

**Model P170**  
**17mm Rotary Potentiometer**  
**Metal Shaft / Bushing**  
**Conductive Plastic Element**  
**100,000 Cycle Life**  
**Switch Option**  
**RoHS Compliant**



#### 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 |

#### ELECTRICAL<sup>1</sup>

|                                   |                                                    |
|-----------------------------------|----------------------------------------------------|
| Resistance Range, Ohms            | 100-1M (for "B" taper)<br>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- others                       |
| Dielectric Strength               | 500Vac, 1 minute                                   |
| Insulation Resistance, Minimum    | 50M ohms at 500Vdc                                 |
| Sliding Noise                     | 100mV max.                                         |
| Actual Electrical Travel, Nominal | 240°                                               |
| Switch Contact Resistance         | 50 m ohms max.                                     |
| Switch Power Rated                | 1.0A at 12Vdc                                      |

#### MECHANICAL

|                         |                   |
|-------------------------|-------------------|
| 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°           |

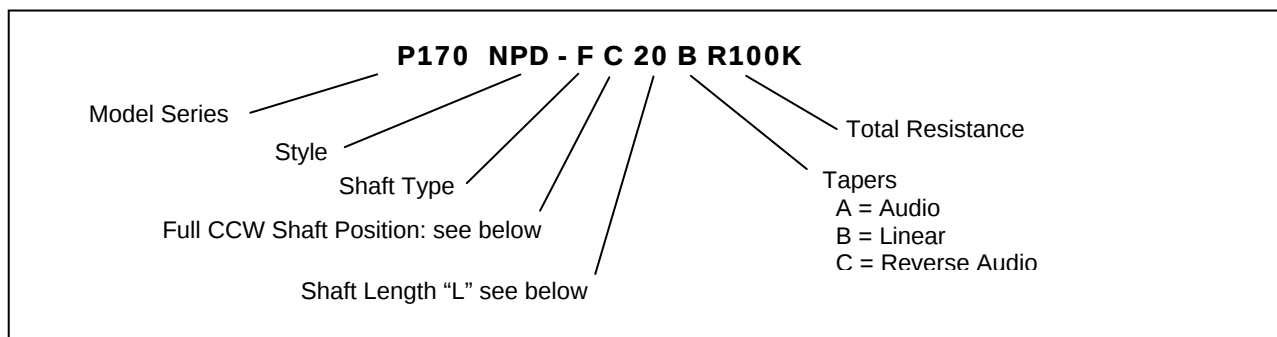
<sup>1</sup> Specifications subject to change without notice.

# Model P170

## ENVIRONMENTAL

|                                 |                |
|---------------------------------|----------------|
| Operating Temperature Range     | -20°C to +70°C |
| Rotational Life (Potentiometer) | 100,000 cycles |
| Rotational Life (Switch)        | 15,000 cycles  |

## ORDERING INFORMATION<sup>2</sup>

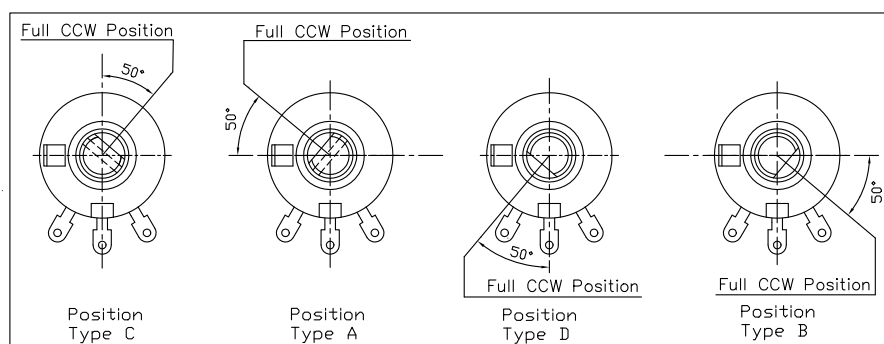


### Shaft Types

| E-TYPE |    |    |    |    |    |    |    |   |   | F-TYPE |    |    |    |    |    |    |    |    |    | Q-TYPE |    |    |    |    |    |    |    |    |  |
|--------|----|----|----|----|----|----|----|---|---|--------|----|----|----|----|----|----|----|----|----|--------|----|----|----|----|----|----|----|----|--|
|        |    |    |    |    |    |    |    |   |   |        |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |  |
| L      | 10 | 15 | 20 | 25 | 30 | 35 | 40 | T | 4 | L      | 10 | 11 | 12 | 15 | 20 | 25 | 30 | 35 | 40 | L      | 10 | 12 | 13 | 15 | 20 | 25 | 30 | 35 |  |
| L      | 10 | 15 | 20 | 25 | 30 | 35 | 40 | T | 4 | L      | 10 | 11 | 12 | 15 | 20 | 25 | 30 | 35 | 40 | 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

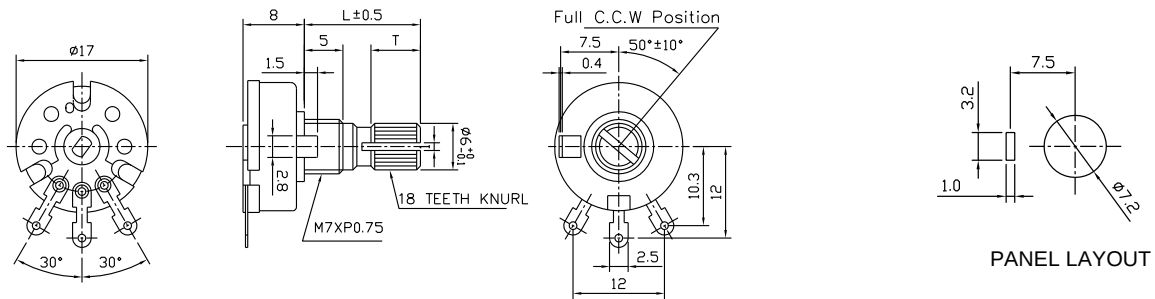
100 200 500 1K 2K 5K 10K 20K 50K 100K 200K 500K 1MEG

<sup>2</sup> Contact our customer service for custom designs and features.

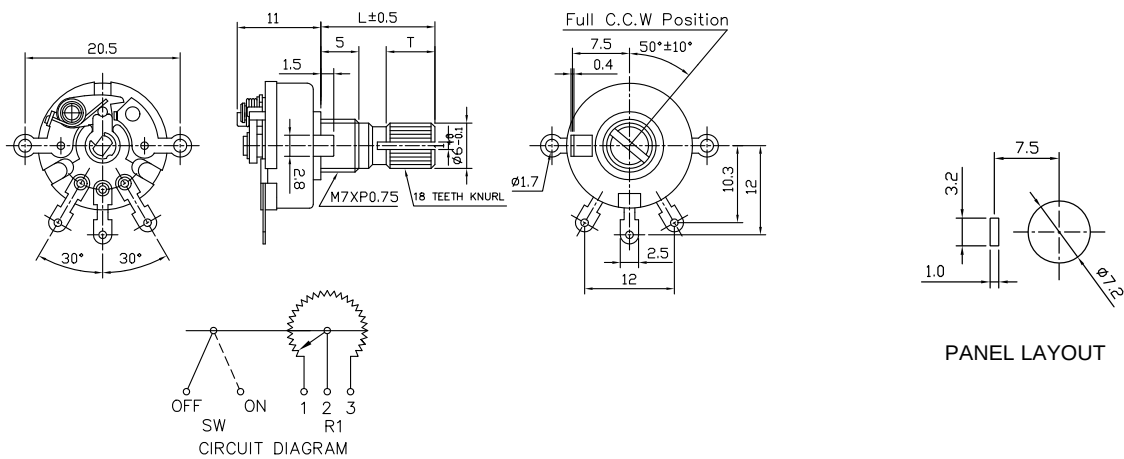
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## OUTLINE DRAWING

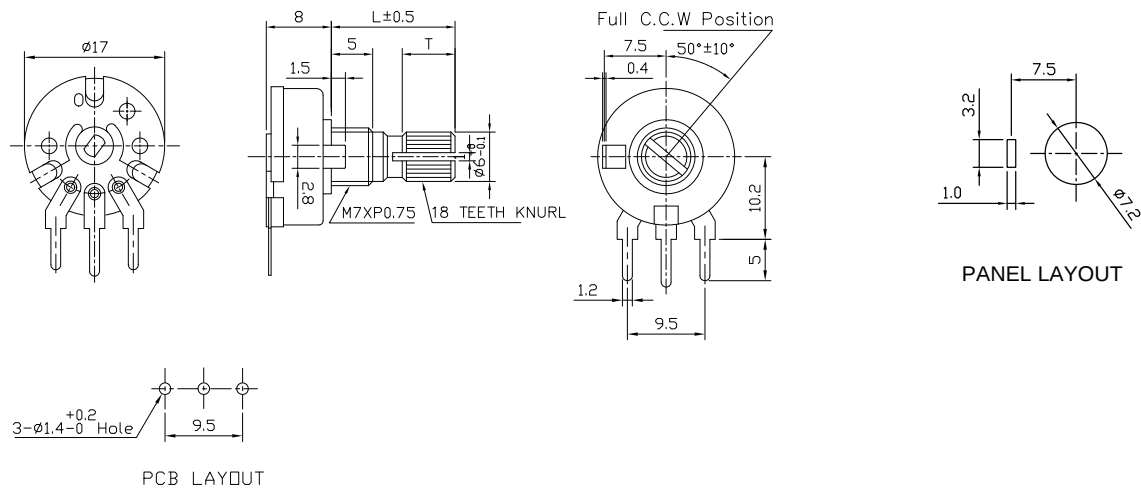
### MODEL P170N (Side Adjust, Solder Lugs)



### MODEL P170S (Side Adjust, Solder Lugs with Switch)

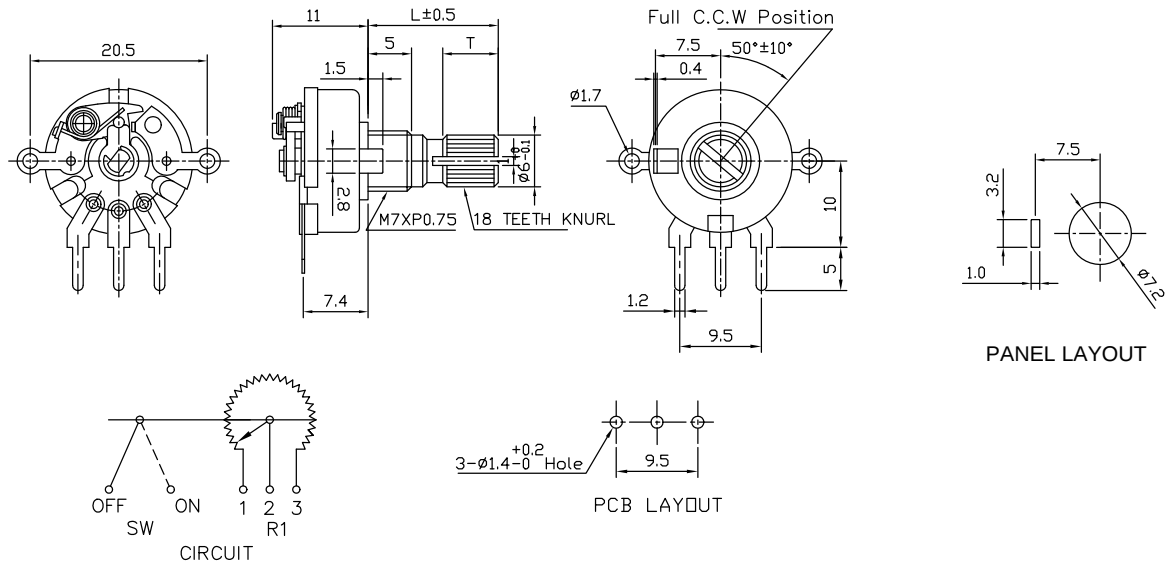


### MODEL P170N2 (Side Adjust, PCB Pins)

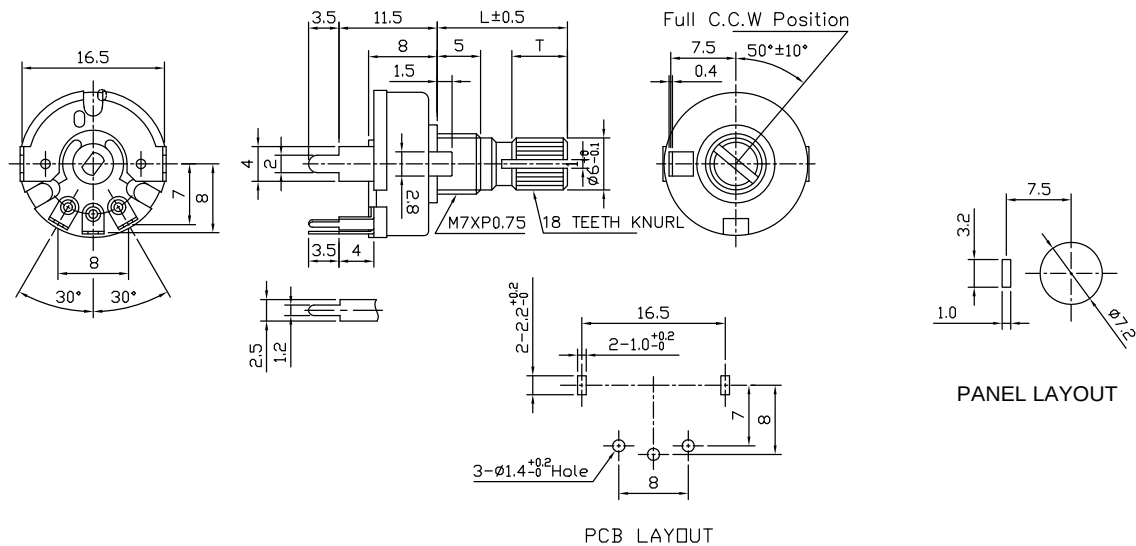


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## MODEL P170S2 (Side Adjust, PCB Pins with Switch)

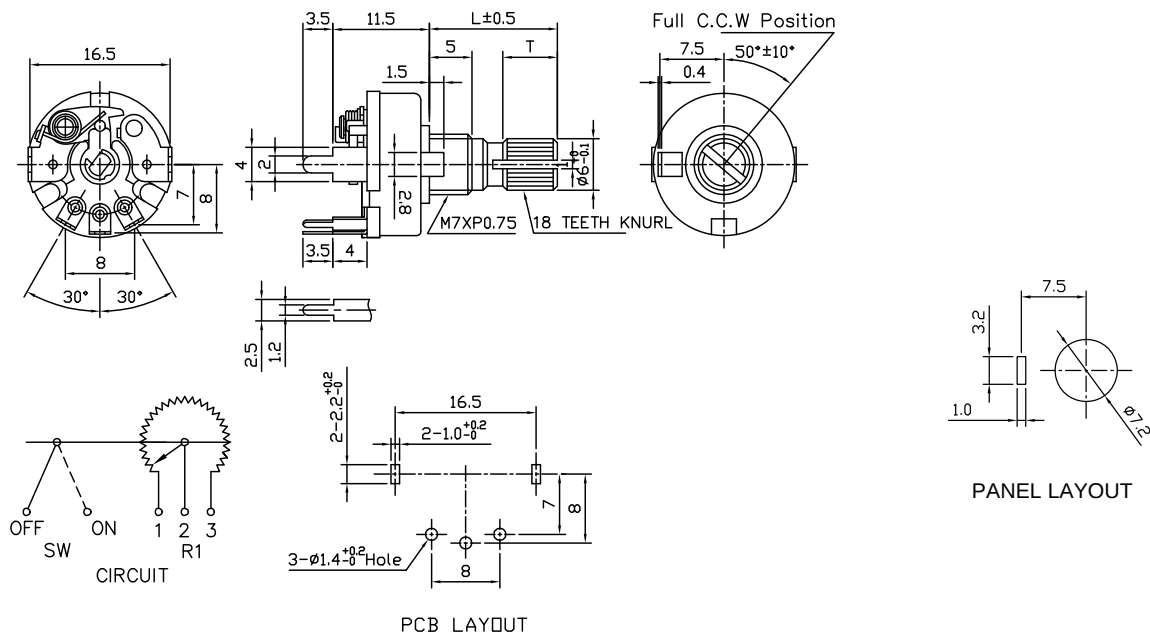


## MODEL P170NP1 (Top Adjust, PCB Pins)

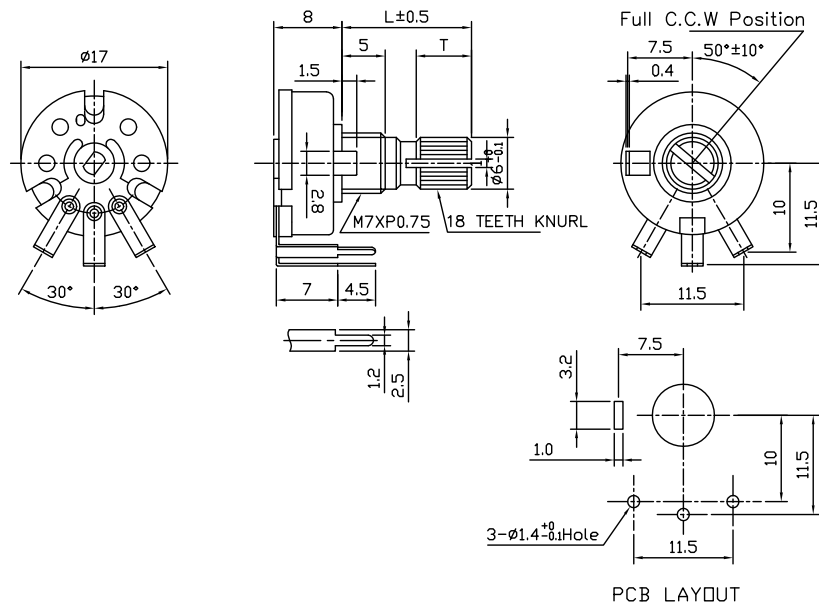


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## MODEL P170SP1 (Top Adjust, PCB Pins with Switch)

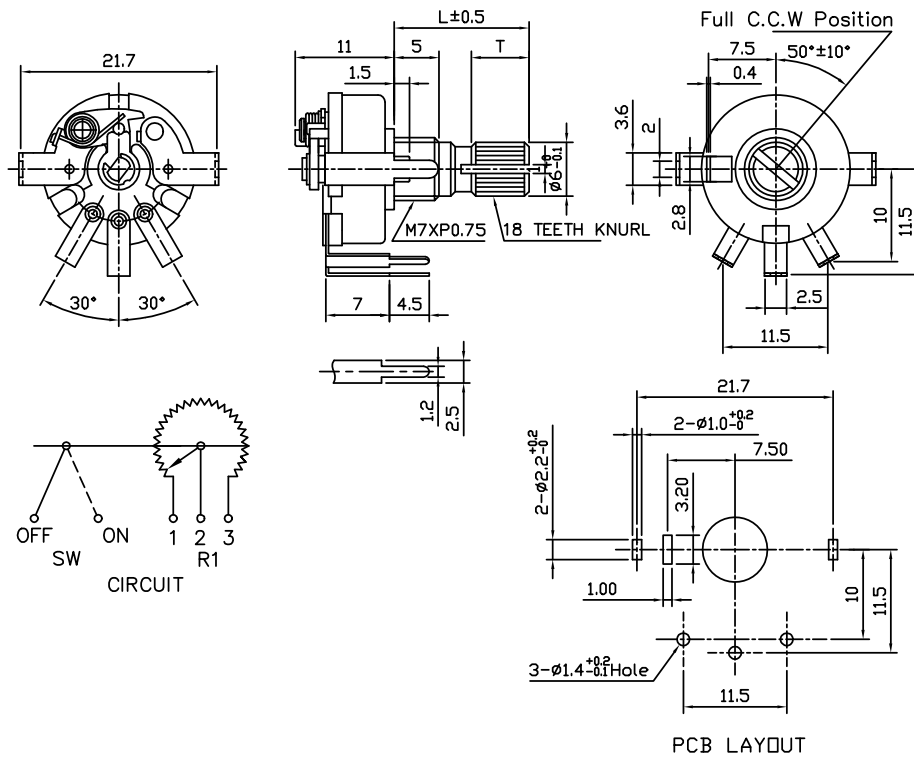


## MODEL P170NPD (Rear Adjust, PCB Pins)



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## MODEL P170SPD (Rear Adjust, PCB Pins with Switch)



## CIRCUIT DIAGRAM

