17mm Rotary Potentiometer

P170



Features:

- 100,000 cycle life
- Switch option
- Metal shaft / bushing
- Conductive plastic element
- RoHS compliant
- Customizable

Description:

Our contacting panel potentiometers are designed for high quality, long lasting panel controls. We offer a wide product range designed to serve both commercial applications and high performance position sensors with a wide variety of features such as the P170 switch option.

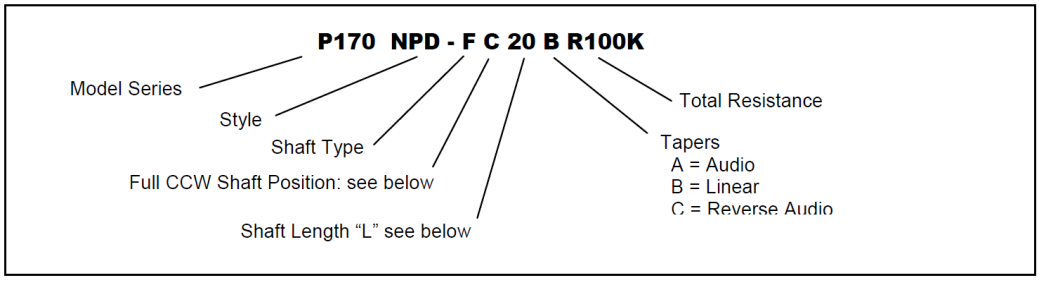
Applications:

- Audio/video controls
- Industrial and commercial joysticks
- Power supply
- Controls for medical equipment
- Pedal position

Model Styles

Side adjust, Solder lugs	P170N
Side adjust, Solder lugs with switch	P170S
Side adjust, PCB pins	P170N2
Side adjust, PCB pins with switch	P170S2
Top adjust, PCB pins	P170NP1
Top adjust, PCB pins with switch	P170SP1
Rear adjust, PCB pins	P170NPD
Rear adjust, PCB pins with switch	P170SPD

Ordering Information



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.

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Electrical Specifications

Resistance range, Ohms	100-1M (for “B” taper), 5K-1M (for other tapers)
Standard resistance tolerance	±20%
Residual resistance	10 ohms max.
Input voltage, maximum	200 Vac max.
Power rating, Watts	0.1W (“B” taper), 0.05W (other tapers)
Dielectric strength	500Vac, 1 minute
Insulation resistance, minimum	50M ohms at 500Vdc
Sliding noise	100mV max.
Actual electrical travel, nominal	240°
Switch contact resistance	50M ohms max.
Switch power rated	1.0A at 12 Vdc

Mechanical Specifications

Total mechanical travel	260° ±10°
Static stop strength	40 oz-in
Rotational torque	0.5 to 1.25 oz-in
Switch rotational angle	30° ±10°

Environmental Specifications

Operating temperature range	-20°C to +70°C
Rotational life (potentiometer)	100,000 cycles
Rotational life (switch)	15,000 cycles

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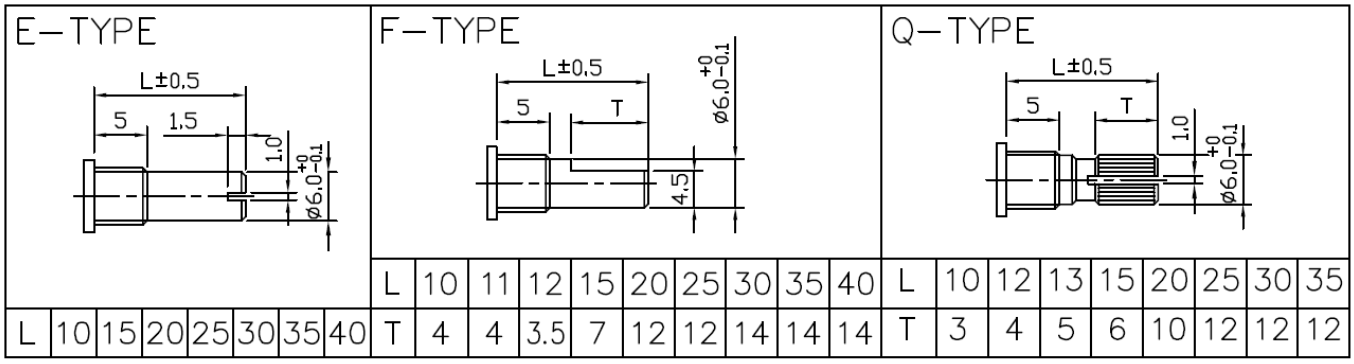
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Shaft Types

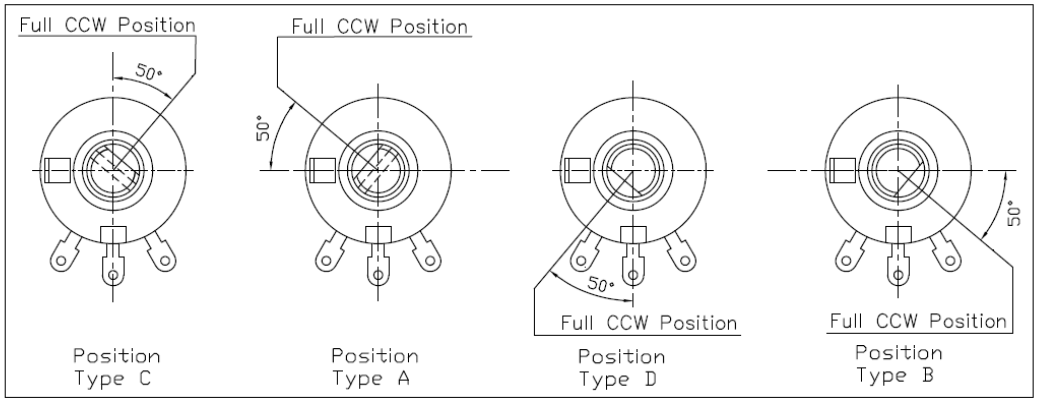


L	10	15	20	25	30	35	40
T	4	4	3.5	7	12	12	14	14	14

L	10	12	13	15	20	25	30	35
T	3	4	5	6	10	12	12	12

Shaft Position (F-Type Shaft)

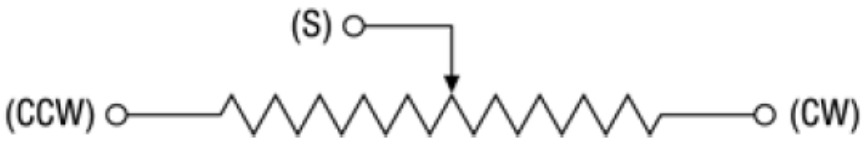
Dashed lines on Type “C” and Type “A” shows position of adjustment slot for E-Type and Q-Type shafts



Standard Resistance Values, Ohms

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

Circuit Diagram



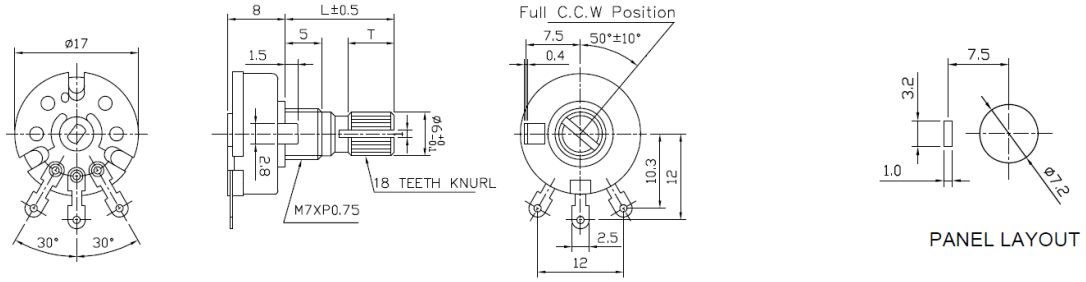
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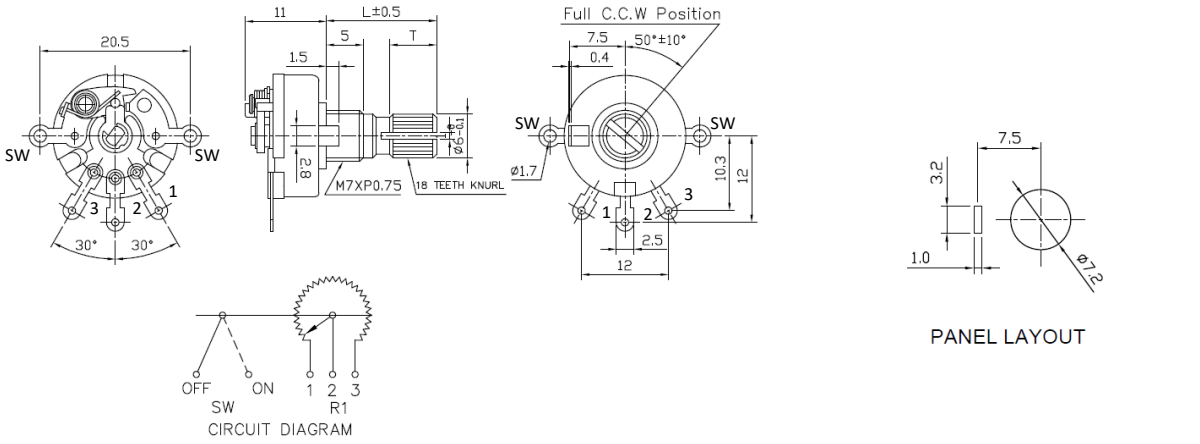
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Outline Drawings

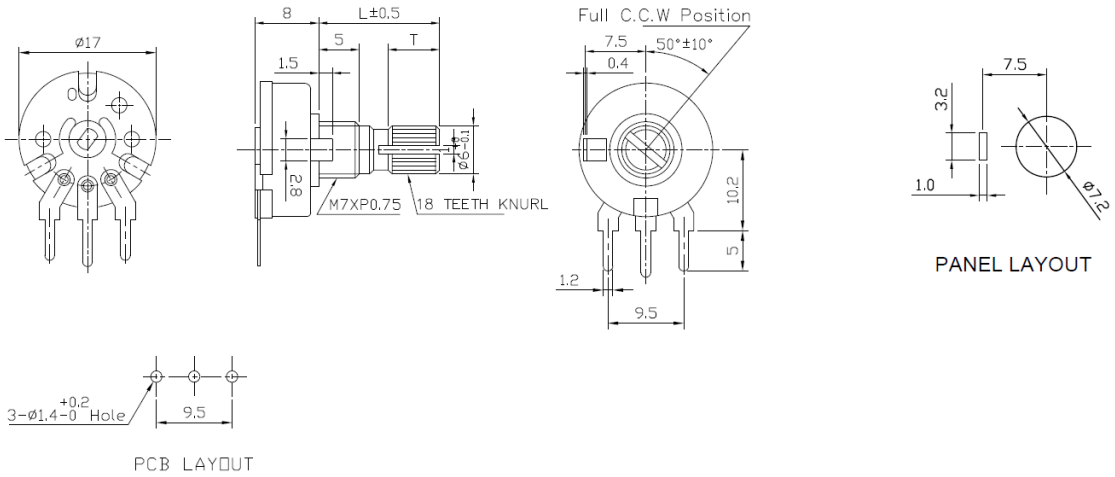
MODEL P170N (Side Adjust, Solder Lugs)



MODEL P170S (Side Adjust, Solder Lugs with Switch)



MODEL P170N2 (Side Adjust, PCB Pins)



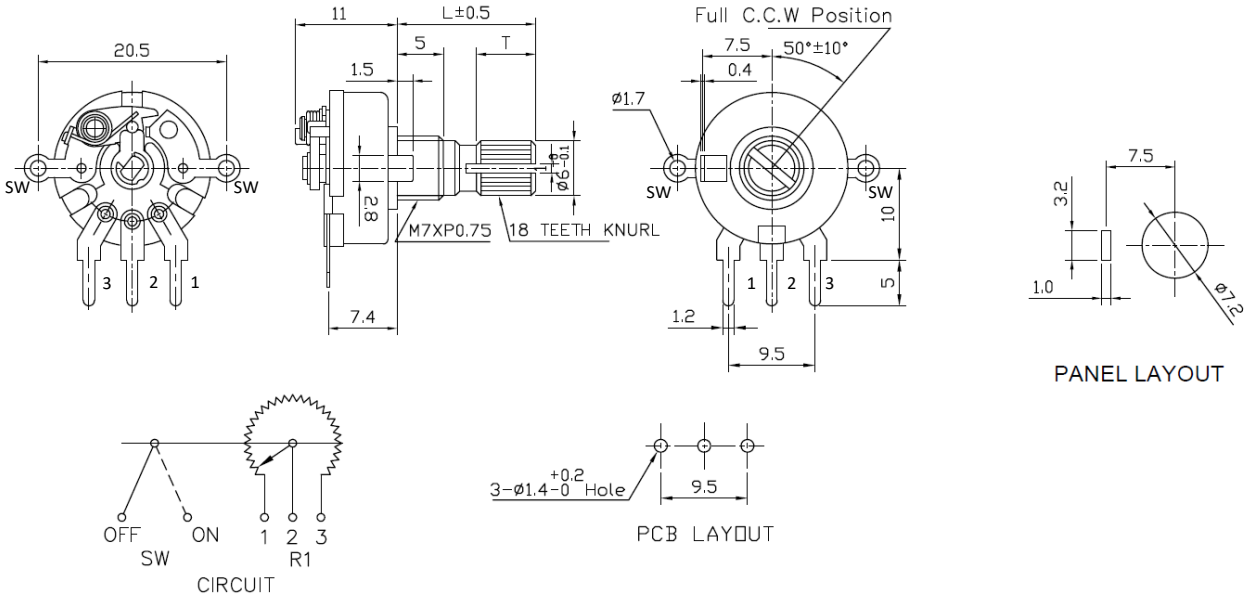
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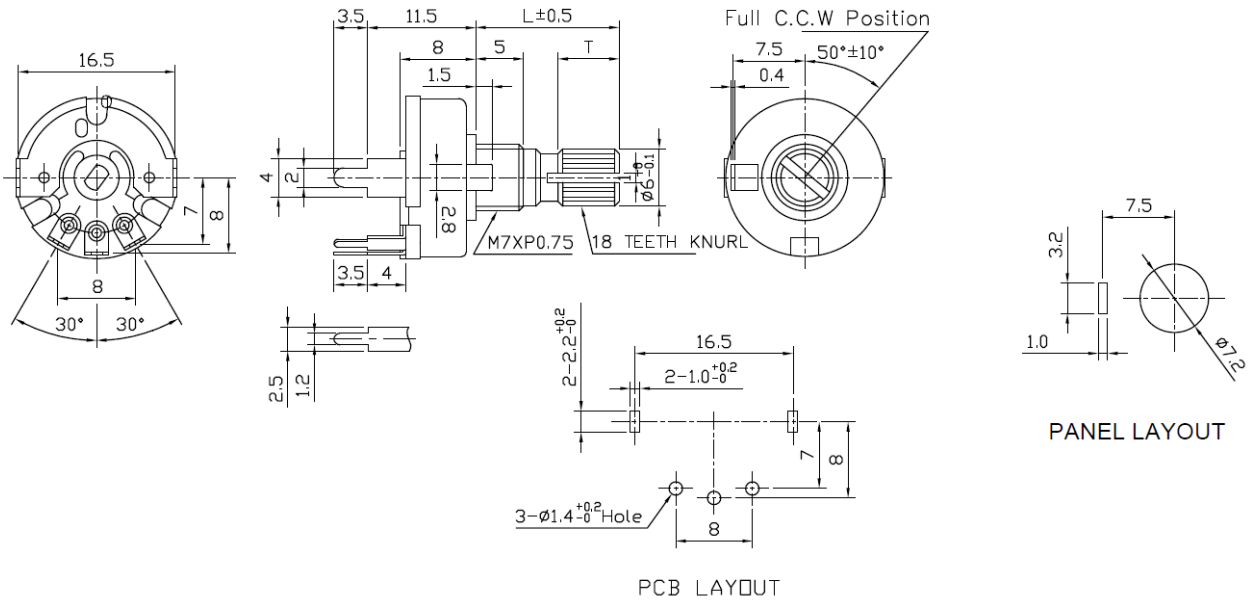
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Outline Drawings

MODEL P170S2 (Side Adjust, PCB Pins with Switch)



MODEL P170NP1 (Top Adjust, PCB Pins)



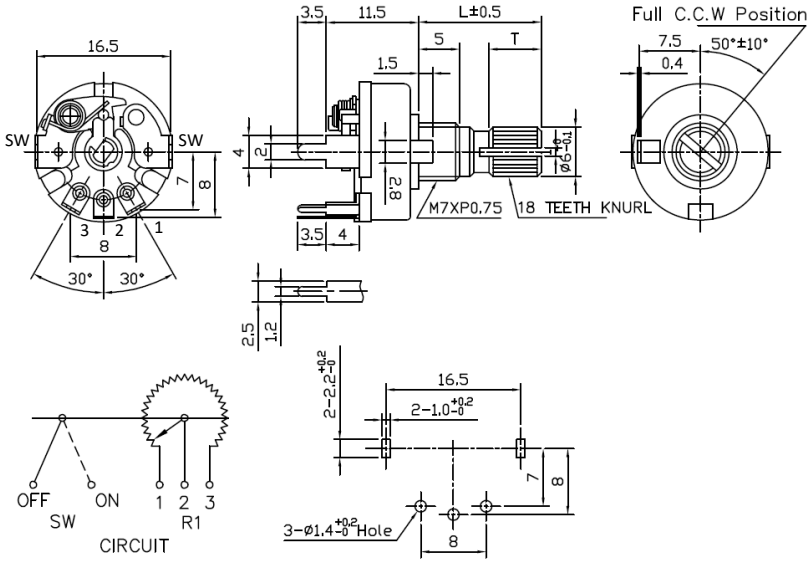
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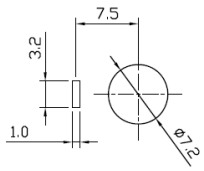
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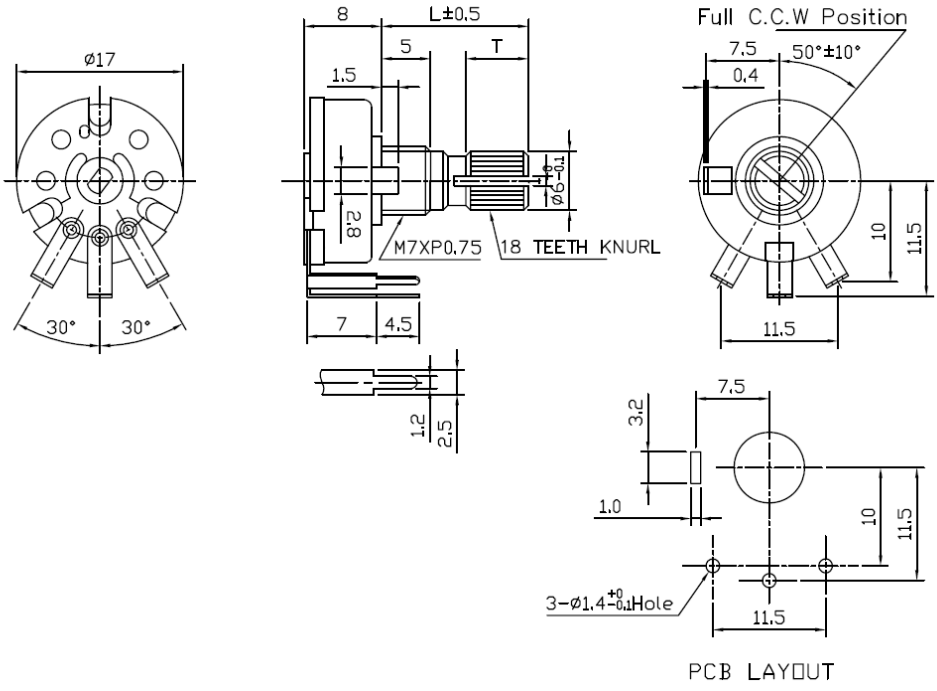
MODEL P170SP1 (Top Adjust, PCB Pins with Switch)





PANEL LAYOUT

MODEL P170NPD (Rear Adjust, PCB Pins)



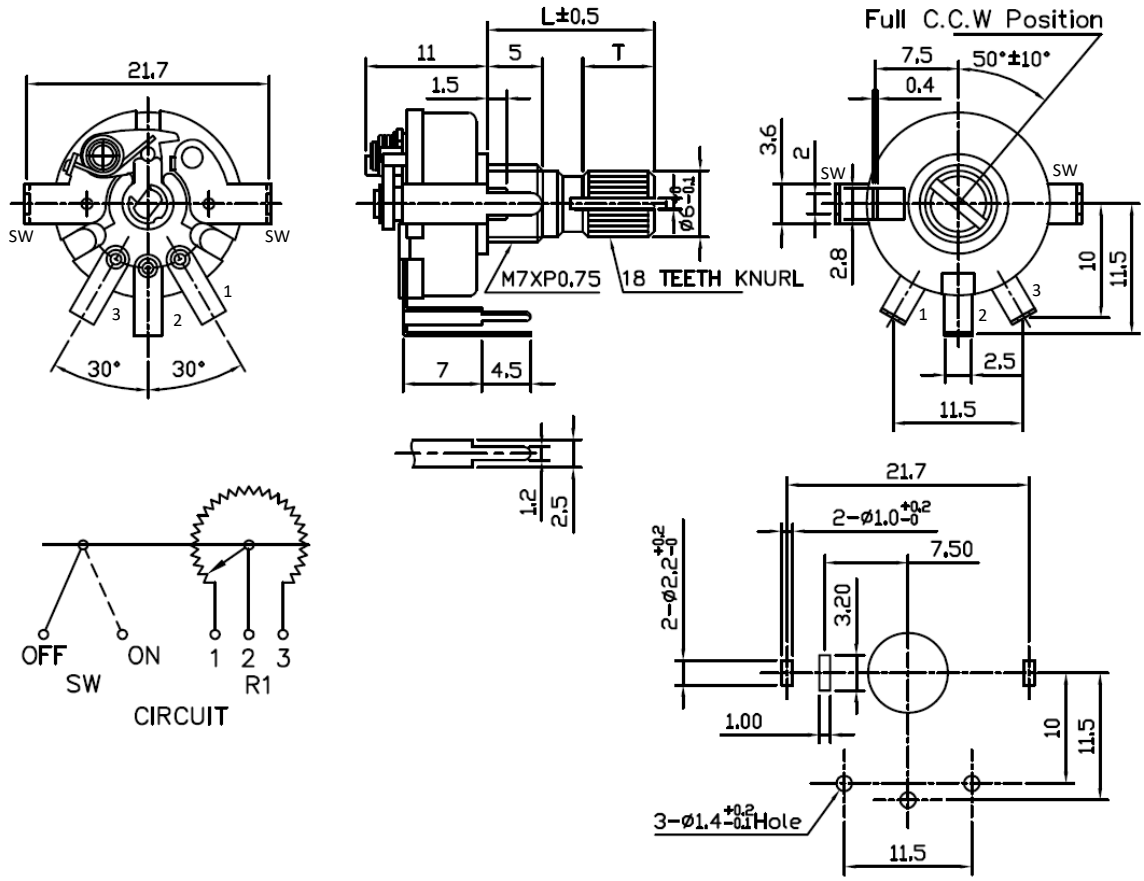
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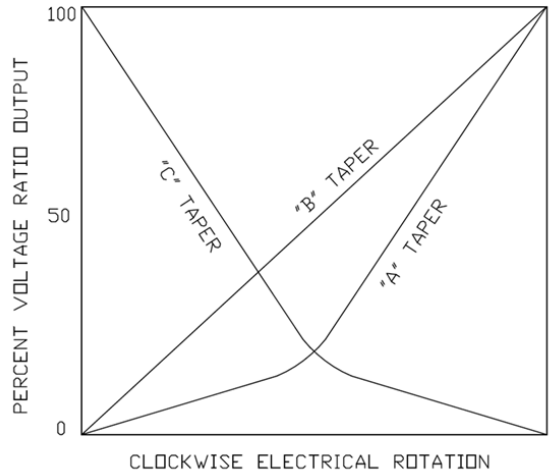
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Outline Drawings

MODEL P170SPD (Rear Adjust, PCB Pins with Switch)





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