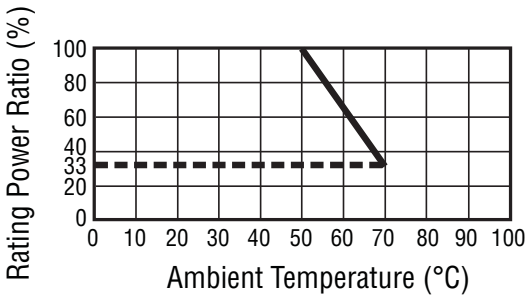
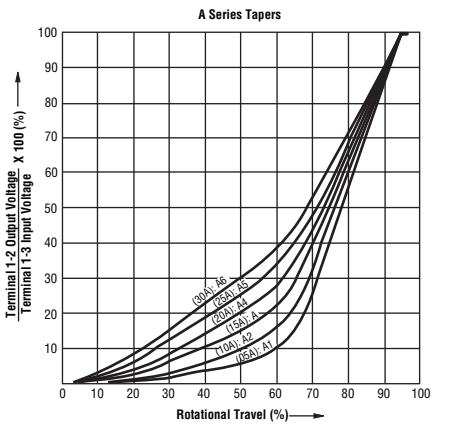
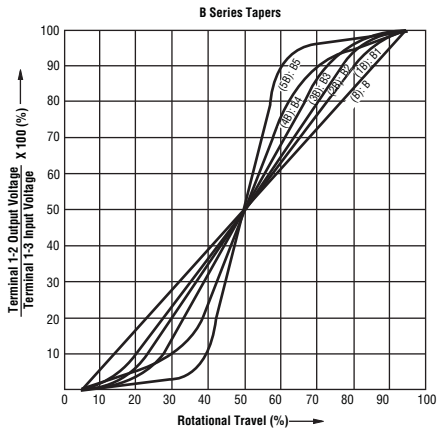
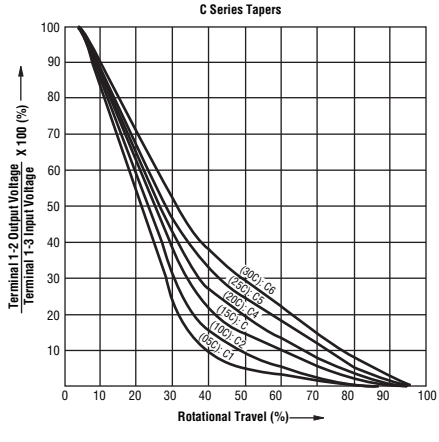
Derating Curve



Tapers







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