

# Introduction of Resistive Position Sensor

Ver.2018

## 1

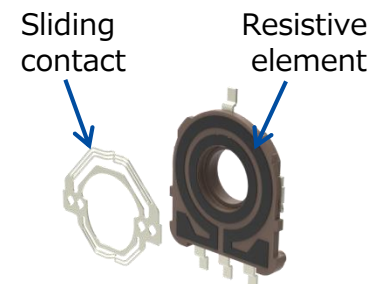
### Excellent usability

- Provides stable output characteristics against external noise and temperature changes
- Analog output facilitates signal processing
- Light operation force type, which contributes to torque load reduction at the drive motor.

## 2

### High accuracy and long-life product

- ALPS original high-accuracy resistor
- Long-life contact by high accuracy processing technology




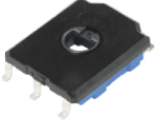







## 3

### Diverse varieties

- Rotary type and Linear type varieties
- Vertical type, Horizontal type, Reflow type and Connector type varieties



# Variety

	Rotary Type					Magnetic Rotary Type	Linear Type		
	RDC50	RDC90	RDC80	RD6R1A	RDC40	RDCC0	RDC1010	RDC10	RD7
Item	 Horizontal Vertical								 Vertical Horizontal
temperature range(°C)	-40 to +120	-40 to +120	-40 to +120	-40 to +85	-30 to +80	0 to +50	-30 to +85	-30 to +85	-40 to +105
Effective variable range	333.3°	80° 260°	340°(1-phase) 360°(2-phase)	320°	5400° (15 rotations)	30°	10 mm	14 mm 22 mm 32 mm 47 mm	8 mm 12 mm + For Horizontal 9 mm
Linearity guarantee range	320°	60° 244°	330°(1-phase) 360°(2-phase)	310°	4,680° (13 rotations)	30°	9.2 mm	12 mm 20 mm 30 mm 45 mm	8 mm 12 mm + For Horizontal 9 mm
Linearity (relative)	±2% ±1%	±3%	±3%	±2% (320°)	±1%	±1%	±0.5%	±0.5%	±1%
Operating Life (cycles)	1,000k	10,000k	20k	500k	100k	100k	50k	200k	100k
Variety	Vertical type Horizontal type Reflow type	Reflow type	Reflow type	Connector type	Connector type	Connector type	Vertical type	Vertical type	Vertical type Horizontal type

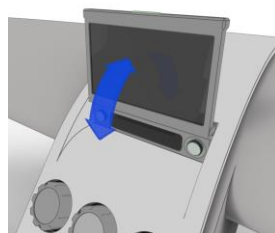
## HVAC

Mode detection



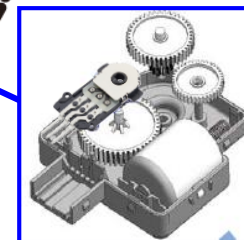
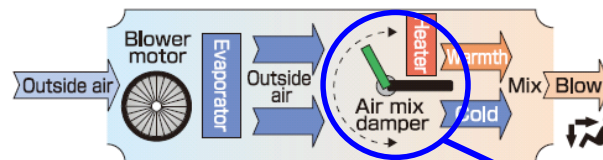
## Navi monitor

Open & close angle detection



## Air conditioning unit

Angle Detection of the actuator output shaft



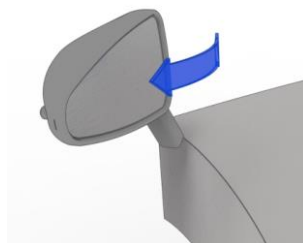
## Headlight

Light angle detection



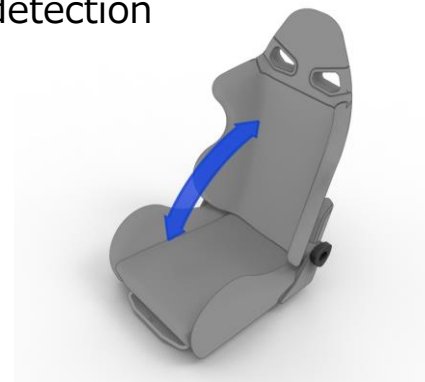
## Door mirror

Mirror angle detection



## Seat Recliner

Head restraint angle detection



# Applications - Home

## Robot

Joint angle  
detection



## Drone

Angle detection for  
Joystick & Gimbal Control



Gimbal Control

## Single-lens reflex camera

Zoom lens position  
detection



## Projector

Zoom lens position  
detection



## Foot controller

Pedal angle  
detection



## Assisted living / nursing care equipment

Controller operation angle detection  
Reclining angle detection



## Shower toilet seat

Open / close angle detection



## Copier/FAX machine

detection for paper width

