

# Panel Potentiometer

Model P270 / P271 / P272



## Features:

- 12.7 mm (1/2") square rotary
- 1,000,000 cycle life
- Conductive plastic element
- Heavy duty applications
- Sealed unit available



## Model Styles Available

Panel, Solder Lugs, Single Gang	P270
Panel, Solder Lugs, with Center Tap	P271
Panel, Solder Lugs, Dual Gang	P272

## Electrical

Resistance Range, Ohms	200-1M (for "B" taper) 1K-1M (for other tapers)
Standard Resistance Tolerance	± 10%
Residual Resistance	6 Ω max.
Input Voltage, maximum	500 Vdc not to exceed power rating
Power rating, Watts	2 Watts @ 70°C for "B" Taper, 1 Watt for all others
Dielectric Strength	1000VAC, 1 minute
Insulation Resistance, Minimum	50M ohms at 500Vdc
Sliding Noise	100mV max.
Actual Electrical Travel, Nominal	300°
Electrical Continuity, Nominal	312°

## Mechanical

Total Mechanical Travel	312°± 5°
Static Stop Strength, Maximum	200 oz-in
Rotational Torque, (Single gang)	Dust Proof : 1.0.oz-in. Max. Sealed : 1.0 to 2.5 oz-in
Rotational Torque, Maximum (Dual gang)	Dust Proof : 3.0.oz-in. Sealed : 5.0 oz-in
Panel Nut Tightening Torque	25 lb-in

### General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

TT Electronics | BI Technologies  
4200 Bonita Place, Fullerton, CA USA 92835 | Ph: +1 714 447 2345  
www.ttelectronics.com | sensors@ttelectronics.com

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## Environmental

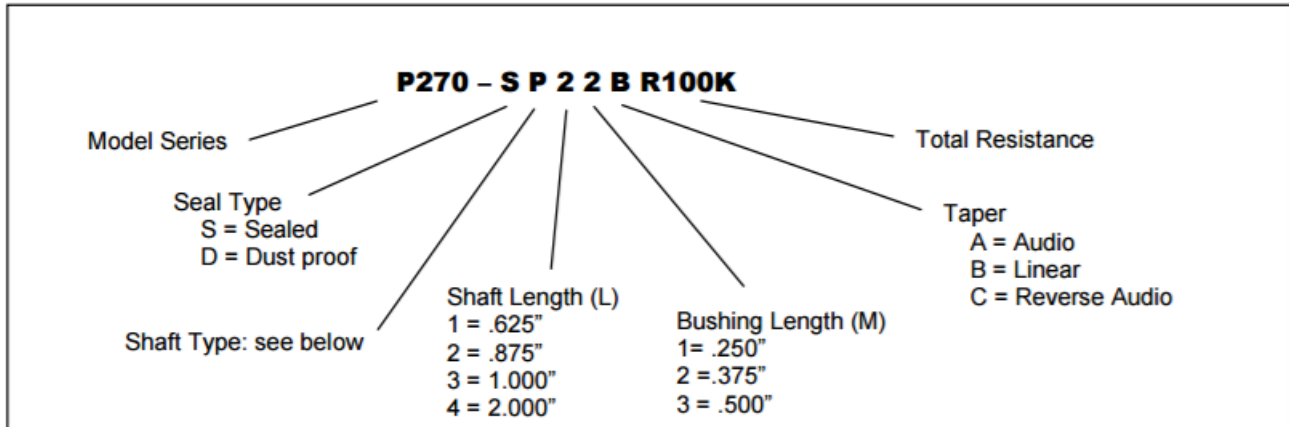
Operating Temperature Range

-55°C to +120°C

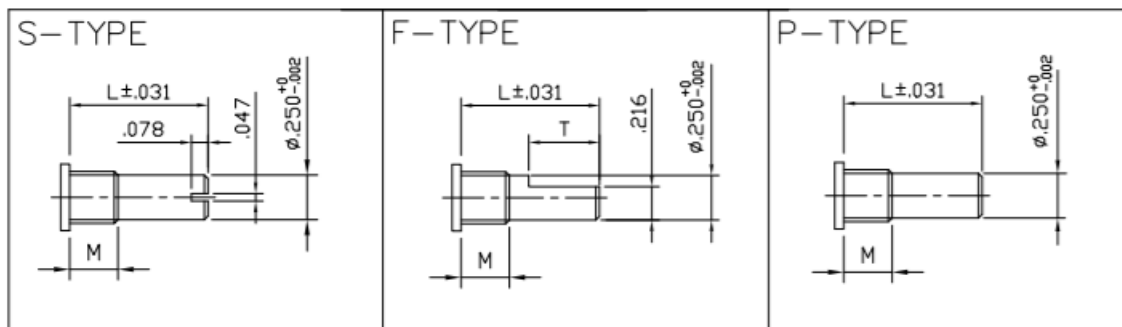
Rotational Load Life

1M Cycles (10% ΔR)

## Ordering



### Shaft Types



### F-TYPE Shaft – Bushing Combinations

Shaft Length (L)	Bushing Length (M)	Flat Length (T)
(1) = .625	(1) = .250	.315
(1) = .625	(2) = .375	.180
(1) = .625	(3) = .500	Not Available
(2) = .875	(3) = .500	.315
All Other Combinations		.375

### STANDARD RESISTANCE VALUES, OHMS

1K 2K 5K 10K 20K 50K 100K 200K 500K 1MEG

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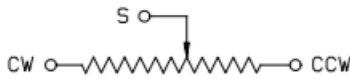
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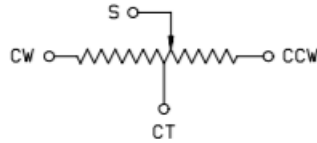


## CIRCUIT DIAGRAM

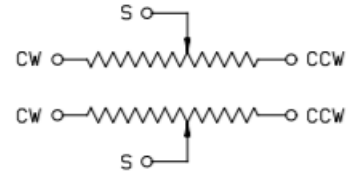
**P270 (without Center Tap)**



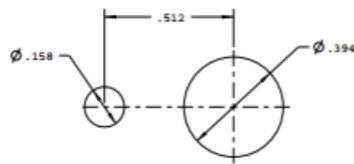
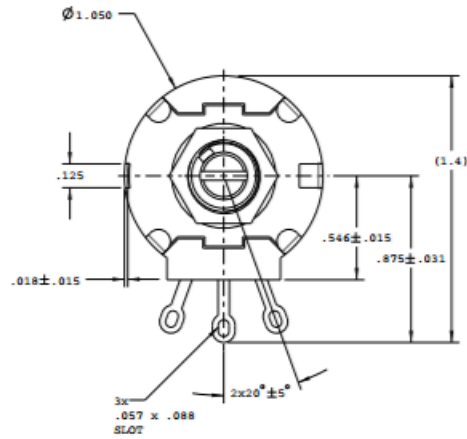
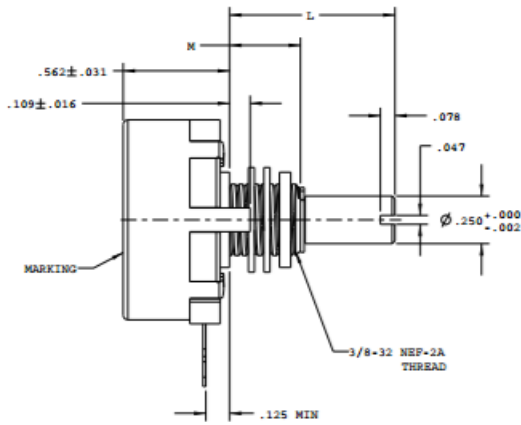
**P271 (with Voltage Center Tap)**



**P272 (Dual Gang)**



### Model 270



PANEL LAYOUT

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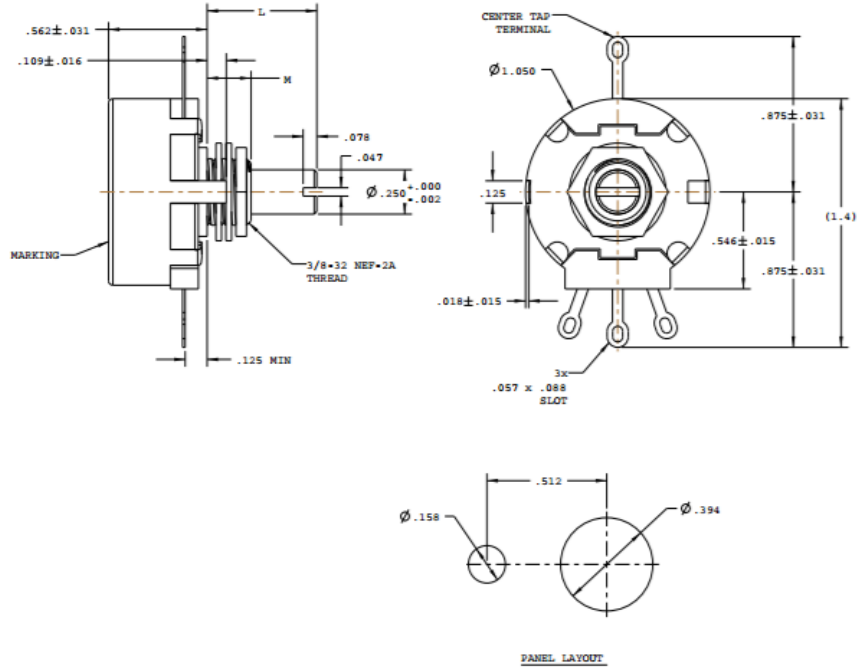
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# Panel Potentiometer

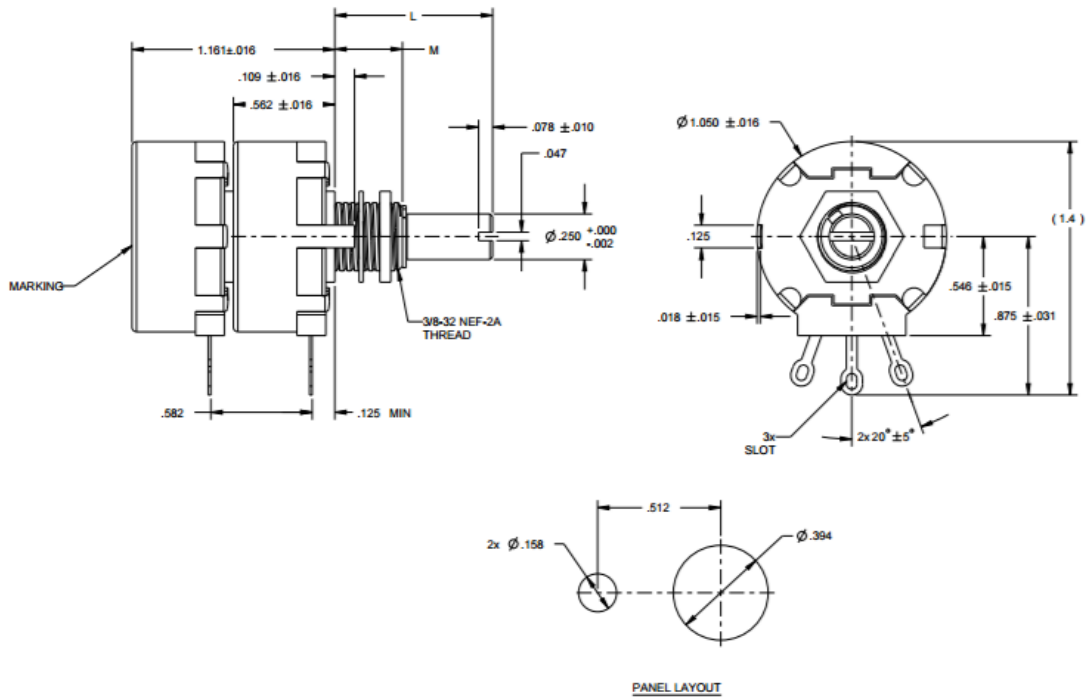
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## Model 271 (Center Tap)



## Model 272 (Dual gang)



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