

# 9 mm Conductive Plastic Potentiometers

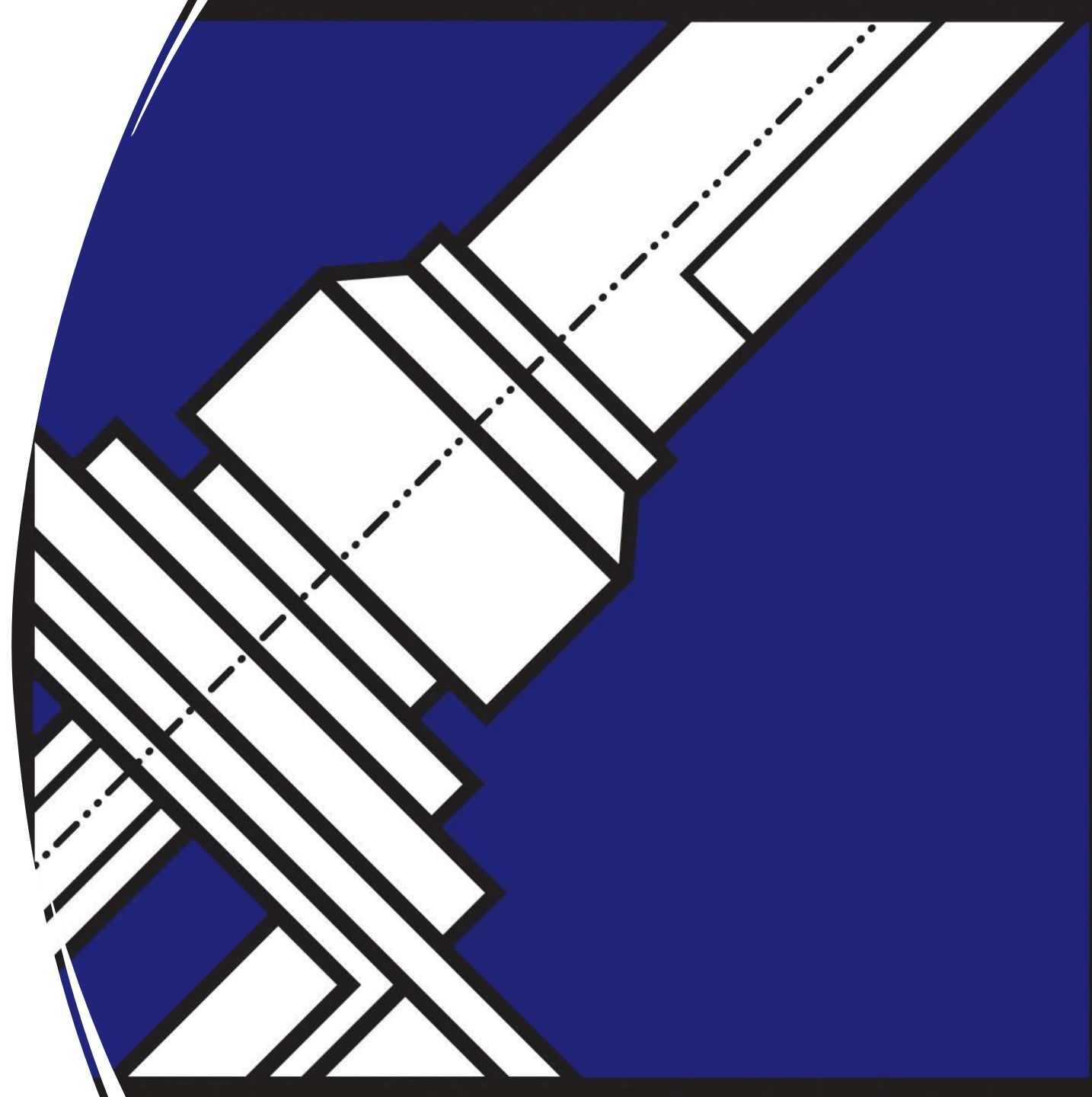
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Types of 9mm CP pots:

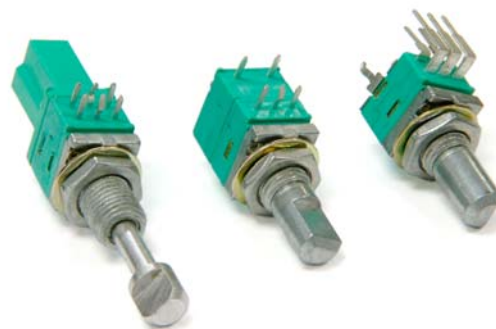
- Model P09X Rotary potentiometer
- Model P090 Rotary potentiometer

These will be further classified as :-

Top/side adjust, Multi-Ganged, Metal shaft/  
Bushing, Switch/Push Lock Option, Concentric  
Shaft Option, Centre Tap Option, Insulated Shaft,  
Snap-in Clip



Model P09x  
 9mm Rotary Potentiometer  
 Multi - Ganged  
 Conductive Plastic Element  
 100,000 Cycle Life  
 Metal shaft / Bushing  
 Switch / Push-Lock Option  
 RoHS Compliant  
 Concentric Shaft Option  
 Center Tap Option



#### MODEL STYLES

Side Adjust, PCB pins, up to 8 gangs	P09xN
Side Adjust, PCB pins, up to 8 gangs, with Switch	P09xS
Top Adjust, PCB pins, up to 2 gangs	P09x5N
Side Adjust, PCB pins, with Push-Lock, up to 2 gangs	P09xP
PCB pins, with Concentric Shaft	P09xC
PCB pins, with Center Tap	P09xT

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

Resistance Range, Ohms	1K-500K
Standard Resistance Tolerance	± 20%
Residual Resistance	20 ohms max.
Input Voltage, maximum	50 Vac max.
Power rating, Watts	Taper B: 0.05W Other Tapers: .025W
Dielectric Strength	300Vac, 1 minute
Insulation Resistance, Minimum	100M ohms at 250Vdc
Sliding Noise	100mV max.
Gang Error ( Multi-ganged )	-40dB – 0dB, ±3dB
Switch Contact Resistance	< 100 milliohms
Switch Power Rated	3.0A at 16Vdc

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

# Model P09x

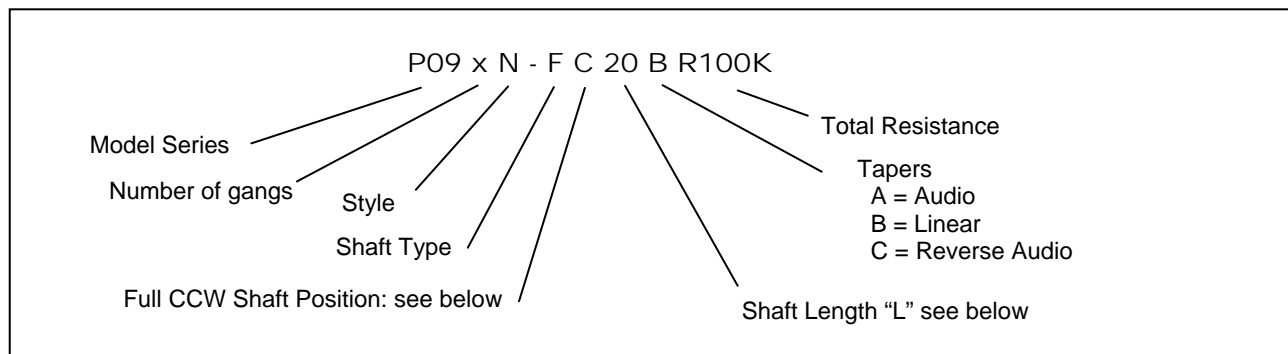
## MECHANICAL

Total Mechanical Travel	300°± 10°
Static Stop Strength	50 oz-in
Rotational Torque	0.5 to 1.25 oz-in
Switch Rotational Angle, Maximum	50°

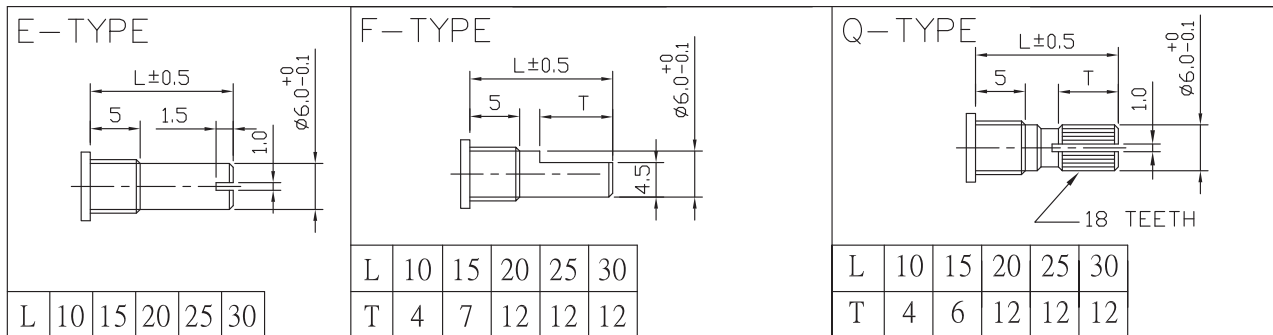
## ENVIRONMENTAL

Operating Temperature Range	-40°C to +85°C
Rotational Life	100,000 cycles

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



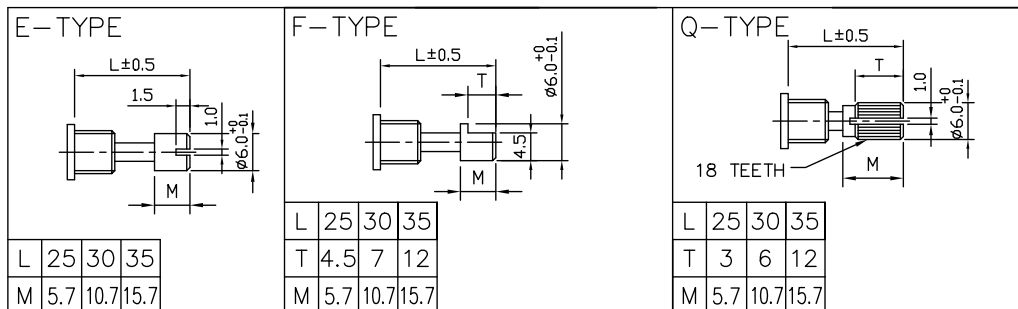
### Shaft Types (P09xN, P09xS, P09x5N)



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

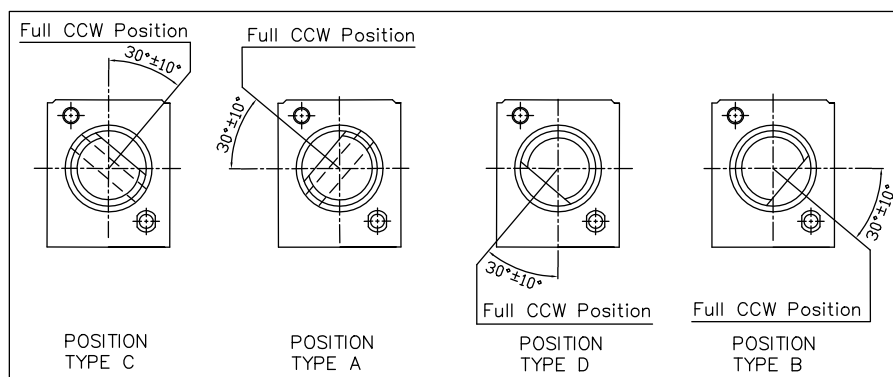
# Model P09x

## Shaft Types for Push-Lock ( P09xP)



## 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



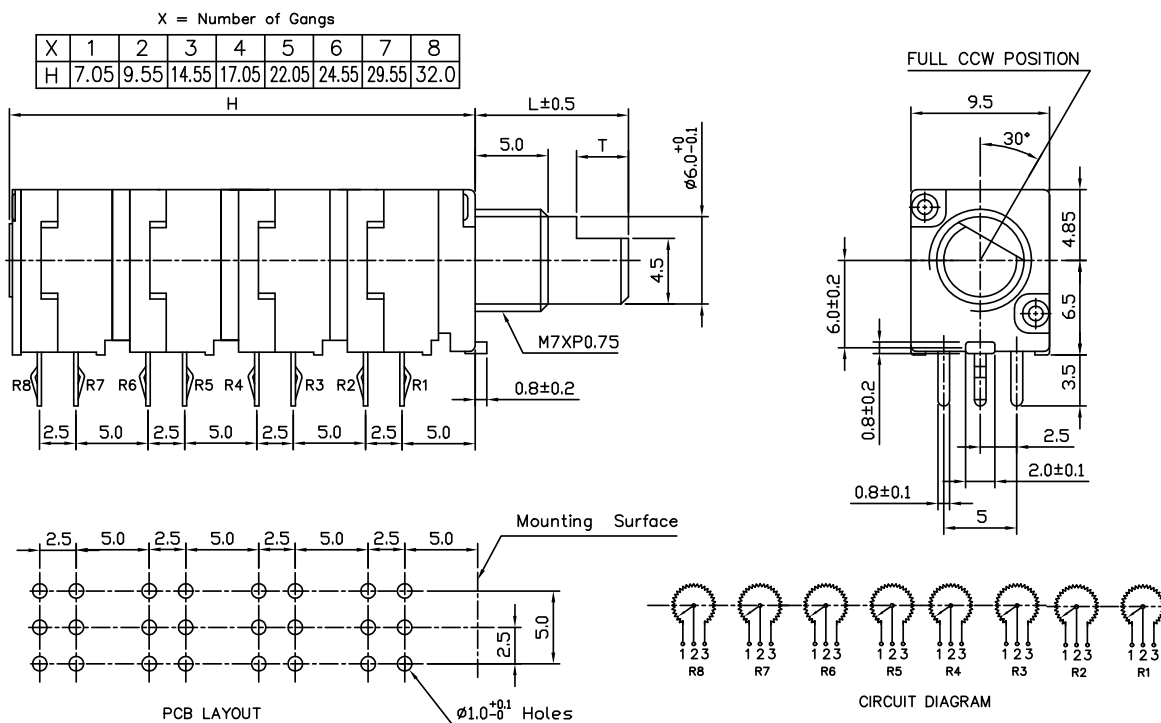
## STANDARD RESISTANCE VALUES, OHMS

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

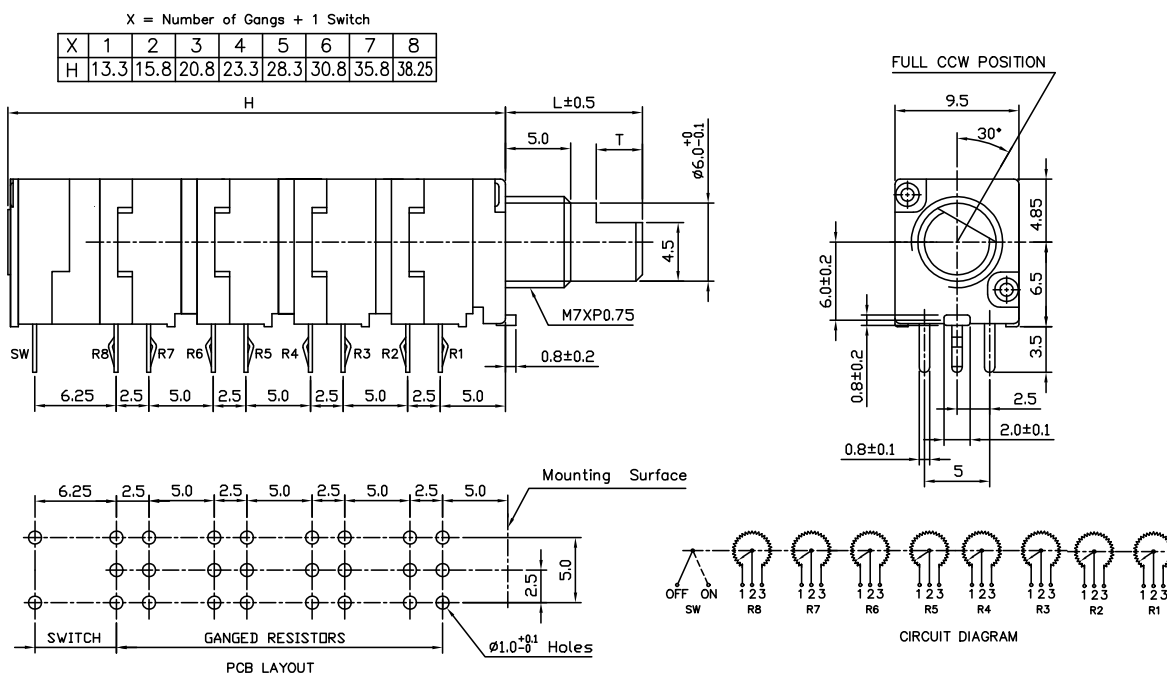
# Model P09x

## OUTLINE DRAWING

### Model P09xN (Side Adjust, PCB pins, up to 8 gangs)



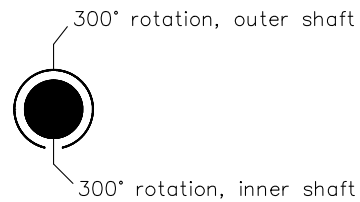
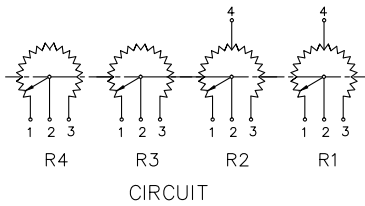
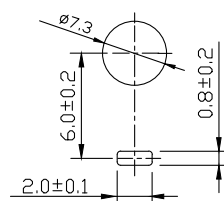
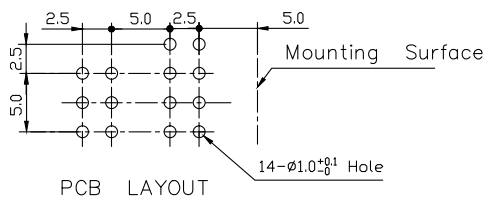
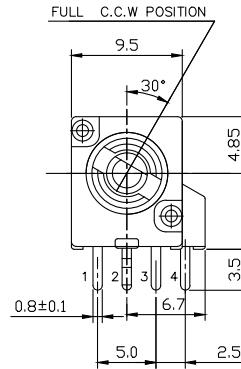
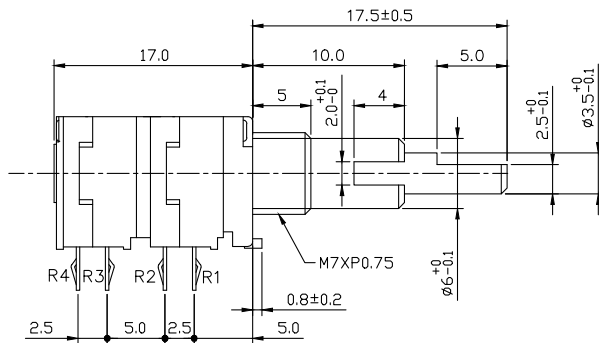
### Model P09xS (Side Adjust, PCB pins, up to 8 gangs, with Switch)





# Model P09x

**Model P09xC and P09xT (PCB pins with Concentric Shaft and Center Tap Options)**  
**This Diagram shows both options**  
**Please consult factory for details**



Model P090  
 9mm Rotary Potentiometer  
 Insulated Shaft  
 Conductive Plastic Element  
 100,000 Cycle Life  
 Snap-in Clip  
 RoHS Compliant



## MODEL STYLES

Side Adjust	P090L
Top Adjust	P090S

## ELECTRICAL<sup>1</sup>

Resistance Range, Ohms	500 – 1M
Standard Resistance Tolerance	± 20%
Residual Resistance	20 ohms max.
Input Voltage, maximum	50 Vac max.
Power rating, Watts	0.03W
Dielectric Strength	250Vac, 1 minute
Insulation Resistance, Minimum	100M ohms at 250Vdc
Sliding Noise	100mV max.
Actual Electrical Travel, Nominal	240°

## MECHANICAL

Total Mechanical Travel	280°± 10°
Static Stop Strength	40 oz-in
Rotational Torque	0.5 to 1.25 oz-in

## ENVIRONMENTAL

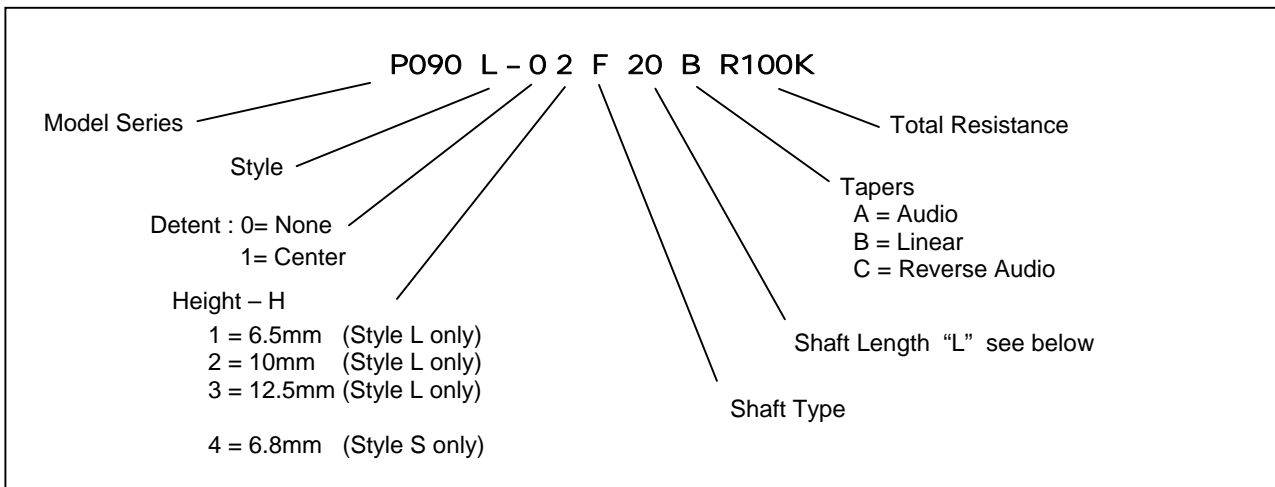
Operating Temperature Range	-20°C to +70°C
Rotational Life	100,000 cycles

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

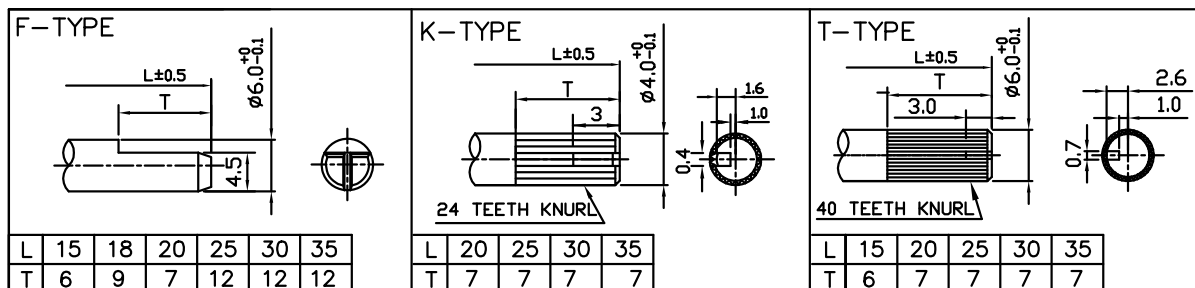


# Model P090

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



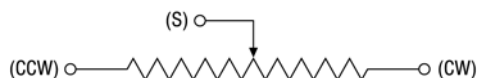
## Shaft Type



## STANDARD RESISTANCE VALUES, OHMS

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

## CIRCUIT DIAGRAM

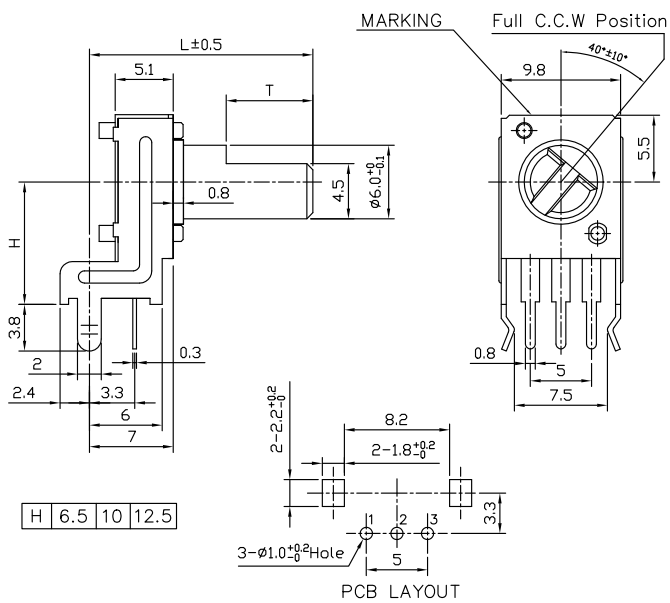


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# Model P090

## OUTLINE DRAWING

### Model P090L (Side Adjust)



### Model P090S (Top Adjust)

