



Features

- Long life carbon element
- PC terminals
- 100 mm travel lengths
- Touch sense track
- RoHs compliant

SM100 Series Motorized Slide Potentiometer

Electrical Characteristics

Standard Resistance Range
..... 1K Ω to 500 K Ω

Standard Resistance Tolerance... $\pm 20\%$

Insulation Resistance @ 250 VDC
..... 100 M Ω min.

Dielectric Withstanding Voltage
..... 250 VAC

Standard Taper Linear

Power Rating 0.5 watt

Slider Noise 68 mV max.

Conductive Resistance 1 K Ω max.

Environmental Characteristics

Operational Life 30,000 cycles

TR Shift $\pm 15\%$

Operating Temperature Range
..... -10 $^{\circ}\text{C}$ to +60 $^{\circ}\text{C}$

Resistance to Solder Heat..... $\pm 5\%$

Mechanical Characteristics

Mechanical Trave..... 100 mm

Operating Force..... 10-80 gf

Stop Strength 5 kgf min.

Shaft Wobble..... 1.6 mm max.

Soldering Condition

Manual 350 $^{\circ}\text{C}$ $\pm 5^{\circ}\text{C}$ for 3 sec.

Wave 260 $^{\circ}\text{C}$ $\pm 5^{\circ}\text{C}$ for 5 sec.

Motor Drive Characteristics

Rated Voltage 10 VDC

Operating Voltage Supply .. 6 to 11 VDC

Starting Current..... 800 mA max.

Lever Speed @ 10 VDC
..... 20 mm/0.1 sec.

How To Order

SM100 A N - B 10K - L93 T1

Model _____

Motor Type _____
(See the drawing)

- A
- B
- C

Resistance Taper _____
B = Linear

Resistance Code _____
(See Standard Resistance Table)

Lever Length _____
93 = 9.3mm
82 = 8.2mm

Lever Shape _____

Standard Resistance Table

Resistance (Ohms)	Resistance Code
1,000	1 K
2,000	2 K
5,000	5 K
10,000	10 K
20,000	20 K
50,000	50 K
100,000	100 K
200,000	200 K
500,000	500 K

General Tolerance

Dimension:

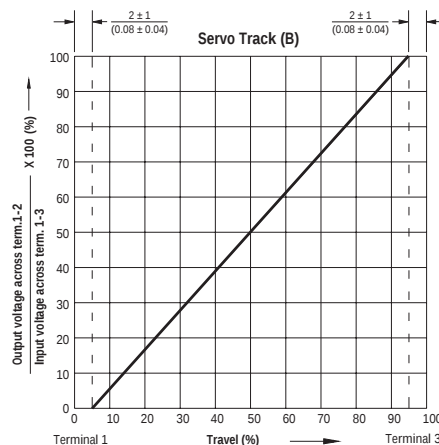
$X < 10 \pm 0.3\text{mm}$

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

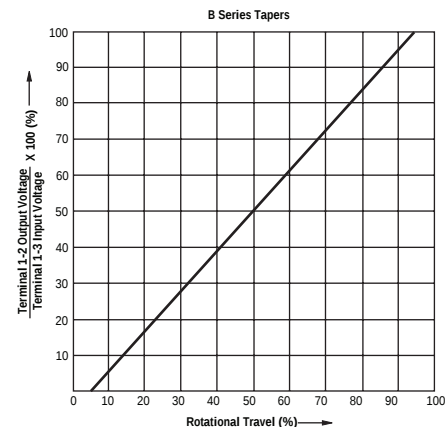
$30 \leq X \leq 100 \pm 1\text{mm}$

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

Servo Track Output Chart



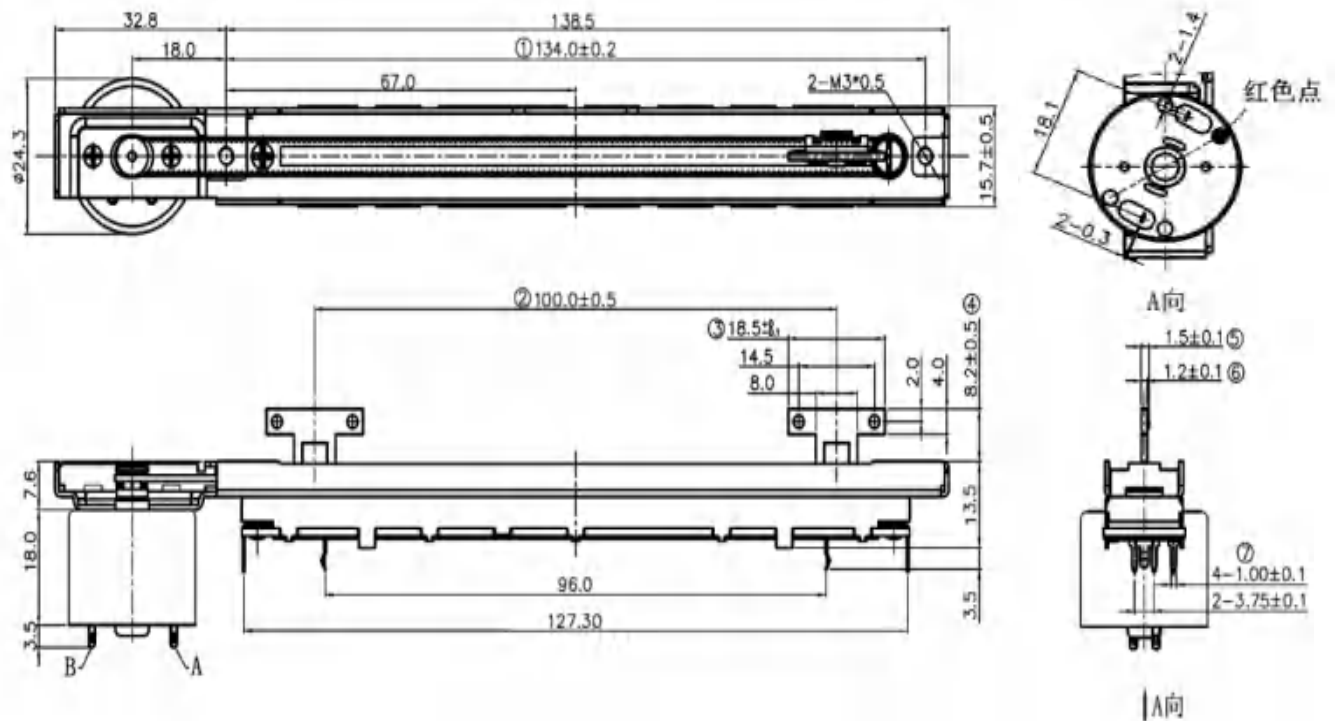
Tapers



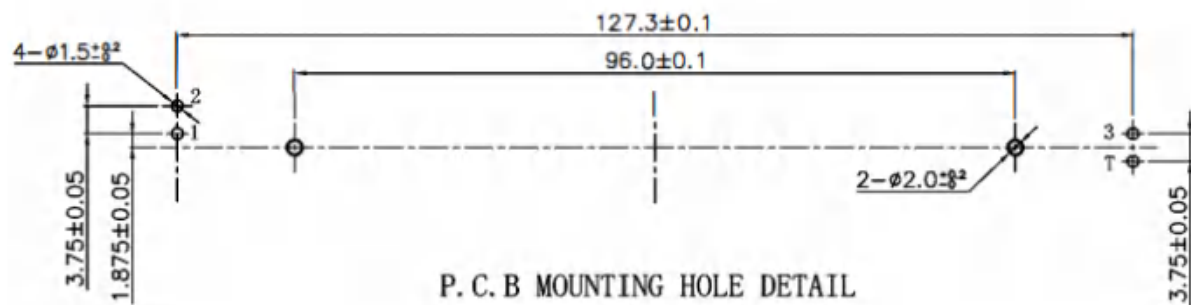
SM100 Series Motorized Slide Potentiometer

Product Dimensions

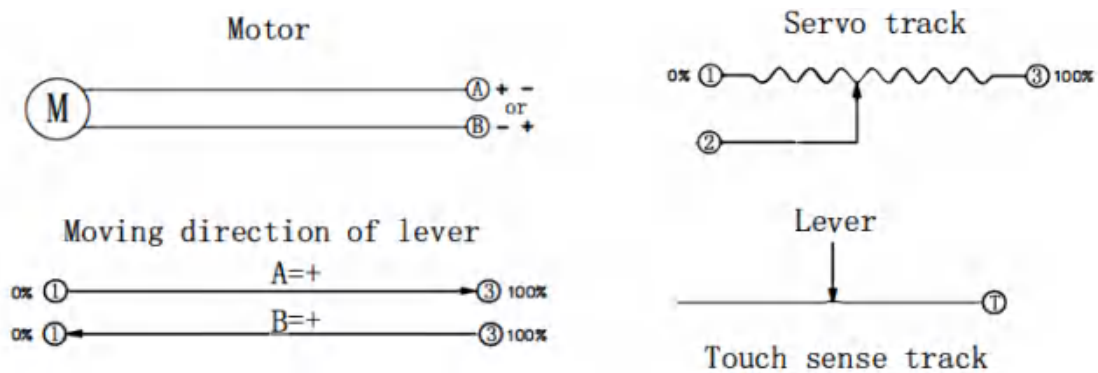
SM100AN



Mounting Hole Detail



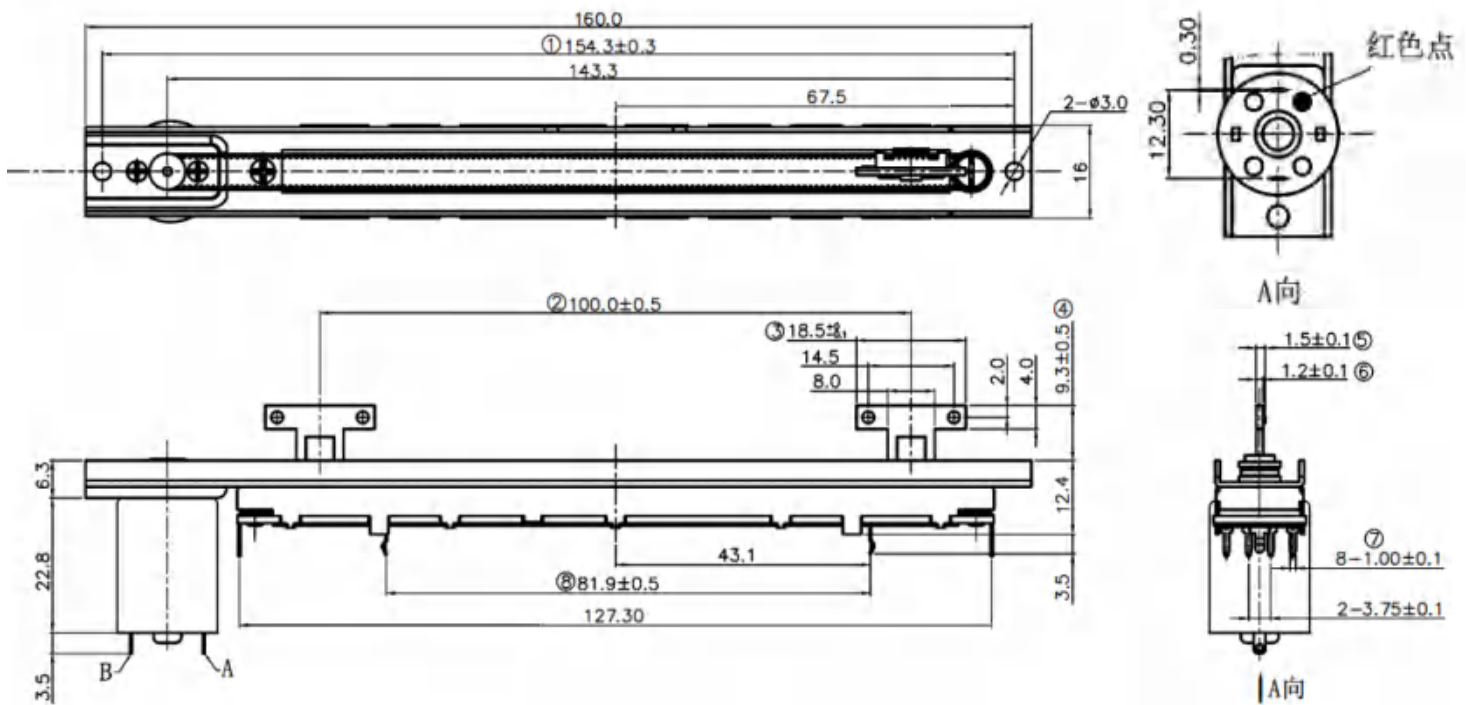
Schematics



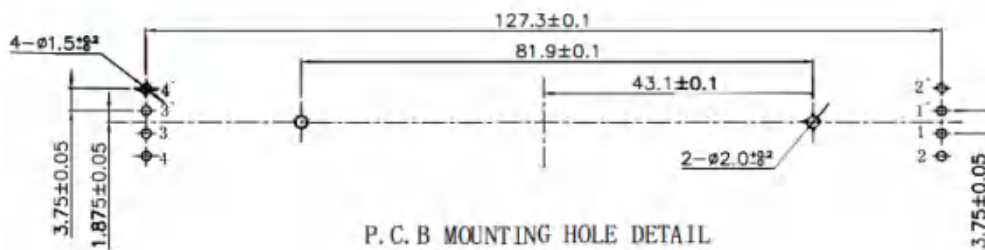
SM100 Series Motorized Slide Potentiometer

Product Dimensions

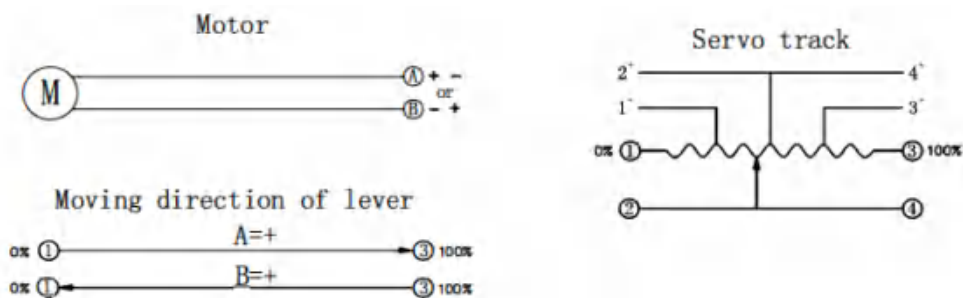
SM100BN



Mounting Hole Detail



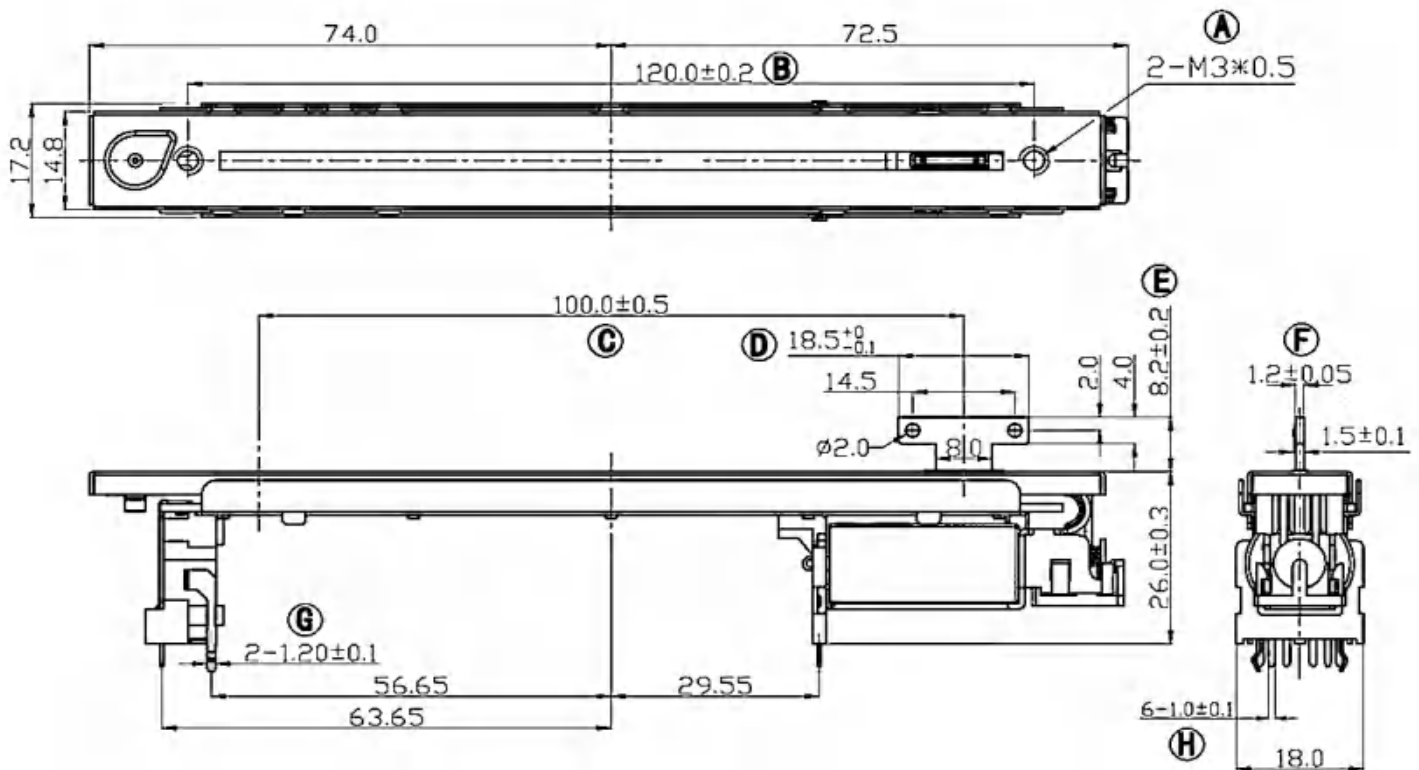
Schematics



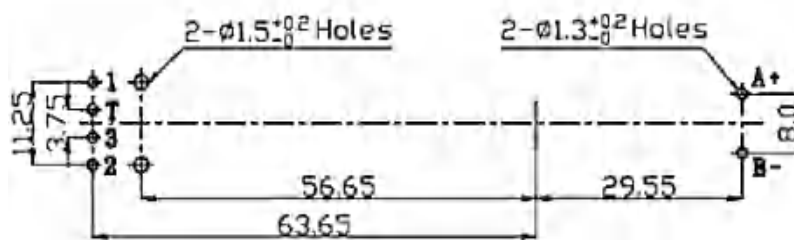
SM100 Series Motorized Slide Potentiometer

Product Dimensions

SM100CN

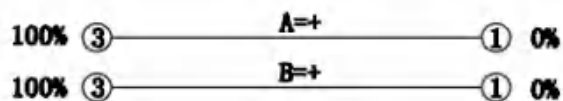
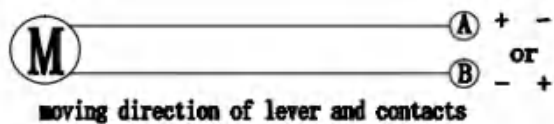


Mounting Hole Detail

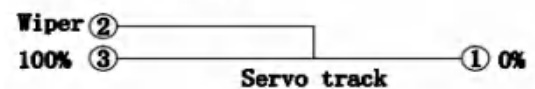


Schematics

Motor



Servo track



Touch sense track

