

Model P270/271/272
27mm Rotary Potentiometer
Long Life - 1 Million cycles
Conductive Plastic Element
Heavy Duty Applications
Sealed Unit Available
RoHS Compliant



MODEL STYLES

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

ELECTRICAL¹

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

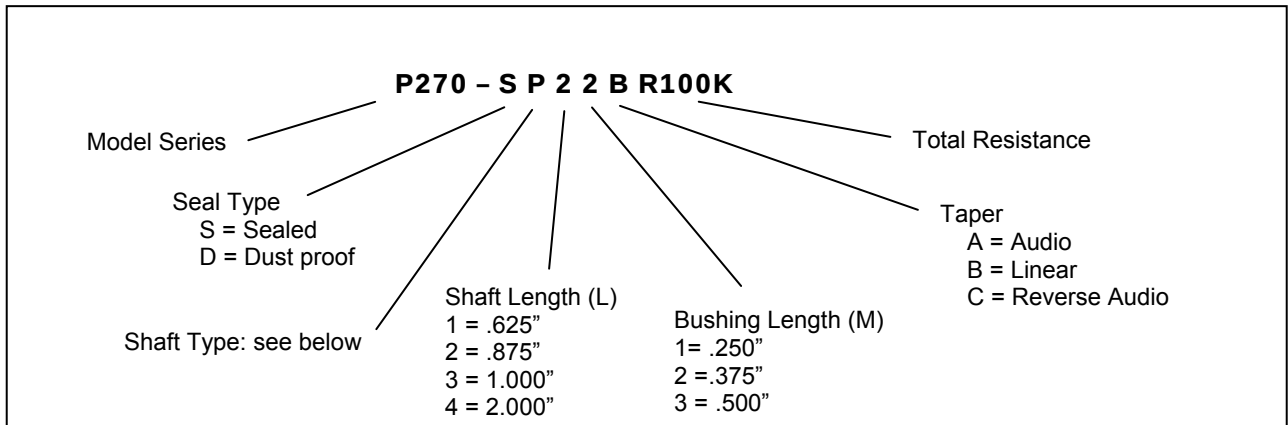
ENVIRONMENTAL

Operating Temperature Range	-55°C to +120°C
Rotational Load Life	1M Cycles (10% ΔR)

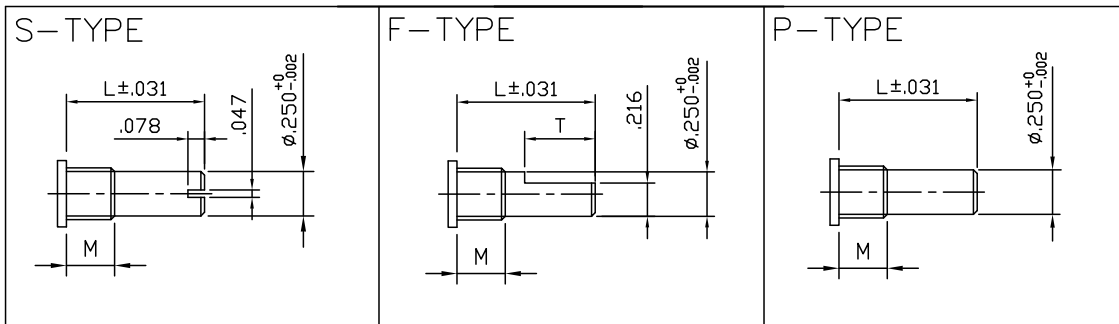
¹ Specifications subject to change without notice.

Model P270/271/272

ORDERING INFORMATION²



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

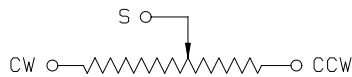
1K 2K 5K 10K 20K 50K 100K 200K 500K 1MEG

² Contact our customer service for custom designs and features.

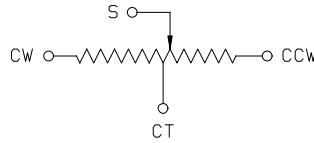
Model P270/271/272

CIRCUIT DIAGRAM

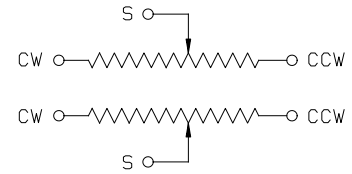
P270 (without Center Tap)



P271 (with Voltage Center Tap)

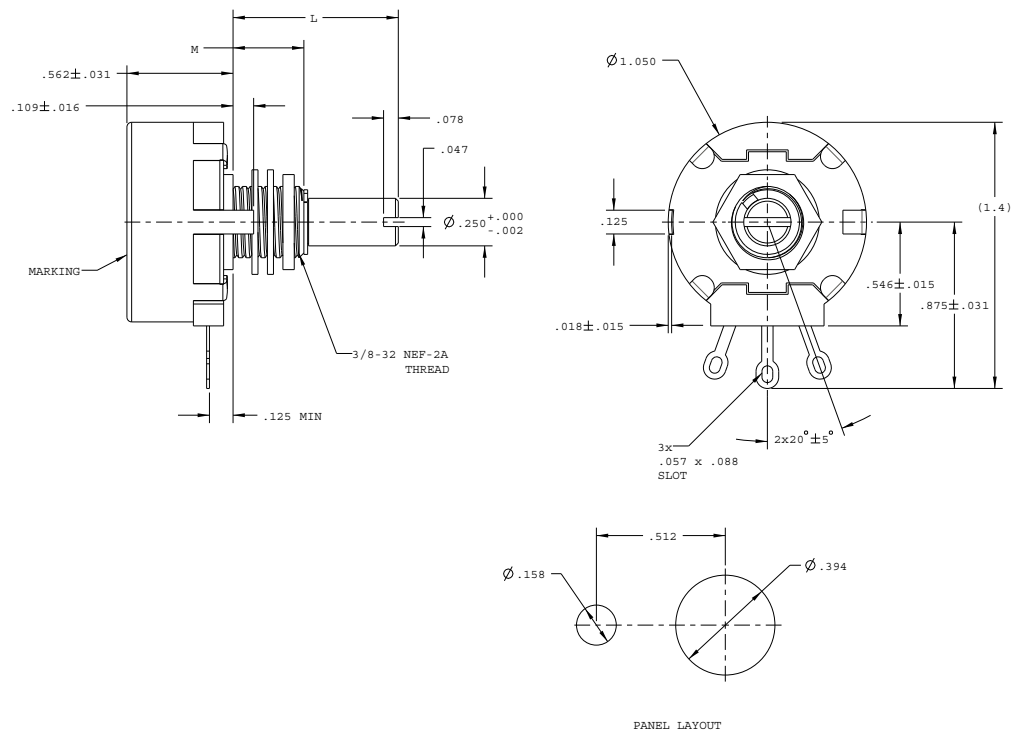


P272 (Dual Gang)

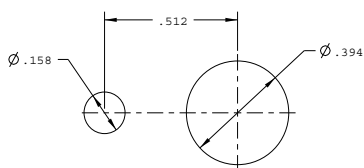


OUTLINE DRAWING

Model 270



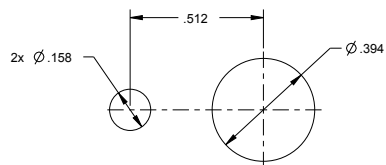
Model 271 (Center Tap)



PANEL LAYOUT

Technical drawing of the 3000 Series 1/2" (Figure 1) showing side and end views with dimensions:

- Side View Dimensions:
 - Overall length: L
 - Distance from mounting face to centerline: $1.161 \pm .016$
 - Distance from centerline to mounting face: $.109 \pm .016$
 - Distance from centerline to mounting face (alternative): $.562 \pm .016$
 - Distance from centerline to mounting face (alternative): $.078 \pm .010$
 - Distance from centerline to mounting face (alternative): $.047$
 - Distance from centerline to mounting face (alternative): $\varnothing .250 \begin{smallmatrix} +.000 \\ -.002 \end{smallmatrix}$
 - Thread specification: 3/8-32 NEF-2A THREAD
 - Distance from centerline to mounting face (alternative): $\varnothing .125$
 - Distance from centerline to mounting face (alternative): $.582$
 - Distance from centerline to mounting face (alternative): $.125 \text{ MIN}$
 - Marking location: MARKING
- End View Dimensions:
 - Overall diameter: $\varnothing 1.050 \pm .016$
 - Distance from centerline to mounting face: $.125$
 - Distance from centerline to mounting face: $.018 \pm .015$
 - Distance from centerline to mounting face: $.546 \pm .015$
 - Distance from centerline to mounting face: $.875 \pm .031$
 - Overall diameter: (1.4)
 - Slot dimensions: 3x SLOT
 - Slot angle: $2 \times 20^\circ \pm 5^\circ$



PANEL LAYOUT

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

BI Technologies:

[P271-DS21R10K](#)

TT Electronics:

[P270-SS33R5K](#) [P270-DP42R250K](#) [P270-DS22R1K](#) [P270-DP22R20K](#) [P270-DS22R2.5K](#) [P270-DS21R10K](#) [P271-SS21R10K](#) [P270-DS22R500](#) [P270-DS22R25K](#) [P270-SP12R5K](#) [P271-SS22R10K](#) [P270-SF22R5K](#) [P270-DP42R250](#)
[P270-DP22R2K](#) [P270-SP22R10K](#) [P271-SP22R10K](#) [P270-DS22R2K5](#) [P271-SF32R10K](#) [P270-DP22R200K](#) [P270-DS22R200K](#) [P270-DS22R200](#) [P270-DS21R5K](#) [P270-SF21R10K](#) [P271-SP32R100K](#) [P270-SF11R10K](#) [P272-SS22R1K](#) [P271-DP41R10K](#) [P270-DS22R10K](#) [P270-SS22R1K](#) [P271-DS11R10K](#) [P270-D22R20K](#) [P272-SP22AR1K](#)
[P270-SS22R5K](#) [P271-DS22R2K5](#) [P271-SP42BR2K](#) [P272-DS32R5K](#) [P272-SP22BR5K](#) [P270-DS22R5K](#) [P270-DSR225K](#) [P270-SF11R150K](#) [P270-SP12R2K5](#) [P270-SP42R20K](#) [P271-DS11R5K](#) [P271-DS13R10K](#) [P271-DS13R20K](#) [P271-DS32R1MEG](#) [P271-SP22R1K](#) [P272-DS13R20K](#) [P270-DS43R5K](#) [P270-SS21R5K](#) [P270-SS22R250](#) [P270-SS22R2K5](#) [P271-D22R2K5](#) [P271-DS11R20K](#) [P272-DS11R10K](#) [P272-DS11R20K](#) [P270-DF22R5K](#)
[P270-DP12R10K](#) [P270-DS22R20K](#) [P270-DS42R20K](#) [P272-DS13R10K](#) [P270-DS12R5K](#) [P270-SP42R2K](#) [P270-SS22R10K](#) [P271-D32R1MEG](#) [P271-DS22R1K](#) [P271-DS21BR10K](#) [P270-SF21BR10K](#)