

BOURNS®

Features

- Carbon element
- Ganging up to 8 potentiometers available
- Assorted metal shaft styles
- Assortment of resistance tapers
- Tracking error within 3 dB
- Switch option

Applications

- Audio/TV sets
- Car radio
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

PTD90/PTR90 - 9 mm Multi-Ganged Potentiometer

Electrical Characteristics

TaperLinear, audio
 Standard Resistance Range
1 K ohms to 1 M ohms
 Standard Resistance Tolerance
±10 % or ±20 %
 Switch Contact Resistance
0.3 ohms max.
 Switch Rating3 A @ 16 V DC

Environmental Characteristics

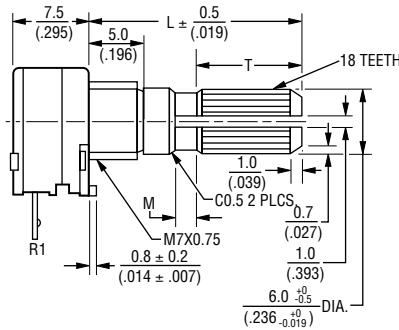
Power Rating0.05 watt
 Maximum Operating Voltage
50 V AC, 10 V DC
 Sliding Noise100 mV max.
 Tracking Error
at 50 % angle max. ±3 dB

Mechanical Characteristics

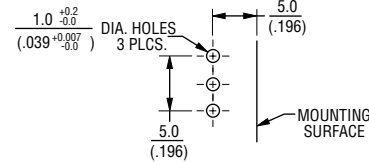
Mechanical Angle300 ° ±5 °
 Rotational Torque20 to 200 g-cm
 Detent Torque.....250 gf.cm max.
 Switch Torque500 gf.cm max.
 Stop Strength.....4 kg-cm min.
 Rotational Life10,000 cycles
 Soldering Condition
300 °C max. within 3 seconds
 HardwareOne flat washer and
 mounting nut supplied per
 potentiometer with bushing.

Product Dimensions

PTD901

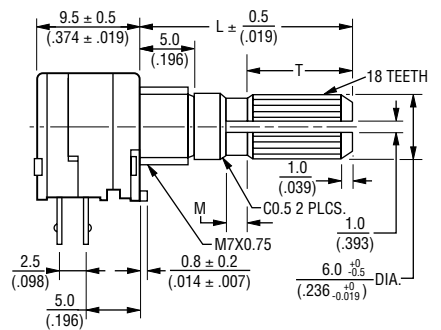


RECOMMENDED PCB LAYOUT

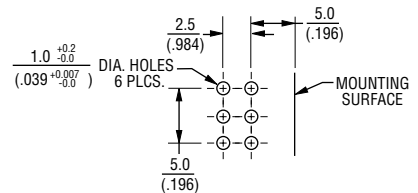


SHAFT SHOWN IN CCW POSITION

PTD902



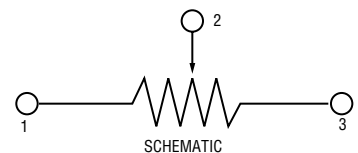
RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION

PTD90 Dimensions

L	15	20	25
	(.590)	(.787)	(.984)
T	6	10	12
	(.236)	(.393)	(.472)
M	1.5	2	4
	(.059)	(.078)	(.157)



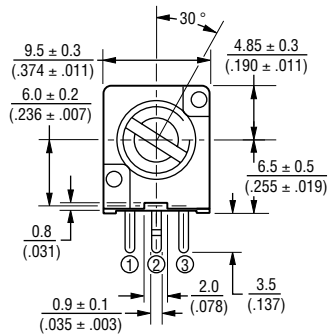
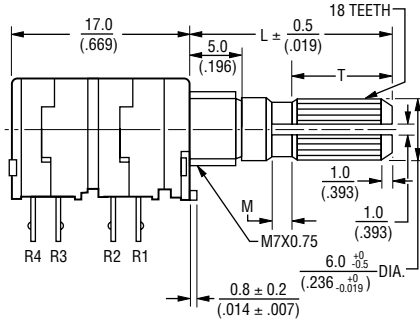
DIMENSIONS ARE: $\frac{\text{MM}}{\text{(INCHES)}}$

PTD90/PTR90 - 9 mm Multi-Ganged Potentiometer

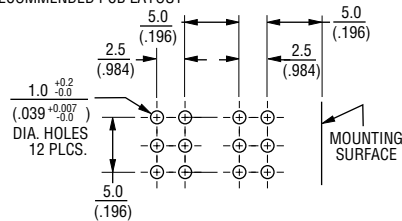
BOURNS®

Product Dimensions

PTD904

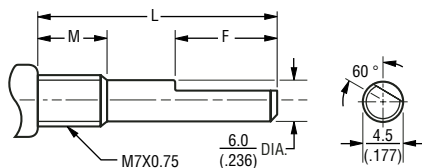


RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION

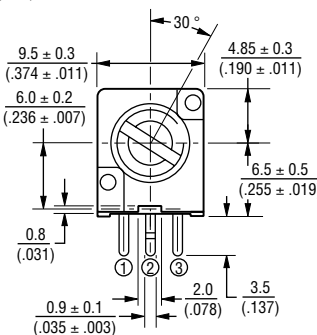
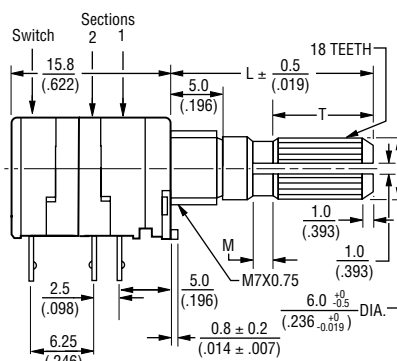
FLATTED METAL SHAFT



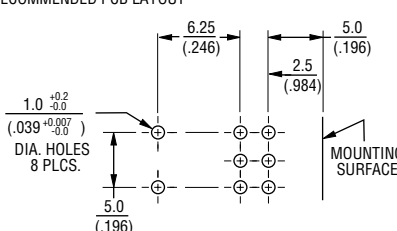
SHAFT SHOWN IN CCW POSITION

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

PTR902



RECOMMENDED PCB LAYOUT



SHAFT SHOWN IN CCW POSITION

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

How To Order

PTD90 1 - 2 0 20 K - B 203

Model

- PTD90 = No Switch
- PTR90 = With Rotary Switch

No. of Sections

- 1 = 1 Section
- 2 = 2 Sections
- 3 = 3 Sections
- 4 = 4 Sections
- 5 = 5 Sections
- 6 = 6 Sections
- 8 = 8 Sections*

Pin Style

- 1 = PC Pins vertical/down facing and $\pm 10\%$ Total Resistance Tolerance
- 2 = PC Pins vertical/down facing and $\pm 20\%$ Total Resistance Tolerance

Center Detent Option

- 0 = No Detent
- 2 = Center Detent

Standard Shaft Length

- 15 = 15 mm
- 20 = 20 mm
- 25 = 25 mm
- 30 = 30 mm

Shaft Styles

- K = Knurled Type Shaft (Metal) 18 Toothed Serration Type
- F = Flatted Metal Shaft

Resistance Taper

- A = Audio Taper
- B = Linear Taper

Resistance Code (See Table)

Other styles available.
*8 gang version available in PTD90 only.

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