

Encoder 40mm Size Hollow Shaft Type

EC40A Series



Less shaft wobble achieves good operation feel.



Features

- Excellent operation feel when rotating.
- Incremental type.

Applications

- For adjusting temperature and fan speed in air conditioners
- For various control in car audio equipment

Typical Specifications

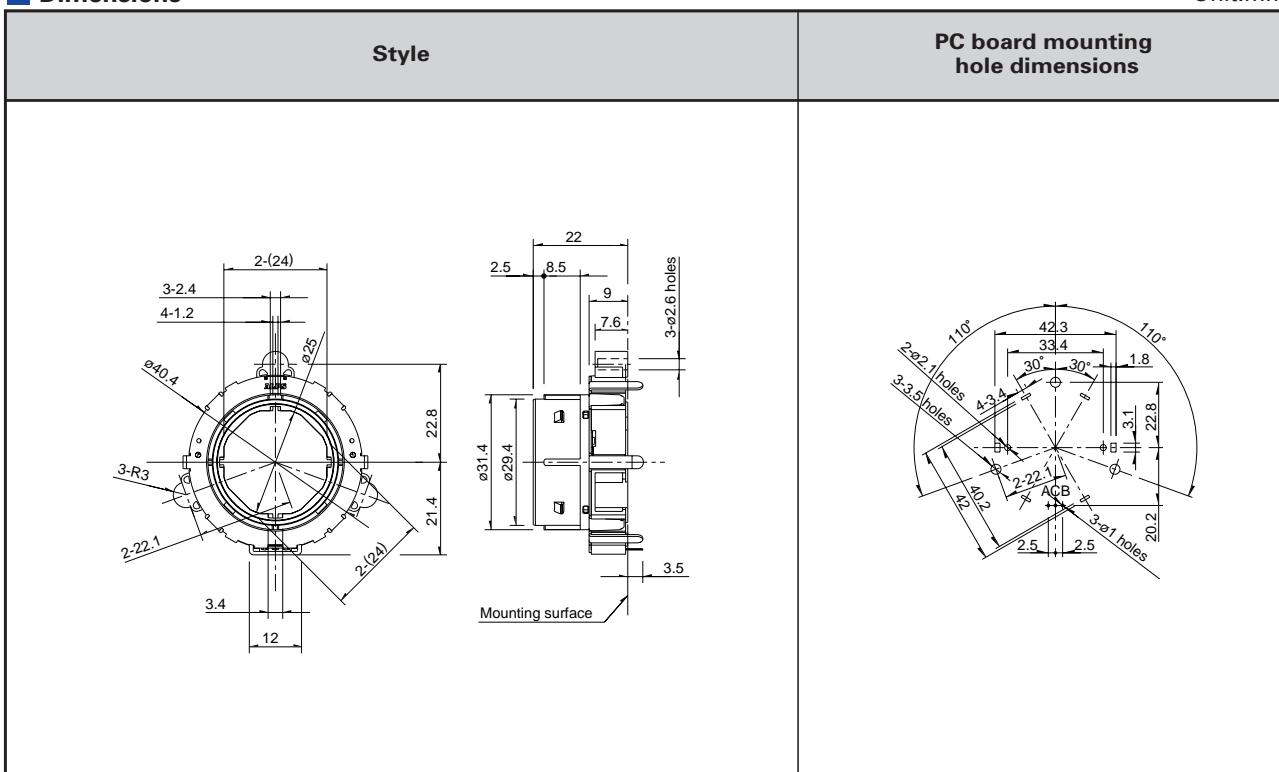
Items	Specifications
Rating	0.5mA 5V DC
Operating life	30,000cycles

Product Line

Actuator length (mm)	Detent torque (mN·m)	Number of detent	Number of pulse	Operating direction	Minimum packing unit (pcs.)	Product No.
22	20±11	30	15	Vertical	400	EC40A1520401

Dimensions

Unit:mm



Refer to P.214 for product specifications.

Product Specifications

Items	Type	EC40A	EC45A	RK45A RK45B	EC60A	EC35B	EC35AH		
Detector	Operating temperature range	-40°C to +85°C							
Push	Rating	0.5mA 5V DC		0.05W	0.5mA5V DC		10mA5V DC		
Slide	Electrical performance	Output voltage		2.5V max. at 5V DC, 0.5mA (resistive load)	—	2.5V max. at 5V DC, 0.5mA (resistive load)	2.5V max. at 5V DC, 1mA (resistive load)		
Rotary		Insulation resistance		10MΩ min. 50V DC		100MΩ min. 250V DC	250V DC 100MΩ min.		
Encoders		Voltage proof		50V AC for 1minute		300V AC for 1minute			
Power	Mechanical performance	Detent torque		20±11mN·m	Shall be in accordance with individual specifications.	40±20mN·m	20±10mN·m		
Dual-in-line Package Type		Terminal strength		3N for 10s			5N for 1minute		
Multi Control Devices		Actuator strength	Pushing direction	100N					
TACT Switch™			Pulling direction	50N		100N			
Custom-Products		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 for 2 hours respectively					
Incremental Type		Resistance to soldering heat	Manual soldering	350°C max. 3s max.					
Absolute Type			Dip soldering	260°C max. 5s max.		260±5°C, 5±1s			
			Reflow soldering	—					
Durability	Operating life without load	30,000cycles				50,000cycles			
	Operating life with load	30,000cycles				50,000cycles			
Environmental performance	Cold	-40±3°C for 240h							
	Dry heat	85±3°C for 240h							
	Damp heat	40±2°C, 90 to 95% RH for 240h				60±2°C, 90 to 95% RH for 240h			

■ Self-return Switch Specifications

Items	EC35B
circuit • number of contacts	Single pole and single throw (Push-on)
Travel(mm)	2.8±0.5
Push operating force(N)	3.8±1.5
Switch ON position	15±5°
Ratational torque	40±25mN·m
Rating	10mA 5V DC
Contact resistance	200mΩ max.
Operating life	15,000cycles

Mouser Electronics

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