

RD6R1A Rotary Type

Long-life sensor supporting absolute linearity



Typical Specifications

Items	Specifications
Rated Voltage	5V DC
Operating life	500,000 cycles
Total resistance	3.8kΩ
Operating temperature range	-40°C to +85°C

Product Line

Mounting method	Linearity guarantee range	Linearity	Hollow shaft variation	Minimum order unit (pcs.)		Model No.
				Japan	Export	
Connector type	310°	±2%	φ3.53	1,800	1,800	RD6R1A0008

Note

Please ask about linearity with variable ranges other than 320° .

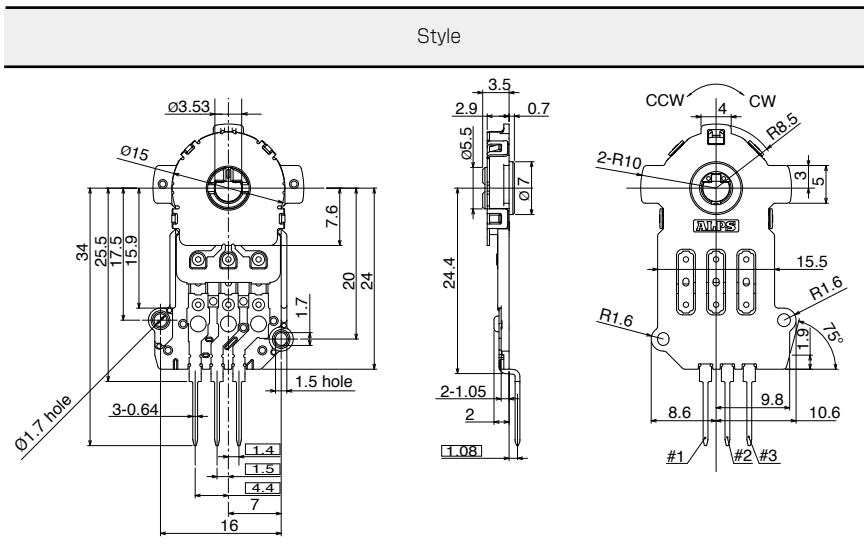
Packing Specifications

Tray

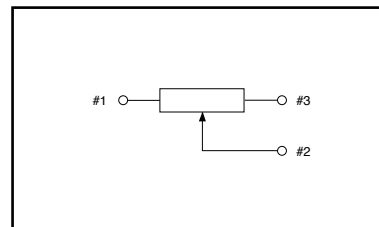
Number of packages (pcs.)		Export package measurements (mm)
1 case /Japan	1 case /export packing	
1,800	1,800	540×360×250

Dimensions

Unit:mm



Circuit Diagram



Refer to P.466 for product specifications.

Resistive Position Sensors

List of Varieties

Type	Rotary Type			
Series	RDC40	RDC50	RDC90	RD6R1A
Photo				
Direction of lever	Horizontal	Vertical Horizontal	Vertical	
Effective electrical angle (°)	5,400 (15 rotations)	333.3	80,260	320
Linearity guarantee range (°)	4,680 (13 rotations)	320	60,244	310
Travel	—	—	—	—
Operating temperature range	−30°C to +80°C	−40°C to +120°C		−40°C to +85°C
Operating life	100,000 cycles	1,000,000 cycles	10,000,000 cycles	500,000 cycles
Available for automotive use	—	●	●	●
Life cycle (availability)				
Mechanical performance	Operating force	—	—	—
	Rotational torque	1.96mN·m max.	2mN·m max.	
Electrical performance	Total resistance tolerance	±30%		±20%
	Linearity (%)	±1	±2	±3
	Rated voltage (V DC)	5		
Environmental performance	Cold	−30°C 240h	−40°C 168h	
	Dry heat	80°C 240h	120°C 168h	85°C 168h
	Damp heat	60°C, 90 to 95%RH 240h	60°C, 90 to 95%RH 96h	
Terminal style	Connector	Insertion / Reflow	Reflow	Connector
Page	456			459

Resistive Position Sensors Measurement and Test Methods	466
Resistive Position Sensors Soldering Conditions	467
Resistive Position Sensors Cautions	467

Note

● Indicates applicability to all products in the series.

Resistive Position Sensors

Rotary Type

Linear Type

