

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	..... ±20 %
R ≥ 250K ohms	..... ±30 %
End Resistance	
R < 50K ohms	..... 30 ohms max.
R ≥ 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

Mechanical Characteristics

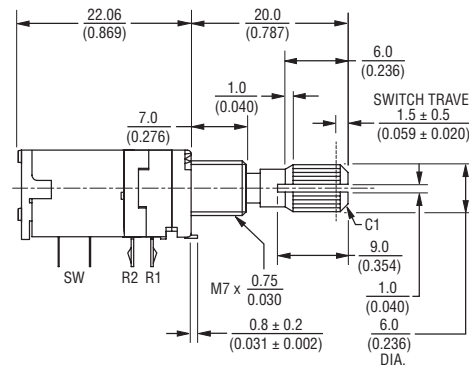
Mechanical Angle	..... 300 ° ±3 °
Operating Torque	..... 20~250 gf-cm
Stop Strength	..... 5 kgf-cm min.
Mounting Torque	..... 10 kgf-cm max.
Shaft Push/Pull Strength	..... 10 kgf max.
Soldering Condition	
Manual	..... 300 °C ±5 °C for 3 sec.
Wave	..... 260 °C ±5 °C for 5 sec.
Wash	..... Not recommended

Switch Characteristics

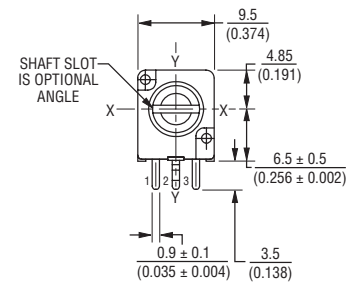
Power Rating	..... 3 A @ 16 VDC
Contact Resistance	..... 100 milliohms
Dielectric Strength	
Bushing to Terminals	..... 300 VAC
Switch Terminals	..... 50 VAC
Insulation Resistance	
Bushing to Terminals @ 250 VAC	..... 100 megohms
Switch Terminals @ 50 VAC	..... 10 megohms
Switch Type	..... Push on - Push off
Contact Arrangement	..... SPDT
Switch Stroke	..... 1.5 ± 0.1 mm
Operating Force	..... 2 kgf max.
Operating Life	..... 10,000 cycles

Product Dimensions

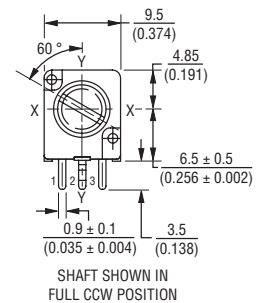
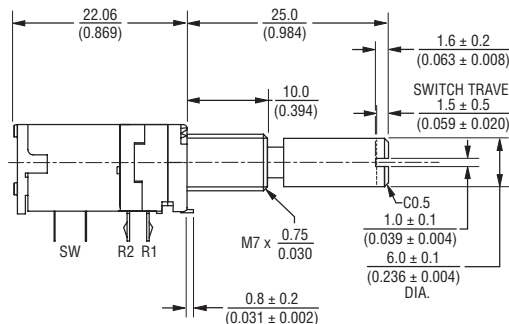
20 mm Length of Travel, Knurled Shaft



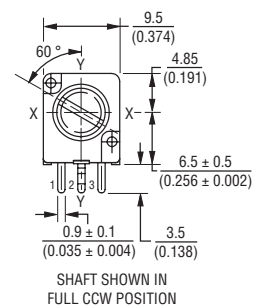
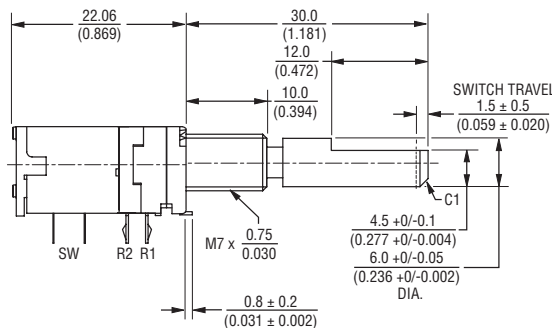
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$



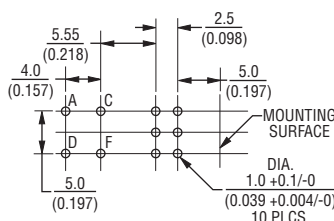
25 mm Length of Travel, Slotted Shaft



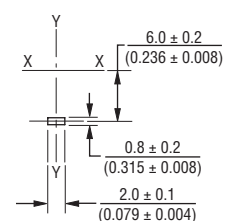
30 mm Length of Travel, Flatted Shaft



Mounting Hole Detail



Locating Lug Detail



*RoHS Directive 2002/95/EC Jan 27 2003 including Annex Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications.

PTM90 Series Panel Control w/Push-Push Switch

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How To Order

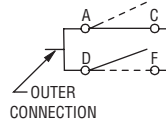
PTM90 2 - 0 25 S - 103 B2

- 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 shaft only)
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

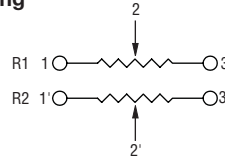
Resistance (Ohms)	Resistance Code
1,000	102
2,000	202
5,000	502
10,000	103
20,000	203
50,000	503
100,000	104
200,000	204
500,000	504
1,000,000	105

Switch Circuit

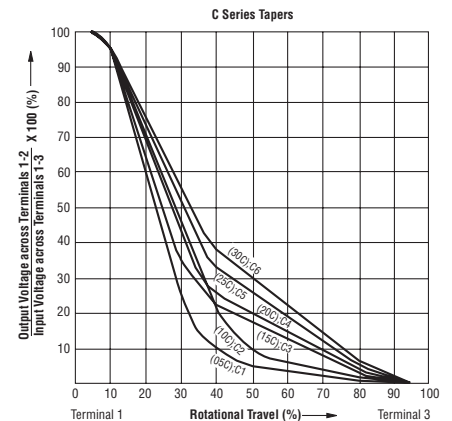
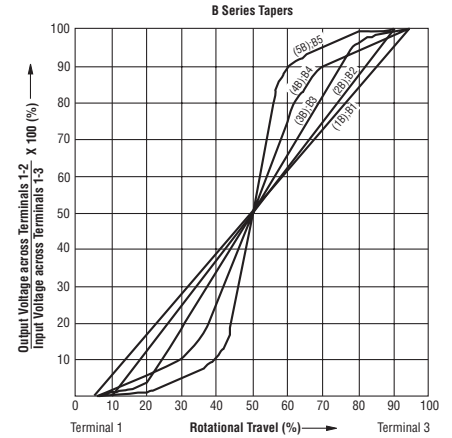
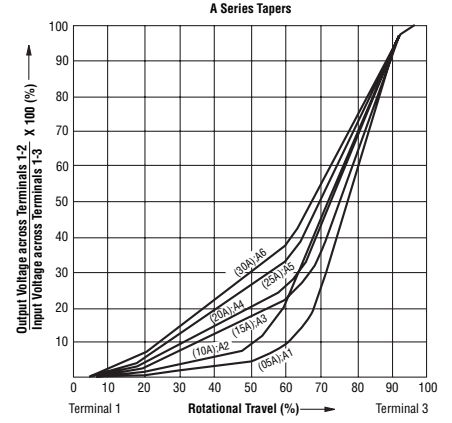


Schematic

Dual Gang



Tapers



REV. 02/10

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