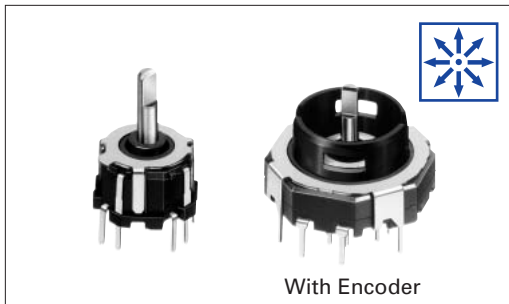


Multi Control Devices 8-way Stick Switch (Center-Push Function)

RKJXM Series



Single and dual shaft structured device contributes to simple operation and space saving.



With Encoder

Features

- Excellent operability is achieved as tactile feeling is attached to an 8-directional stick switch.
- Provides different operating angles and force for each operating direction (four "+" directions and four "x" directions) for improved blind-touch operation.
- The two axis structural type allows a stick switch (inside axis) and an encoder (outside axis) to be placed into one unit in an external size of 20 mm.
- The encoder achieves a smooth rotation feeling by an original click structure.

Applications

- For a volume or a mode change of car audio, car navigation, and for a cursor control
- For various other level controlling applications
- For remote controllers of the above products

Typical Specifications (Inner-shaft Stick Switches)

Items		Specifications
Rating (max.) (Resistive load)		10mA 5V DC
Contact resistance	Lever operation	1 Ω max.
	Push operation	
Operating force		A·B·C·D direction : 30±20mN·m AB·BC·CD·DA direction : 25±20mN·m
Operating angle (lever operation)		A·B·C·D direction : 10° max. AB·BC·CD·DA direction : 12° max.
Travel (Push operation)		0.3±0.2mm
Operating life	8-direction	100,000 cycles
	Center push	

Typical Specifications (Outer-shaft Encoders)

Items		Specifications
Rating (max.) (Resistive load)		10mA 5V DC
Detent torque		12±8mN·m
Operating life		15,000 cycles

Products Line

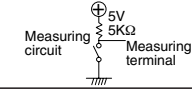
Shaft	Maximum resolution		Products No.	Minimum packing unit (pcs.)	Drawing No.
	Direction	Encoder			
1	8	—	RKJXM1015001	1,000	1
2		15-pulses/15-detents	RKJXM2E13001		2

For other specifications, see P.303

Detector
Push
Slide
Rotary
Encoders
Power
Dual-in-line Package Type
Multi Control Devices
TACT Switch™
Custom-Products

Variable Resistor Type
Switch Type

Products Specifications

Items		RKJXT1F	RKJXM	RKJXL	RKJXS	SRBE	SLLB		
Operating temperature range		-40°C to +85°C	-30°C to +70°C		-20°C to +70°C		-10°C to +60°C		
Rating (max.) (Resistive load)		—	10mA 5V DC			1mA 5V DC	10mA 5V DC		
Electrical performance	Output voltage	—			1V max. at 1mA 5V DC (Resistive load)				
	Directional resolution	4-direction	8-direction			—			
	Insulation resistance	100MΩ min. 250V DC			50MΩ min. 50V DC		100MΩ min. 100V DC		
	Voltage proof	300V AC for 1min. or 360V AC for 2sec.	300V AC for 1min.		50V AC for 1min.		100V AC for 1 min.		
Mechanical characteristics	Direction application force	40±25mN·m		Direction A, B, C, D 30±20mN·m	10±7mN·m	0.8±0.5N	—	0.65±0.3N	
				Direction AB, BC, CD, DA 25±20mN·m					
	Push application force	5±2N	3±1.5N	4.5±1N	2.5±1.5N	3.5±1.5N	2±1N		
	Encoders Detent torque	15±8mN·m	12±8mN·m	—		3±2mN·m	—		
	Robustness of terminal	5N for 1min.	—				3N for 1 min.		
	Robustness of actuator	Pushing direction	100N	—		30N	50N		
		Operating direction	0.4N.m	—		20N	—	10N	
	Solder heat resistance	Manual soldering	350±5°C 3s max.	350°C max. 3s max.		350±10°C 3 [±] s	350±5°C 3s max.		
		Dip soldering	260±5°C, 5±1s				—		
		Reflow soldering	—				Please see P.305		
Endurance	Vibration		8.3±1 to 200±4 to 8.3±1Hz, 4.4G fixed (for 15 minutes/1 cycle), 3 angles each 2 hours	8.3 to 200 to 8.3Hz, 4.4G fixed (for 15 minutes/1 cycle), 3 angles each 2 hours		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			
	Operating life	Directions	50,000 cycles		100,000 cycles		500,000 cycles		
		Center detent	—		—		100,000 cycles	—	
	Encoder	15,000 cycles		—		100,000 cycles		—	
	Operating life without load	—						100,000 cycles	
Operating life with load (Load : As rating)	—								
Environmental test	Cold	-40±2°C for 500±10h	-40±2°C for 500h		-40±2°C for 96h		-20±2°C for 96h		
	Long-term heat resistance	85±2°C for 500±10h	85±2°C for 500h		85±2°C for 96h				
	Moisture resistance	60±2°C, 90 to 95%RH for 500±10h	60±2°C, 90 to 95%RH for 500h		60±2°C, 90 to 95%RH for 96h	40±2°C, 90 to 95%RH for 96h			

Note

Shall be in accordance with individual specifications.

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line Package Type

Multi Control Devices

TACT Switch™

Custom-Products

Variable Resistor Type

Switch Type