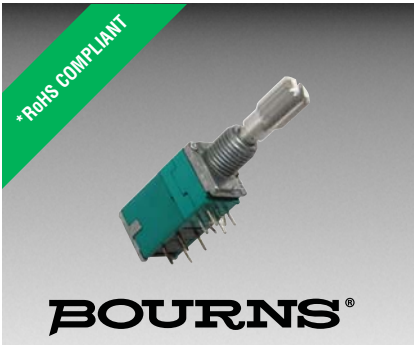




Features

- Carbon element
- Assortment of resistance tapers
- Variety of shaft lengths
- Flatted, knurled and slotted shaft styles
- Center detent option



PTM90 Series Panel Control w/Push-Push Switch

Electrical Characteristics

Standard Resistance Range
..... 1K ohms to 1 megohm

Standard Resistance Tolerance
R < 250K ohms $\pm 20\%$
R $\geq$ 250K ohms $\pm 30\%$

End Resistance
R < 50K ohms 30 ohms max.
R $\geq$ 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 $\pm 15\%$

Operating Temp. Range -10 °C to +55 °C

Resistance to Solder Heat $\pm 5\%$

IP Rating IP 40

Mechanical Characteristics

Mechanical Angle $300^\circ \pm 3^\circ$

Operating Torque 20~250 gf-cm

Stop Strength 5 kgf-cm max.

Mounting Torque 10 kgf-cm max.

Shaft Push/Pull Strength 10 kgf max.

Soldering Condition
Manual 300 °C $\pm 5^\circ$ C for 3 sec.
Wave 260 °C $\pm 5^\circ$ C for 5 sec.
Wash Not recommended

Hardware One flat washer and one mounting nut supplied with each potentiometer

Switch Characteristics

Power Rating 3 A @ 16 VDC

Contact Resistance 100 milliohms

Dielectric Strength
Bushings to Terminals 300 VAC
Switch Terminals 50 VAC

Insulation Resistance
Bushings to Terminals @ 250 VAC
..... 100 megohms
Switch Terminals @ 50 VAC
..... 10 megohms

Switch Type Push on - Push off

Contact Arrangement SPDT

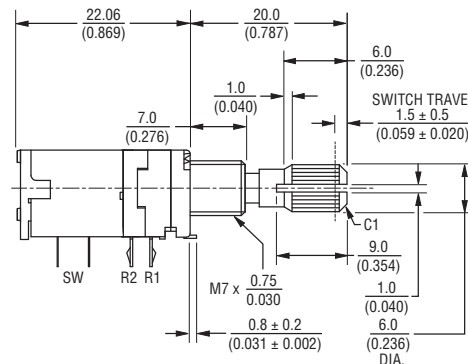
Switch Stroke 1.5 ± 0.1 mm

Operating Force 2 kgf max.

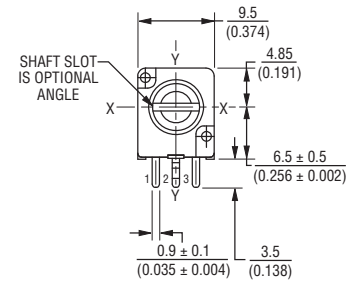
Operating Life 10,000 cycles

Product Dimensions

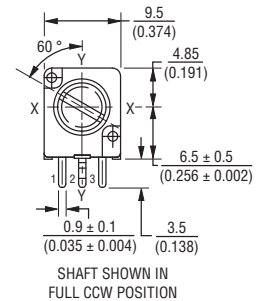
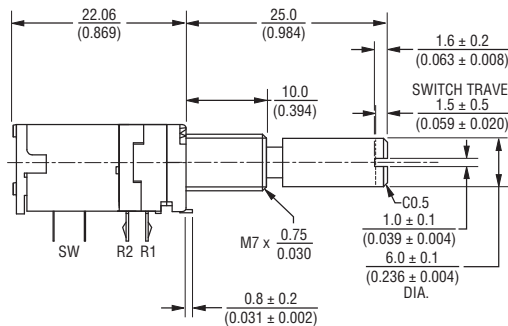
Knurled Shaft



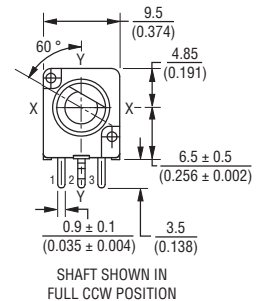
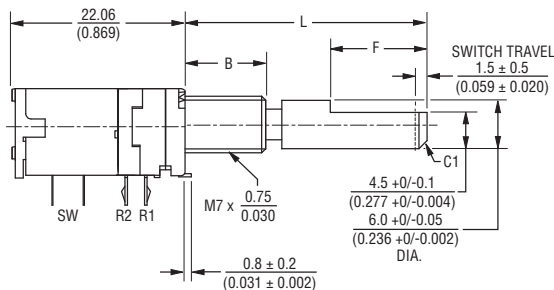
DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$



Slotted Shaft



Flatted Shaft



Dimensions		
L	$\frac{20}{(0.787)}$	$\frac{30}{(1.181)}$
B	$\frac{7}{(0.276)}$	$\frac{10}{(0.394)}$
F	$\frac{10}{(0.694)}$	$\frac{12}{(0.472)}$

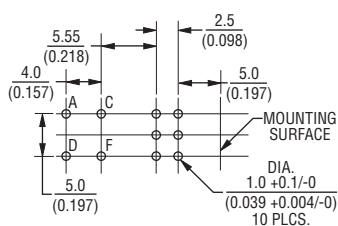
*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
Specifications are subject to change without notice.

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.

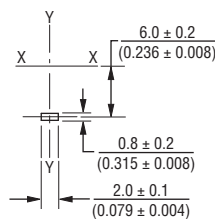
PTM90 Series Panel Control w/Push-Push Switch

BOURNS®

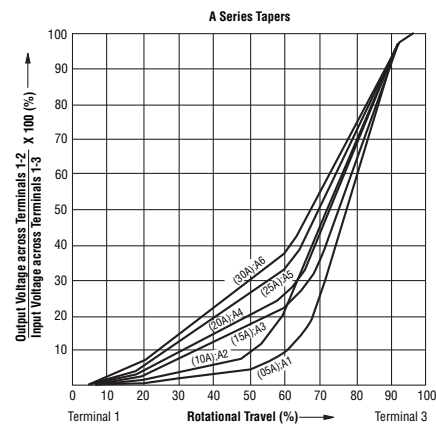
Mounting Hole Detail



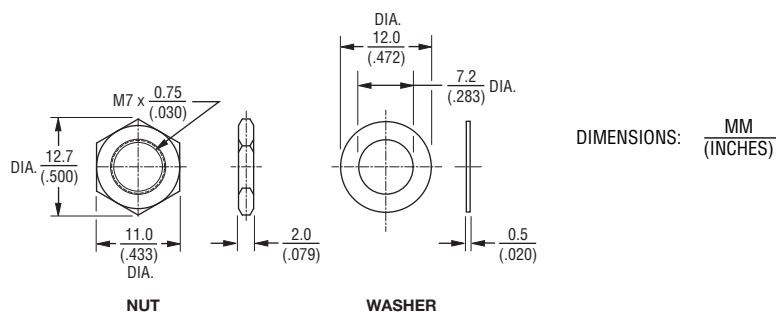
Locating Lug Detail



Tapers



Hardware



How To Order

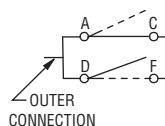
PTM90 2 - 0 25 S - 103 B2

Model Number
Designator
PTM90 = Panel Control
w/Push-Push Switch
Number of Sections
2 = Dual Gang
Center Detent
0 = No Detent
1 = Center Detent
Shaft Length (FMS)
20 = 20 mm (Knurled and Flatted
shaft)
25 = 25 mm (Slotted shaft only)
30 = 30 mm (Flatted shaft only)
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

Standard Resistance Table

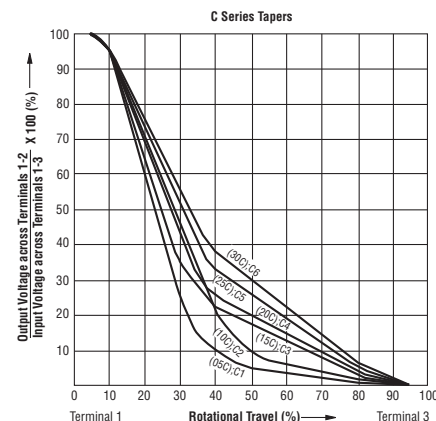
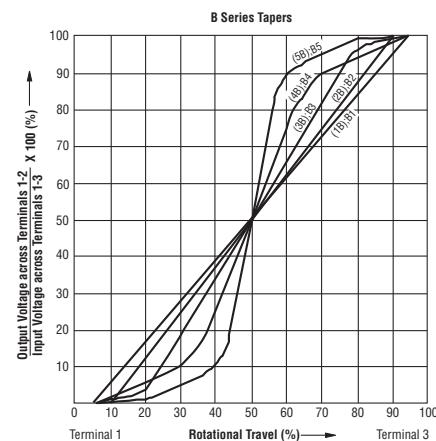
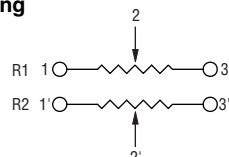
Resistance (Ohms)	Resistance Code
1,000	102
2,000	202
5,000	502
10,000	103
20,000	203
50,000	503
100,000	104
200,000	204
500,000	504
1,000,000	105

Switch Circuit



Schematic

Dual Gang



REV. 02/15

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.