



Features

- Carbon element
- Assortment of resistance tapers
- Dual gang element
- Center detent option



PTJ90 Series Dual Concentric Shaft 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
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

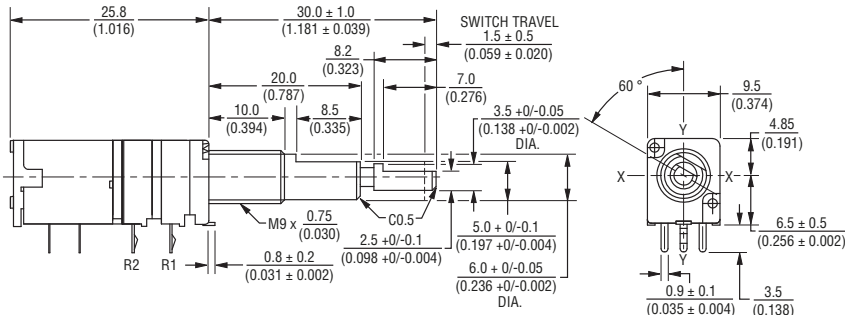
Mechanical Angle	300 ° ±3 °
Operating Torque	20~250 gf-cm
Stop Strength	5 kgf-cm max.
Mounting Torque	10 kgf-cm max.
Shaft Push/Pull Strength	10 kgf max.
Soldering Condition	
Manual	300 °C ±5 °C for 3 sec.
Wave	260 °C ±5 °C for 5 sec.
Wash	Not recommended
Hardware	One flat washer and one mounting nut supplied with each potentiometer

Switch Characteristics

Power Rating	3 A @ 16 VDC
Contact Resistance	100 milliohms
Dielectric Strength	
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

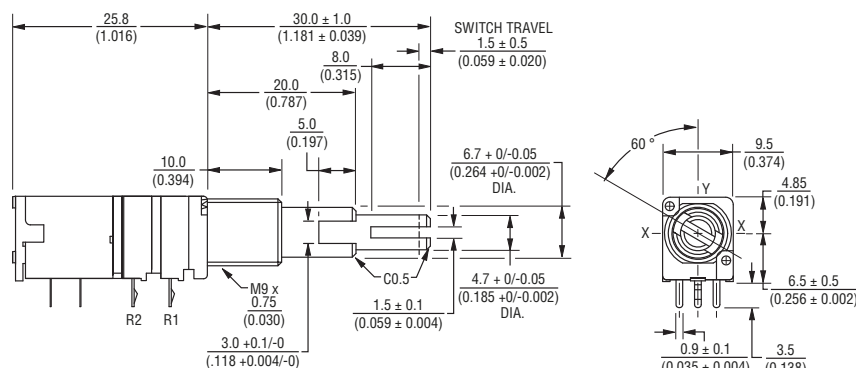
Product Dimensions

PTJ902-xxxF



INNER AND OUTER SHAFT SHOWN IN CCW POSITION

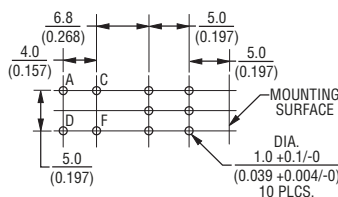
PTJ902-xxxS



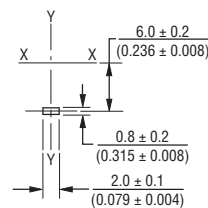
INNER AND OUTER SHAFT SHOWN IN CCW POSITION

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

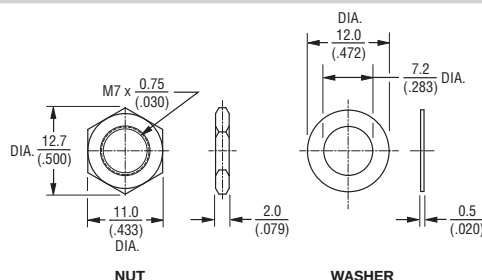
Mounting Hole Detail



Locating Lug Detail



Hardware



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

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

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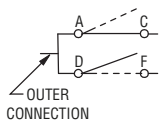
Applications

- Multimedia sound systems
- Mixers / drums / DJ equipment
- Portable electronics
- Portable appliances

PTJ90 Series Dual Concentric Shaft Panel Control w/Push-Push Switch

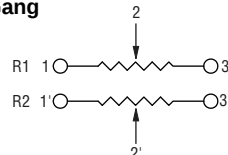
BOURNS®

Switch Circuit



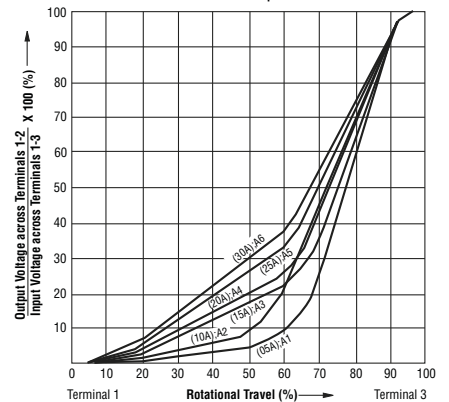
Schematic

Dual Gang

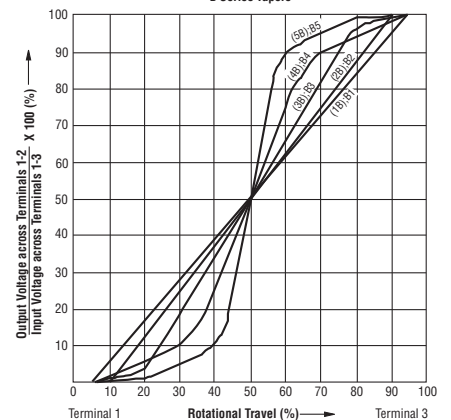


Tapers

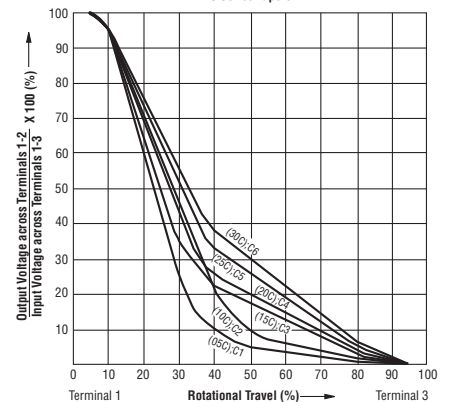
A Series Tapers



B Series Tapers



C Series Tapers



How To Order

PTJ90 2 - 0 30 F - 103 B2

Model Number
Designator
PTJ90 = Dual
Concentric Shaft Panel
Control w/Push-Push
Switch
Number of Sections
2 = Dual Gang
Center Detent
0 = No Detent
1 = Center Detent
Shaft Length (FMS)
30 = 30 mm
Shaft Style
F = Flatted Metal
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

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REV. 10/19

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