

Introduction of Resistive Position Sensor

Ver.2018

Perfecting the Art of Electronics
ALPS[®]

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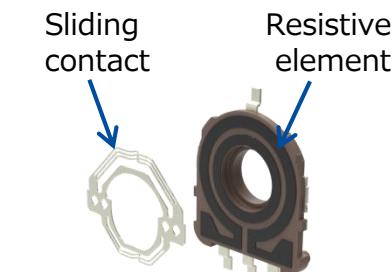
Excellent usability

- 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

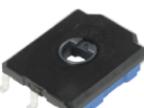


3

Diverse varieties

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



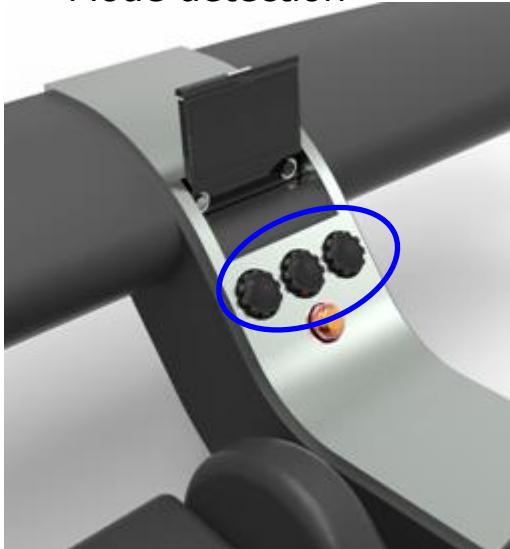
	Rotary Type					Magnetic Rotary Type	Linear Type		
	RDC50	RDC90	RDC80	RD6R1A	RDC40	RDCC0	RDC1010	RDC10	RD7
Item	 Horizontal  Vertical							 Vertical  Horizontal	
temperature range(°C)	-40 to +120	-40 to +120	-40 to +120	-40 to +85	-30 to +80	0 to +50	-30 to +85	-30 to +85	-40 to +105
Effective variable 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

Applications - Automotive

ALPS

HVAC

Mode detection



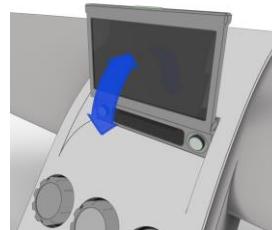
Headlight

Light angle detection



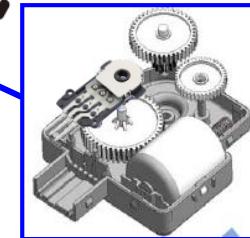
Navi monitor

Open & close angle detection



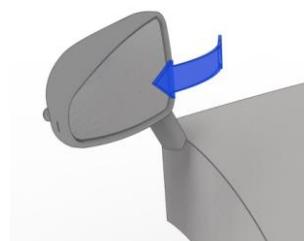
Air conditioning unit

Angle Detection of the actuator output shaft



Door mirror

Mirror angle detection



Seat Recliner

Head restraint angle detection



Applications - Home

Robot
Joint angle
detection



Drone
Angle detection for
Joystick & 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

