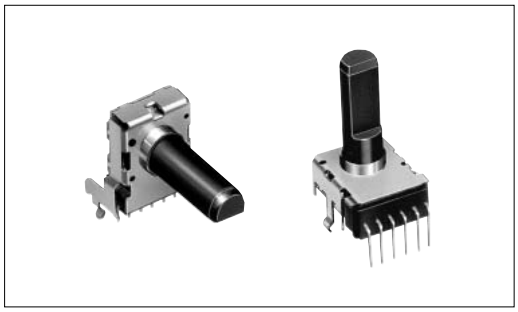
12mm Size Insulated Shaft Snap-in Type

RK12L Series

RoHS compliant

High performance 12mm width type.



Typical Specifications

Items	Specifications
Total resistance tolerance	±20%
Maximum operating voltage	50V AC for AC only
Total rotational angle	300±5 °
Rotational torque	2 to 15mN•m
Operating life	15,000cycles
Operating temperature range	−10℃ to +70℃

Product Line

Number of resistor elements	Mounting direction	Shaft type	Length of the shaft LM1 (mm)	Center detent	Total resistance (kΩ)	Resistance taper	Application	Minimum order unit (pcs.)	Products No.	Drawing No.
Dual-unit	Vertical type	Flat	20	Without	50	1B	For tone	1,000	RK12L1230C0K	2
			30		10	15A		800	RK12L1230C0T	
			25	With	20	1B			RK12L1230C1M	
			30		50				RK12L123000E	
	Horizontal type			Without	10	15A			RK12L1210C0R	1
	Vertical type		15		50	15C	For vol.	1,200	RK12L12C0C0V	2
			25		10	15A		800	RK12L12C0A0E	
			30						RK12L12C0A0G	
					20				RK12L12C0A0A	
	Horizontal type				10				RK12L12A0C0R	1

Note

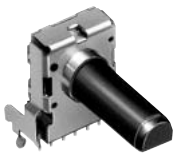
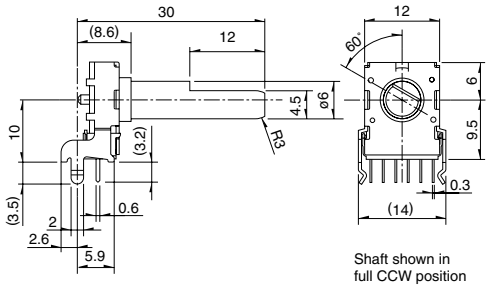
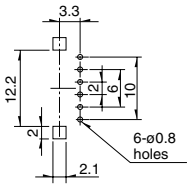
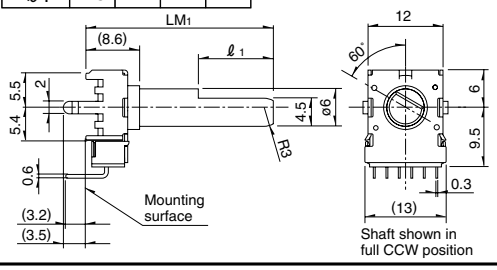
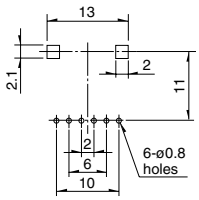
Products other than those listed in above products are also available. Please contact us for details.

Refer to **P.379** for product varieties.

ALPS

Dimensions

Unit:mm

No.	Photo	Style	PC board mounting hole dimensions (Viewed from mounting side)
1	**Horizontal type without bushing** **RK12L121 (For tone control)** **RK12L12A (For vol. control)** 		
2	**Vertical type without bushing** **RK12L123 (For tone control)** **RK12L12C (For vol. control)** 	LM1 / 15 / 20 / 25 / 30 ℓ1 / 4.5 / 7 / 12 / 12 	

Terminal Layout/Circuit Diagram

Outer : R1 ①②③
Inner : R2 1 2 3

Product Varieties

In addition to the recommended products, the following specifications can also be accommodated.

Total Resistance Variety

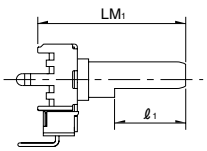
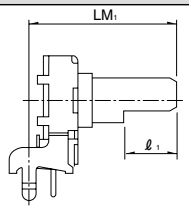
Total resistance (kΩ)	5	10	20	50	100	200

Resistance Taper

Resistance taper	15A	1B	3B	15C

Shaft Variety

Unit:mm

Style		Vertical type		Horizontal type	
					
Shaft variety	LM1	15	20	25	30
	ℓ1	4.5	7	12	12

Note

marked are specifications recommended by ALPS.

Refer to **P.380, 502** for resistance taper.

Orders Other Than Recommended Products

When ordering product varieties that are not listed in the Product Line, please specify by referring to the below example.

Sample Part Number

R	K	1	2	L	1	2	C	0	–	F	3	0	–	C	0	–	A	5	0	3

Model type

Code	Model type
1	Horizontal type for tone
3	Vertical type for tone
A	Horizontal type for vol.
C	Vertical type 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
15	15	25	25
20	20	30	30

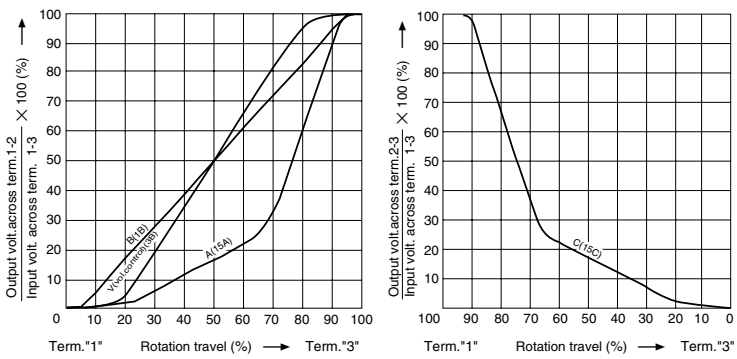
Detent

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 : 1,3)
V: For vol. (Model type : A,C)



Total resistance

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

Note

marked are specifications recommended by ALPS.

List of Varieties

Items \ Type			9mm Size Insulated Shaft Snap-in		11mm Size Insulated Shaft Snap-in	12mmSize Insulated Shaft Snap-in	14mm Size Insulated Shaft Snap-in	9mm Size Insulated shaft Long-life
Model			RK09K11□ RK09D11□	RK09K12□	RK11K11□	RK12L12□	RK14K12□	RK09Y11L
			Single-unit	Dual-unit	Single-unit	Dual-unit		Single-unit
Photo								
Bushing			Without		With/Without	Without	With/Without	Without
Electrical performance	Total resistance tolerance		±20%	±30%	±20%			±30%
	Maximum operating voltage		50V AC 20V DC	50V AC For AC only	50V AC 20V DC	50V AC For AC only		50V AC 5V DC
	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		250V AC for 1minute
	Gang error		—	−40dB to 0dB 3dB max.	—	Volume control -40dB to 0dB 3dB max. For tone control within 2dB at center		—
Mechanical performance	Strength of the actuator	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.		80N max.			30N 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					
	Resistance to soldering heat	Manual soldering	350°C max. 3s max.					
		Dip Soldering	—			260°C max. 5s max.	—	
Environmental performance	Cold		−30±2°C for 96h					−30±2°C for 240h
	Dry heat		70±2°C for 96h			70±2°C for 240h	70±2°C for 96h	70±2°C for 240h
	Damp heat		40±2°C, 90 to 95% RH for 96h					40°C, 90 to 95% RH for 240h
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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
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- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.

Как с нами связаться

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