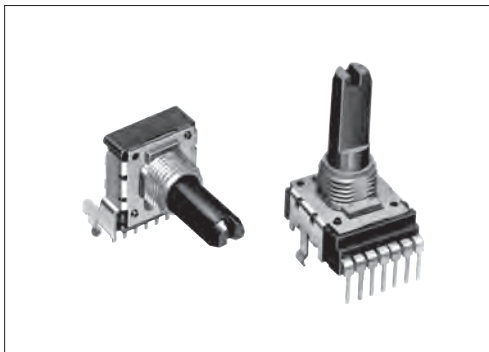


A 14mm wide potentiometer for audio, visual, electronic musical instruments and various applications



Typical Specifications



Items	Specifications
Total resistance tolerance	±20%
Maximum operating voltage	50V AC for AC only
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 ₁ (mm)	Center detent	Total resistance (k Ω)	Resistance taper	Minimum order unit (pcs.)		Products No.	Drawing No.		
							Japan	Export				
Dual-unit for tone	Vertical	Flat	22.5	With	10	1B	800	1,600	RK14K124003H	1		
	Horizontal					RK14K1220012			2			
Dual-unit for vol.	Vertical					Without			15A		RK14K12D0A5V	1
	Horizontal										RK14K12B0A0E	2

Notes

1. Other varieties are also available. Refer to "Other Specifications" (P.327).
2. Nut and washer are not attached. Please specify if required.

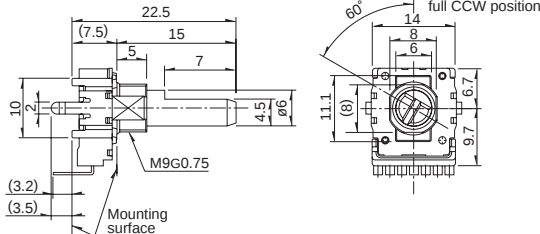
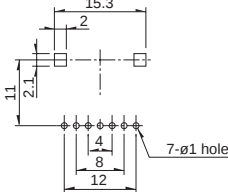
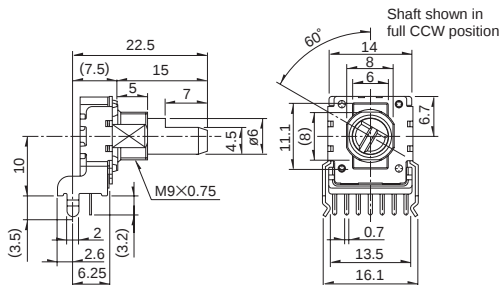
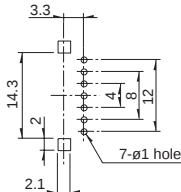
Packing Specifications

Tray

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

Refer to P.327 for other specifications.
Refer to P.328 for ordering products not listed.
Refer to P.331 for soldering conditions.

Unit:mm

No.	Photo	Style	PC board mounting hole dimensions (Viewed from mounting side)
1	Vertical RK14K124 (For tone control) RK14K12D (For vol. control) 		
2	Horizontal RK14K122 (For tone control) RK14K12B (For vol. control) 		

14mm 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
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Resistance Taper

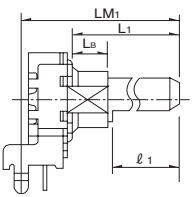
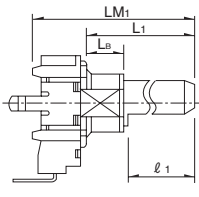
Resistance taper	15A	1B	3B	15C
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Tapped Types are Also Available

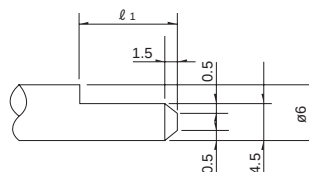
RK14K12 (for audio volume control) is also available with tap.

Shaft Variety

Unit:mm

Style		 					
		Horizontal Vertical					
Detail dimensions	LM ₁	20	22.5	25	27.5	30	32.5
	L ₁	12.5	15	17.5	20	22.5	25
	ℓ_1	7	7	12	12	12	12
	L _B	5	5	5	5	5	5

Detail dimensions



Terminal Layout / Circuit Diagram

Without tap for volume	With tap for volume	For tone and for volume (15C)

Note

Marked are specifications recommended by Alps Alpine.

Refer to P.328 for ordering products not listed.

14mm 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 4 K 1 2 4 0 — **F 2 5** — **C 0** — **B 1 0 3**

Model type

Code	Model type
2	Horizontal for tone
4	Vertical for tone
B	Horizontal for vol.
D	Vertical for vol.

Shaft type

Code	Shaft type
F	Flat

*Only available in flat format.

Length of the shaft LM₁ (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

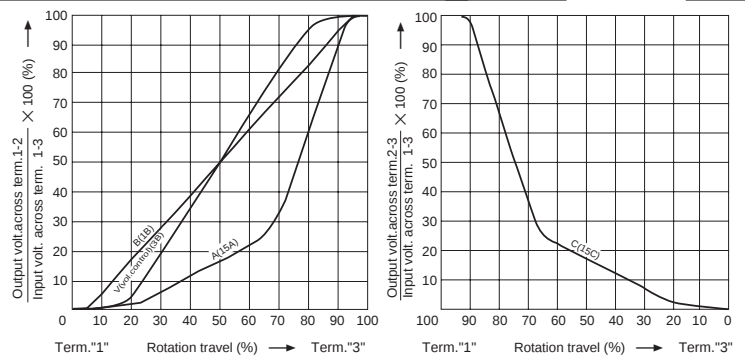
Detent

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 (Model type : 2, 4)
V : For vol. (Model type : B, D)



Total resistance

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

Note

Marked are specifications recommended by Alps Alpine.

Insulated Shaft Potentiometers

List of Varieties

Type		9mm size		11mm size	12mm size	14mm size
Series		RK09K11 RK09D11	RK09Y11L	RK11K	RK12L12	RK14K
		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℃ to +70℃				
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)

Insulated Shaft Potentiometers Soldering Conditions	331
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Potentiometers Measurement and Test Methods	386
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Note

● Indicates applicability to all products in the series.

■ Reference for Manual Soldering

Series	Tip temperature	Soldering time	No. of solders
RK09D, RK09K, RK09Y11L, RK11K, RK12L, RK14K	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	
RK12L	100°C	1 min. max.	260°C max.	5s max.	2 time max.