

Features

- Single and dual section control
- Metal shaft styles
- Carbon element
- Center and multiple detent options
- Wide range of resistance tapers
- Plain or knurled shaft options

R16 Series - 17 mm Rotary Potentiometer

Electrical Characteristics

Taper..... Linear, audio
Standard Resistance Range
..... 1 K ohms to 1 M ohms
Standard Resistance Tolerance..... $\pm 20\%$
Residual Resistance..... 1 % max.

Environmental Characteristics

Operating Temperature ... -10 °C to +75 °C
Power Rating(70°C)..... 0.125 watt
Maximum Operating Voltage
..... 200V
Sliding Noise 68mV max.

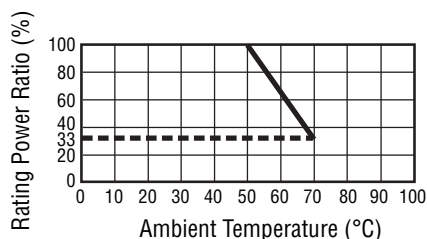
Mechanical Characteristics

Mechanical Angle 300 ° $\pm 5^\circ$
Rotational Torque 10 to 150 gf-cm
Detent Torque 20 to 200 gf-cm
Stop Strength 4 kgf-cm min.
Rotational Life 10,000 cycles
Soldering Condition
..... 260 °C max. within 3 seconds
Hardware One flat washer and
mounting nut supplied per
potentiometer with bushing

Materials

Shaft Zinc alloy
Bushing Zinc alloy
Driving plate..... POM(UL94-HB)
Reed..... Zinc cupronickel
Carbon plate..... FR4 Substrate
(UL94-HB)
Terminal..... Cold rolled strip and
Tin Plating
Hoop Cold rolled strip and
Zinc Plating

Derating Curve



General Tolerance

Dimension:

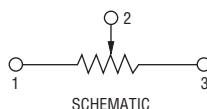
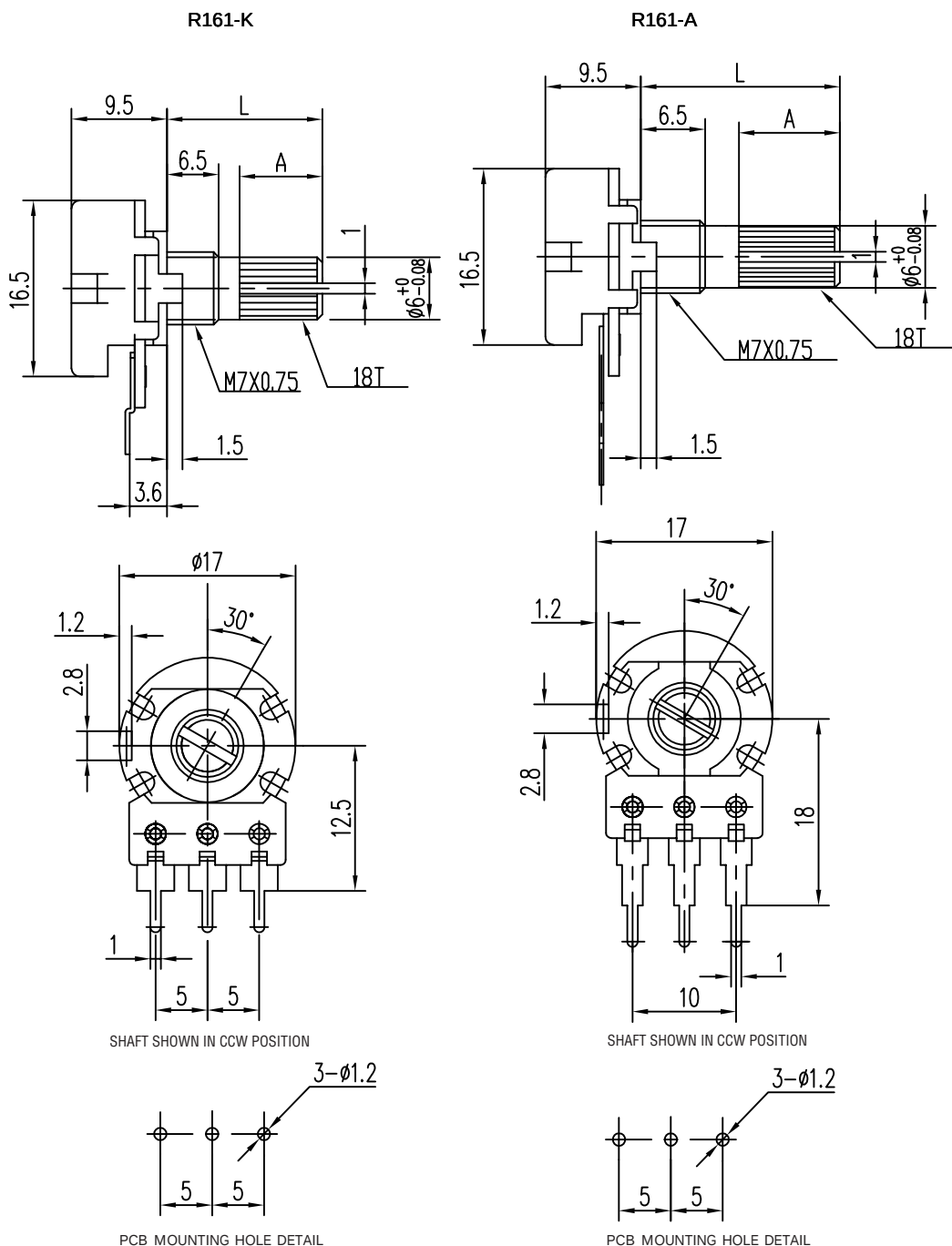
$$X < 10 \pm 0.3\text{mm}$$

$$10 \leq X < 30 \pm 0.5\text{mm}$$

$$30 \leq X \leq 100 \pm 1\text{mm}$$

$$\text{Angle: } \pm 5^\circ$$

Product Dimensions



Additional Features

- Linear, audio and reverse audio taper options
- RoHS compliant*

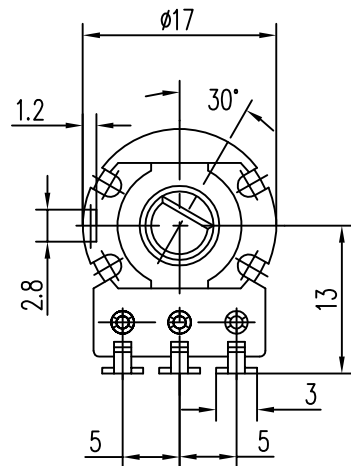
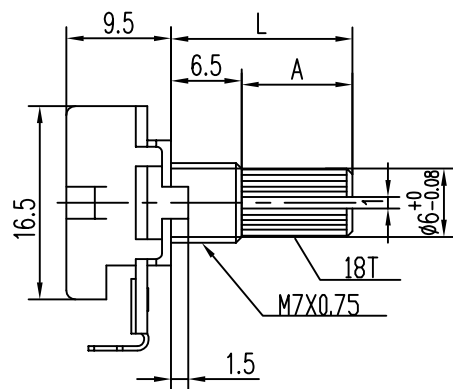
Applications

- Audio/TV sets
- Amplifiers/mixers/drum machines/synthesizers
- PCs/monitors
- Appliances

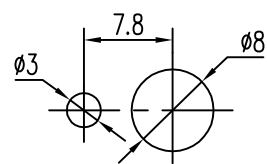
R16 Series - 17 mm Rotary Potentiometer

Product Dimensions

R161-E

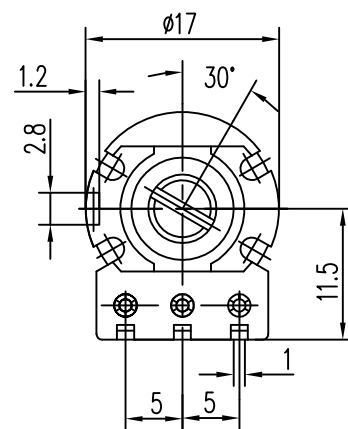
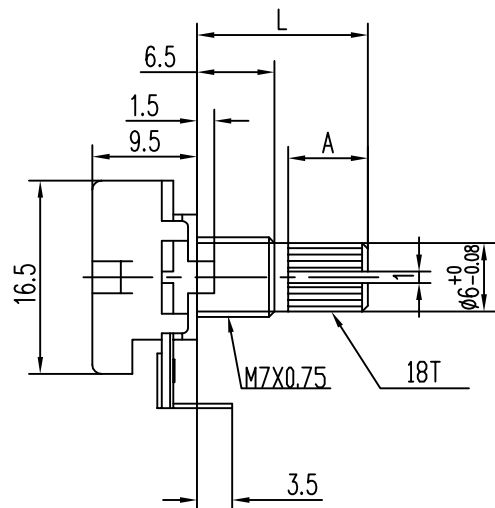


SHAFT SHOWN IN CCW POSITION

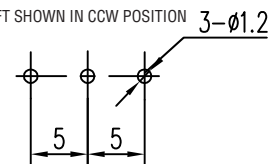


PCB MOUNTING HOLE DETAIL

R161-D

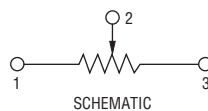


SHAFT SHOWN IN CCW POSITION



PCB MOUNTING HOLE DETAIL

DIMENSIONS:MM

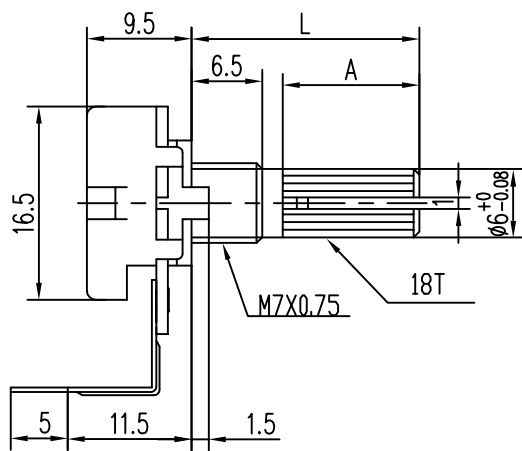


SCHEMATIC

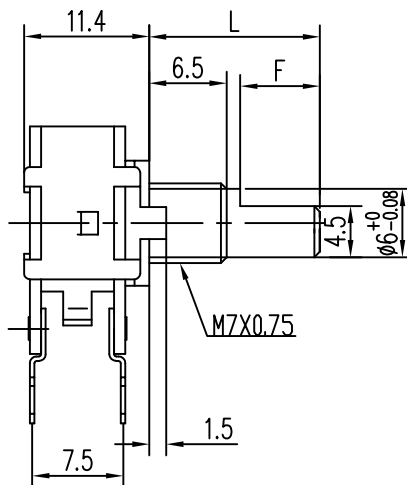
R16 Series - 17 mm Rotary Potentiometer

Product Dimensions

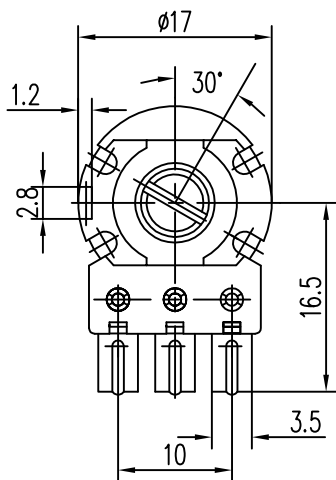
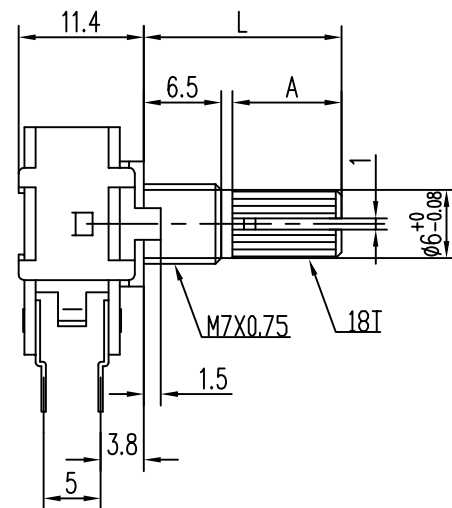
R161-P



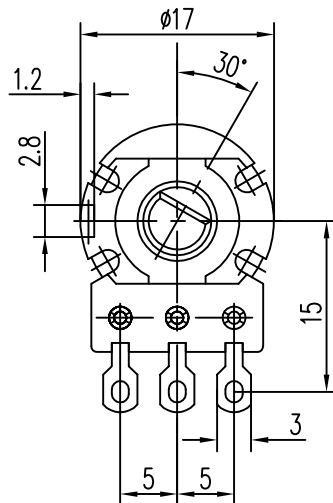
R162-B
Dual Gang



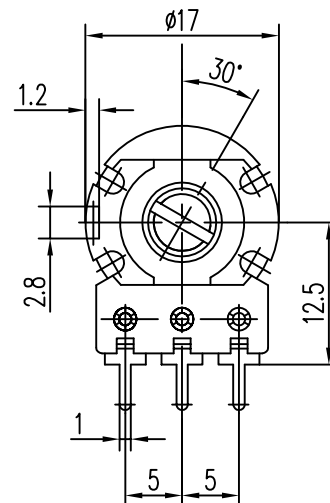
R162-K
Dual Gang



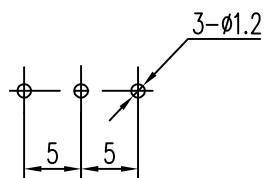
SHAFT SHOWN IN CCW POSITION



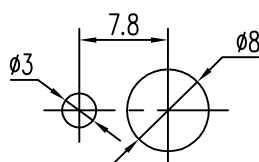
SHAFT SHOWN IN CCW POSITION



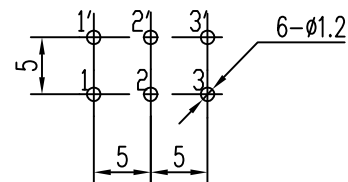
SHAFT SHOWN IN CCW POSITION



PCB MOUNTING HOLE DETAIL

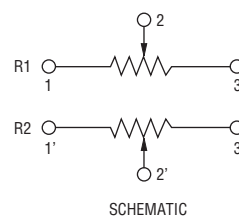


PCB MOUNTING HOLE DETAIL



PCB MOUNTING HOLE DETAIL

DIMENSIONS:MM

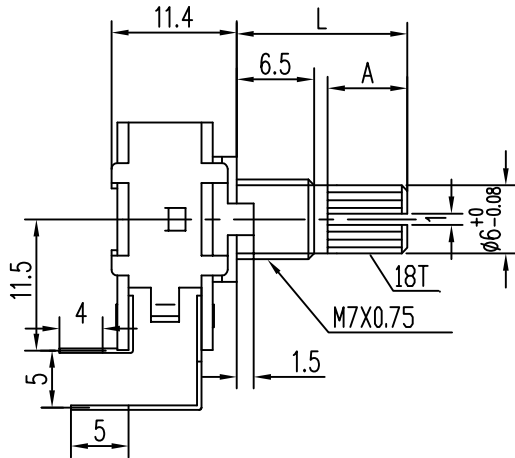


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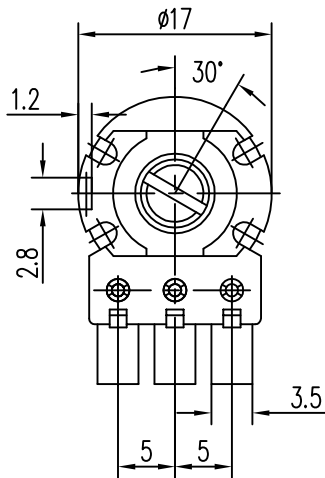
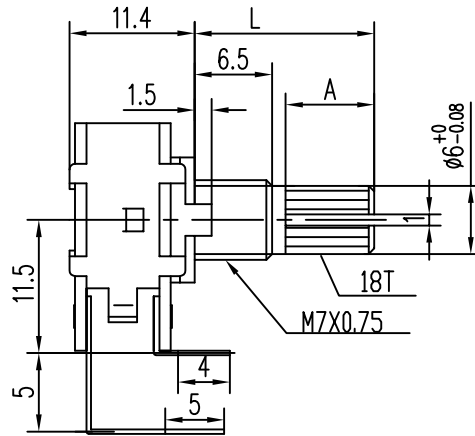
R16 Series - 17 mm Rotary Potentiometer

Product Dimensions

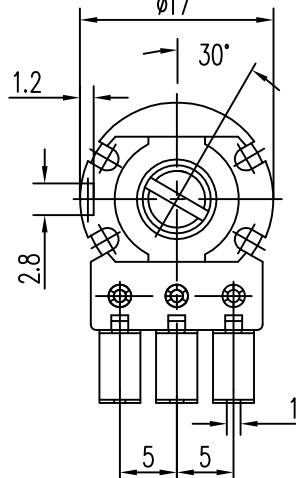
R162-P
Dual Gang



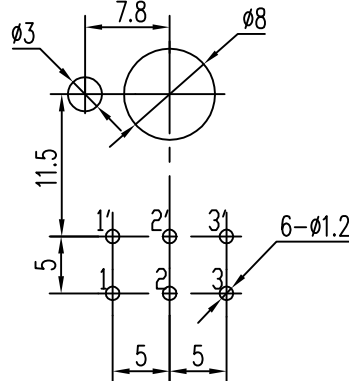
R162-D
Dual Gang



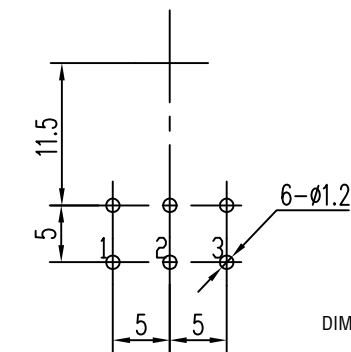
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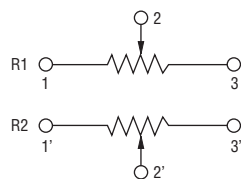
SHAFT SHOWN IN CCW POSITION



PCB MOUNTING HOLE DETAIL



PCB MOUNTING HOLE DETAIL



SCHEMATIC

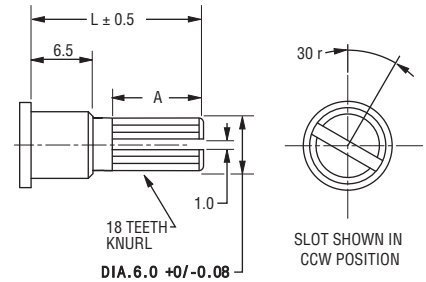
DIMENSIONS: MM

Shaft Styles

K1 Type (Metal Knurled Shaft):
Only for 15mm, 17mm, 20mm, 25mm

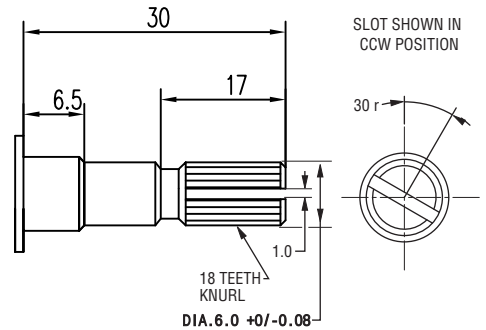
K2 Type (Plastic Knurled Shaft):
Only for 15mm, 20mm, 25mm, 30mm

L	15	17	20	25	30
A	6.5	8.5	11.5	17	17



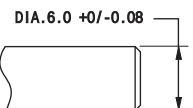
K1 Type (Metal Knurled Shaft)

L	30
A	17



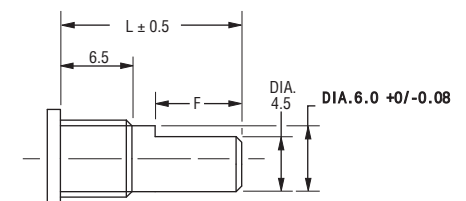
P Type

L	20	25	30
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F Type

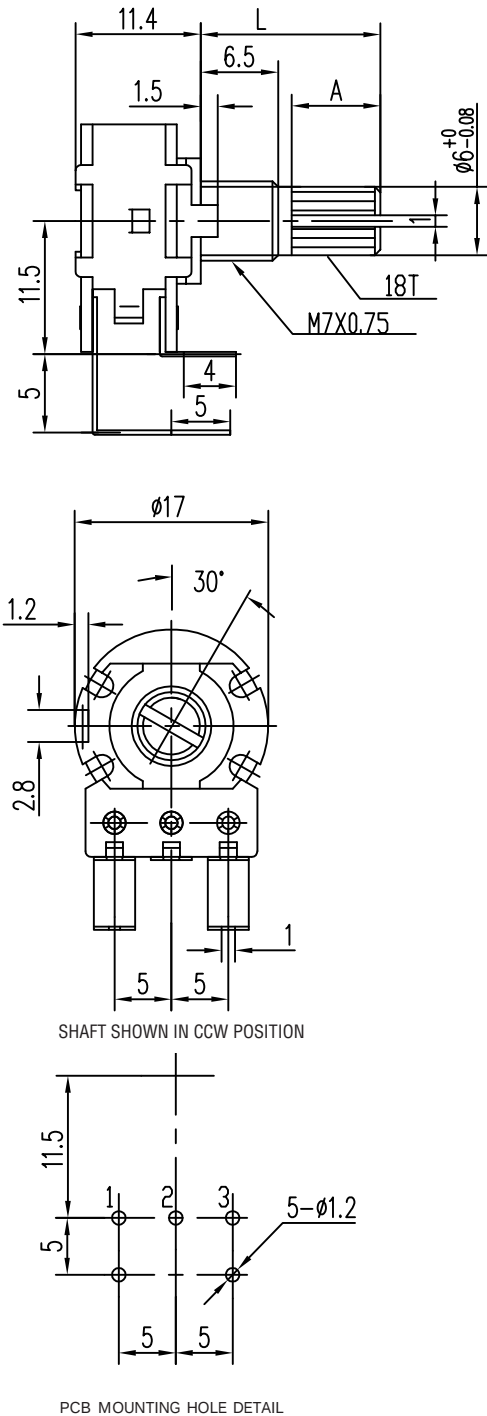
L	15	20	25	30	35
F	7	12	12	12	12



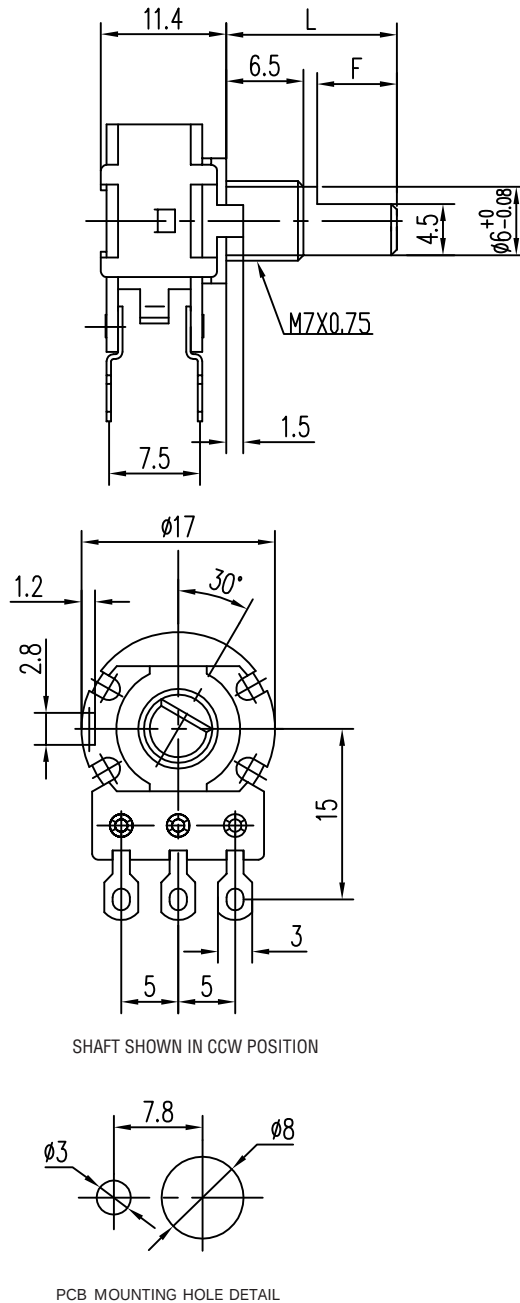
R16 Series - 17 mm Rotary Potentiometer

Product Dimensions

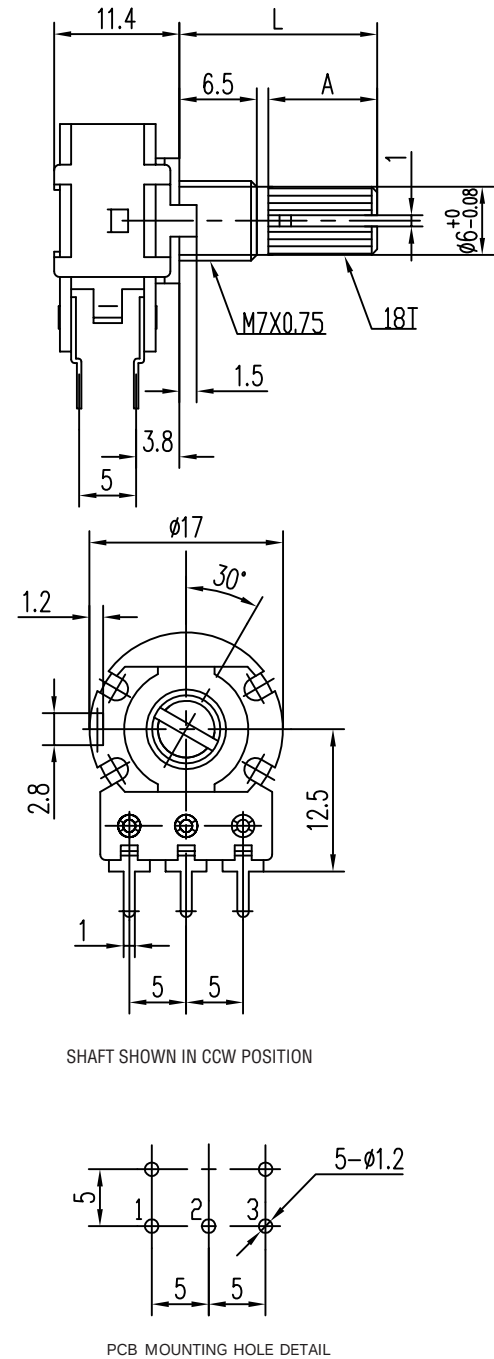
R163-D



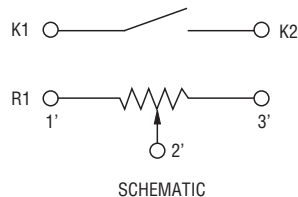
R163-B



R163-K

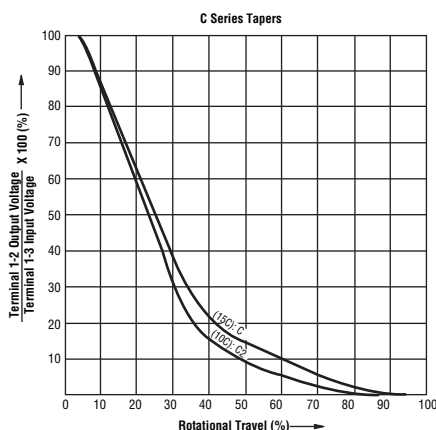
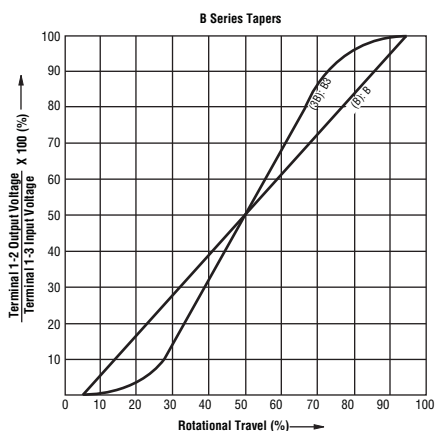
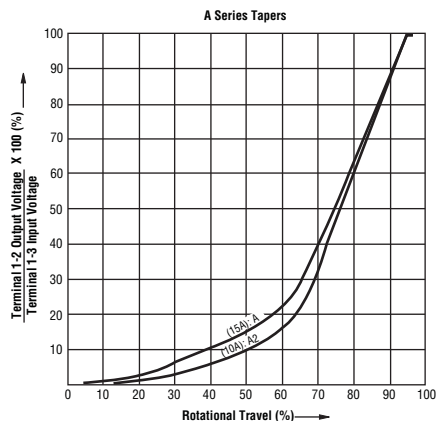


DIMENSIONS: MM



R16 Series - 17 mm Rotary Potentiometer

Tapers



How To Order

R16 1 - K 4 25 F- 103 A1

Model _____

Number of Sections _____

- 1 = Single Section
- 2 = Dual Section
- 3 = With switch

Terminal Configuration (Pin Layout) _____
(see individual drawings)

- K = PC Pins vertical/Down Facing (12.5 mm)
- A = PC Pins vertical/Down Facing (18.0 mm)
- B = Solder Lugs
PC Pins vertical
Down Facing (15.0 mm)
- E = Solder Lugs
Rear Facing
- P = PC Pins
Rear Facing
- D = PC Pins
Front Facing

Detent Option _____

- 2 = Center Detent
- 4 = No Detents
- 5 = 40 Detent / 41 Position

Standard Shaft Length _____

- 15 = 15 mm
- 17 = 17 mm
- 20 = 20 mm
- 25 = 25 mm
- 30 = 30 mm
- 35 = 35 mm (Only for "F" shaft)

Shaft Style _____

- F = Metal Flatted Shaft
- K1 = Metal Knurled Type Shaft
18 Toothed Serration Type
- K2 = Plastic Knurled Type Shaft
18 Toothed Serration Type
- P = Metal Plain Shaft
(*17mm shaft length N/A)

Resistance Code (See Table) _____

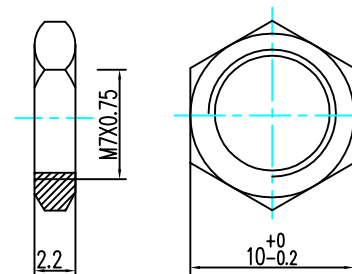
Resistance Taper (See Taper Charts) _____
Taper Series followed by Curve Number

Standard Resistance Table

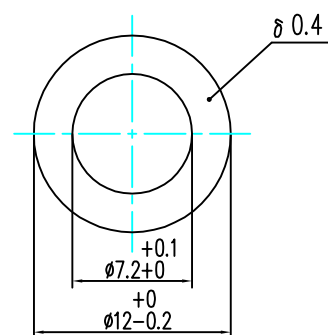
Resistance (Ohms)	Resistance Code
1,000	102
2,000	202
5,000	502
10,000	103
20,000	203
50,000	503
100,000	104
200,000	204
500,000	504
1,000,000	105

Hardware Dimensions

NUT (M7*0.75)



WASHER (M7)



Typical Weight

Model	Net Weight (appr.)
R161	7g ± 2g /pc
R162	8g ± 2g /pc
R163	8g ± 2g /pc

Note:

The net weight of product varies from different shaft materials(metal/plastic), shaft lengths and terminal types.