

General Sensors Linear Type

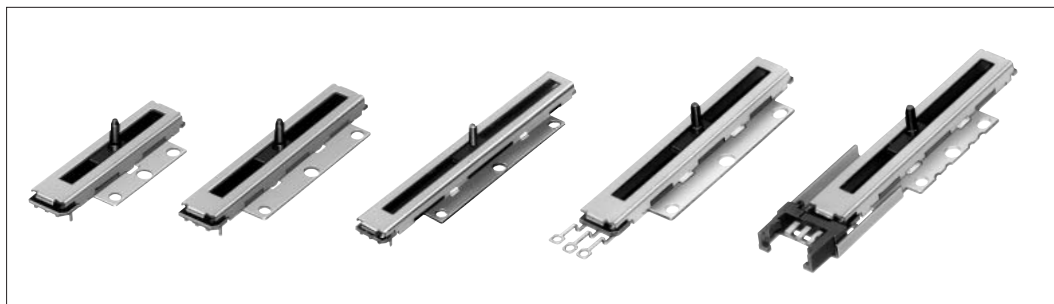
RDC10 Series

The high accuracy space saving design contributes to reduce size and weight of sets to be designed.

Rotary
Type

Linear
Type

Pressure
Type



Car Use



RoHS applicable

Features

Highly accurate linearity is achieved by an advanced printing technique.

Light operation power type, which contributes to torque load reduction at the drive motor.

Applications

For detecting feedback from motor drive units in digital video cameras and CD/MD changers

For detecting the sizes of photo copiers, multifunctional printers and projectors

Typical Specifications

Items	Specifications
Rating voltage	5V DC
Operating force	0.25 N max.
Operating life	100,000 cycles
Total resistance	10k
Total resistance tolerance	± 30%

Recommended Products List

Travel(mm)	Linearity	Length of lever (mm)	Length of terminal (mm)	Model No.	Minimum packing unit (pcs.)
14	± 0.5%	4.5	2	RDC1014A09	2,400
22				RDC1022A05	2,100
32				RDC10320RB	900
47		4.4		RDC1047A03	1,000


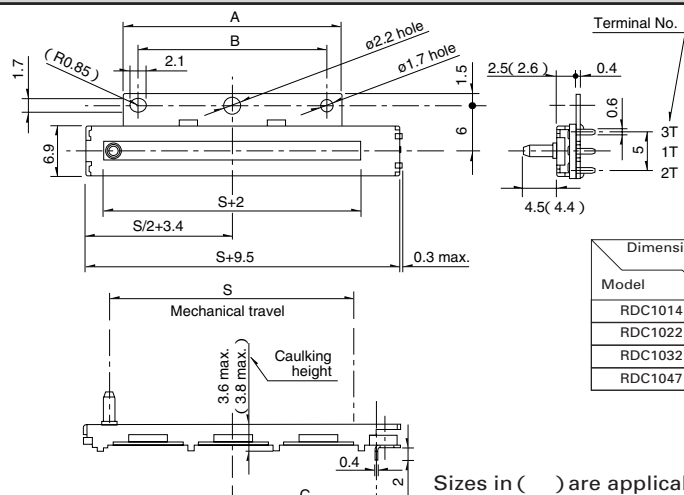
Notes

1. Additional product specifications in response to those not included in the above recommended products are also available.
2. The minimum package content means the basic unit quantity for your order. Kindly determine your purchase order quantity to the "minimum package content" × N(an integral number). Meanwhile, as for the export packaging content quantity, we would like to discuss with you separately.

For product varieties, see P.12
For other product specifications, see P.16

Dimensions

Unit:mm

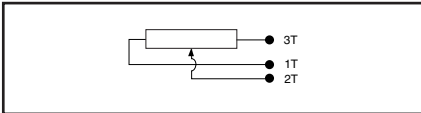
Photo	Style																									
	 <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Dimension</caption> <thead> <tr> <th>Model</th> <th>S</th> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>RDC1014</td> <td>14</td> <td>19</td> <td>15</td> <td>10</td> </tr> <tr> <td>RDC1022</td> <td>22</td> <td>19</td> <td>15</td> <td>14</td> </tr> <tr> <td>RDC1032</td> <td>32</td> <td>29</td> <td>25</td> <td>19</td> </tr> <tr> <td>RDC1047</td> <td>47</td> <td>37</td> <td>33</td> <td>26.5</td> </tr> </tbody> </table> <p style="text-align: right;">Sizes in () are applicable to RDC1047 only.</p>	Model	S	A	B	C	RDC1014	14	19	15	10	RDC1022	22	19	15	14	RDC1032	32	29	25	19	RDC1047	47	37	33	26.5
Model	S	A	B	C																						
RDC1014	14	19	15	10																						
RDC1022	22	19	15	14																						
RDC1032	32	29	25	19																						
RDC1047	47	37	33	26.5																						

Rotary Type

Linear Type

Pressure Type

Circuit Diagram



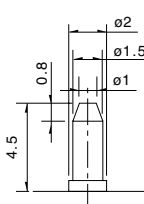
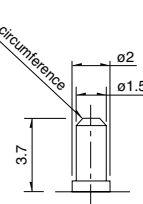
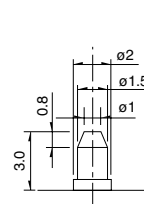
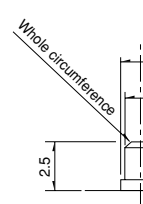
Product Varieties

In addition to the recommended products, the following specifications are supported too.

Lever Variety

* Sizes in () are applicable to RDC1047 only

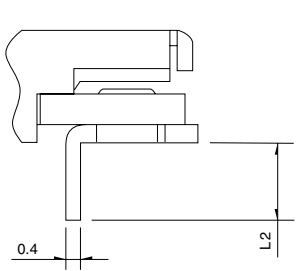
Unit:mm

Length	4.5 (4.4)	3.7 (3.6)	3 (2.9)	2.5 (2.4)
Dimensions				

Terminal Variety

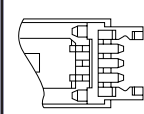
For printed wiring

Unit:mm

Dimensions				
Length L2	1.5	2	4	5.5

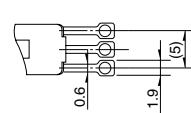
For connector wiring

* This specification is only available for the RDC1032 and RDC1047 models. Unit:mm

Dimensions		Applicable connector Molex pitch=2mm Housing : 51005-0300 Terminal : 50013-8*00
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For lead wiring

Unit:mm

Dimensions	
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Note

Shows the specification recommended by Alps.

Product Specifications

Item	Style Model	Rotary type				Linear type		
		RDC40	RDC501/RDC502 /RDC503/RDC506	RDC504	RDC80	RDC10	RD7	
Operating temperature range		- 30 to + 80	- 40 to + 120	- 40 to + 105	- 40 to + 120	- 30 to + 85	- 40 to + 150	
Electric performance	Total resistance tolerance	± 30%					± 20%	
	Resistance taper	Linear						
	Rated voltage	5V DC					12V DC	
	Max. operating voltage	18V DC	16V DC			5V DC	18V DC	
	Linearity	± 1%	± 2%		± 3%	± 0.5%	± 1%	
Mechanical performance	Effective variable range	13 rotations	320 °		330 (1 phase) 360 (2 phase)	S (travel) - 2mm	S (travel)	
	Rotational angle	—	(Without stopper)			—		
	Rotational torque	2mN·m max.			10mN·m max.	—		
	Operating force	—				0.25N max.	2N less.	
Durability	100,000 cycles	—					—	
	1,000,000 cycles	—					—	

Rotary Type

Linear Type

Pressure Type

Method for Regulating the Linearity

