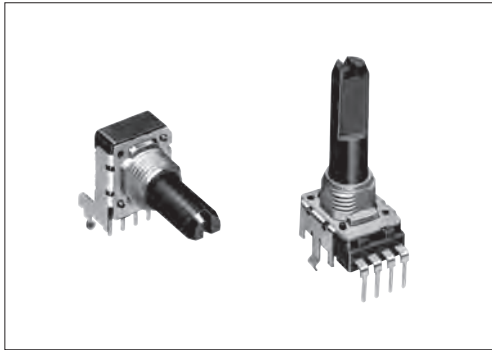


# RK11K

## 1 1 mm Size Insulated Shaft Snap-in Type

A 1 1 mm wide potentiometer for audio, visual, electronic musical instruments and various applications



### Typical Specifications

Items	Specifications
Total resistance tolerance	±20%
Maximum operating voltage	50V AC, 20V DC
Total rotational angle	300° ±5°
Rotational torque	3 to 20mN·m
Operating life	15,000 cycles
Operating temperature range	-10°C to +70°C

### Product Line

Number of resistor elements	Control part orientation	Shaft type	Length of the shaft LM <sub>1</sub> (mm)	Center detent	Total resistance (kΩ)	Resistance taper	Minimum order unit (pcs.)		Products No.	Drawing No.
							Japan	Export		
Single-unit (20V DC)	Vertical	Flat	22.5	Without	10	15A	1,000	2,000	RK11K1140AHZ	1
				With		1B			RK11K1140097	
	Horizontal			Without		15A			RK11K1120A13	2
				With		1B			RK11K112000P	

### Notes

- Other varieties are also available. Refer to "Other Specifications" (P.320).
- Nut and washer are not attached. Please specify if required.

### Packing Specifications

Tray

Number of packages (pcs.)		Export package measurements (mm)
1 case / Japan	1 case / export packing	
1,000	2,000	543×377×250

### Dimensions

No.	Photo	Style	PC board mounting hole dimensions (Viewed from mounting side)
1	<p><b>Vertical RK11K114</b></p>		
2	<p><b>Horizontal RK11K112</b></p>		

Refer to P.320 for other specifications.  
 Refer to P.321 for ordering products not listed.  
 Refer to P.331 for soldering conditions.

# 11 mm Size Insulated Shaft Snap-in Type / Other Specifications

In addition to the Product Line, we accommodate the following specifications. Combinations not included in the Product Line are treated as semi-standard products.

## Total Resistance Variety

Total resistance (k Ω)	5	10	20	50	100	200
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## Resistance Taper

Resistance taper	15A	1B	3B	15C
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## Tapped Types are Also Available

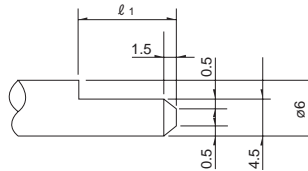
RK11K (single-unit) is also available with tap.

## Shaft Variety

Unit:mm

Style	Horizontal type		Vertical type				
	LM <sub>1</sub>	L <sub>1</sub>	LM <sub>1</sub>	L <sub>1</sub>	LM <sub>1</sub>	L <sub>1</sub>	
Shaft variety	LM <sub>1</sub>	20	22.5	25	27.5	30	32.5
	L <sub>1</sub>	12.5	15	17.5	20	22.5	25
	ℓ <sub>1</sub>	7	7	12	12	12	12
	L <sub>B</sub>	5	5	5	5	5	5

Detail dimensions



## Terminal Layout / Circuit Diagram

Without tap	With tap

### Note

Marked are specifications recommended by Alps Alpine.

Refer to P.321 for ordering products not listed.

# 11 mm Size Insulated Shaft Snap-in Type / Ordering Products Not Listed

In addition to the Product Line, we accommodate the following specifications. Combinations not included in the Product Line are treated as semi-standard products. Please refer to the notation example below.

## Sample Part Number

**R K 1 1 K 1 1 4 0** - **F 2 2** - **C 0** - **B 1 0 3**

Model type

Code	Model type
2	Horizontal
4	Vertical

Shaft type

Code	Shaft type
F	Flat

\*Only available in flat format.

Length of the shaft LM<sub>1</sub> (mm)

Code	Length of the shaft	Code	Length of the shaft
20	20	25	25
22	22.5	30	30
27	27.5	32	32.5

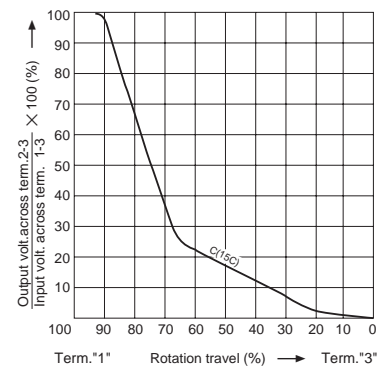
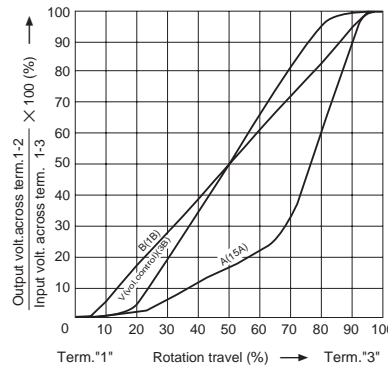
Detent

Code	Center detent
C0	Without
C1	With

Resistance taper

Code	Resistance taper	Code	Resistance taper
A	15A	C	15C
B	1B	V	3B

B : For tone & general  
V : For vol.



Total resistance

Code	Total resistance (k Ω)	Code	Total resistance (k Ω)
502	5	503	50
103	10	104	100
203	20	204	200











## Note

Marked are specifications recommended by Alps Alpine.

- Rotary Potentiometers
- Slide Potentiometers
- Metal Shaft
- Insulated Shaft
- Knob Operating
- Through Shaft type
- Ring Type

# Insulated Shaft Potentiometers

## List of Varieties

Type	9mm size		11mm size	12mm size	14mm size	
Series	<b>RK09K11</b> <b>RK09D11</b>	<b>RK09Y11L</b>	<b>RK11K</b>	<b>RK12L12</b>	<b>RK14K</b>	
	Single-unit	Single-unit	Single-unit	Dual-unit	Dual-unit	
Photo						
Control part orientation	Vertical / Horizontal		Horizontal	Vertical / Horizontal		
Bushing	Without		With	Without	With	
Operating temperature range	-10°C to +70°C					
Operating life	5,000 cycles	1,000,000 cycles	15,000 cycles			
Available for automotive use	—	—	—	—	—	
Life cycle						
Electrical performance	Total resistance (k Ω)	5, 10, 20, 50, 100, 200	10	5, 10, 20, 50, 100, 200		
	Resistance taper	15A, 1B, 3B, 15C	B	15A, 1B, 3B, 15C		
	Total resistance tolerance	±20%	±30%	±20%		
	Rated power	0.05W	0.01W	0.05W		
	Maximum operating voltage	50V AC 20V DC	50V AC 5V DC	50V AC 20V DC	50V AC for AC only	
	Gang error	—	—	—	For volume control -40dB to 0dB 3dB max. For tone control within 2dB max. at center	
	Insulation resistance	100MΩ min. 250V DC		100MΩ min. 500V DC	100MΩ min. 250V DC	
	Voltage proof	250V AC for 1minute		500V AC for 1minute	300V AC for 1minute	
	Center-taps	Without		Without / With	Without	Without / With (Volume control)
Mechanical performance	Detent	Without, Center	Without	Without, Center	Without	Without, Center
	Stopper strength	0.3N·m	—	Without bushing 0.5N·m With bushing 0.6N·m	0.5N·m	0.6N·m
	Push-pull strength	50N max.	30N max.	80N max.		
	Vibration	10 to 55 to 10Hz/min., the amplitude is 1.5mm for all the frequencies, in the 3 direction of X, Y and Z and for 2 hours respectively				
Shaft configuration	Flat type, Knob type, Screwdriver type		Flat type			
Terminal style	Insertion					
Page	313 329 (for Mixers)	318	319 329 (for Mixers)	322 329 (for Mixers)	325 329 (for Mixers)	

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### Note

● Indicates applicability to all products in the series.

# Insulated Shaft Potentiometers / Soldering Conditions

## Reference for Manual Soldering

Series	Tip temperature	Soldering time	No. of solders
<b>RK09D, RK09K, RK09Y11L, RK11K, RK12L, RK14K</b>	350°C max.	3s max.	1 time

## Reference for Dip Soldering

Series	Preheating		Dip soldering		No. of solders
	Soldering surface temperature	Heating time	Soldering temperature	Soldering time	
<b>RK12L</b>	100°C	1 min. max.	260°C max.	5s max.	2 time max.

Rotary Potentiometers

Slide Potentiometers

Metal Shaft

Insulated Shaft

Knob Operating

Through Shaft Type

Ring Type

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