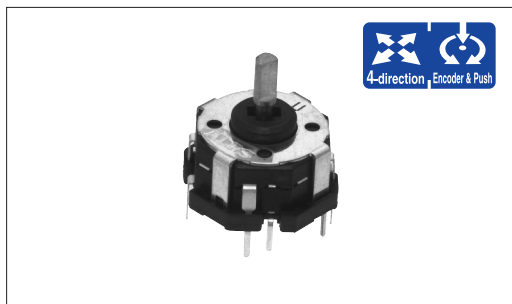


# Multi Control Device 4-directional Stick Switch (with Encoder/Center-push Function)

RKJXT1F Series



A space-saving device with single shaft 4-directions/push/encoder.



### Typical Specifications (Stick Switches)

Items		Specifications
Ratings (max.)	(Resistive load)	10mA 5V DC
Contact resistance	Lever operation	1Ω max.
	Push operation	
Operating force		40±25mN·m
Operating angle (lever operation)		9° max.
Travel (Push operation)		0.3±0.2mm
Operating life	4 direction	total with 4-direction 50,000cycles
	Center push	

### Typical Specifications (Encoders)

Items		Specifications
Ratings (max.)	(Resistive load)	10mA 5V DC
Number of pulse		15
Number of detent		30
Detent torque		15±8mN·m
Operating life		15,000cycles

### Products Line

Maximum resolution		Minimum order unit (pcs.)	Products No.
Direction	Encoder		
4	15-pulses/30-detents	2,640	RKJXT1F42001

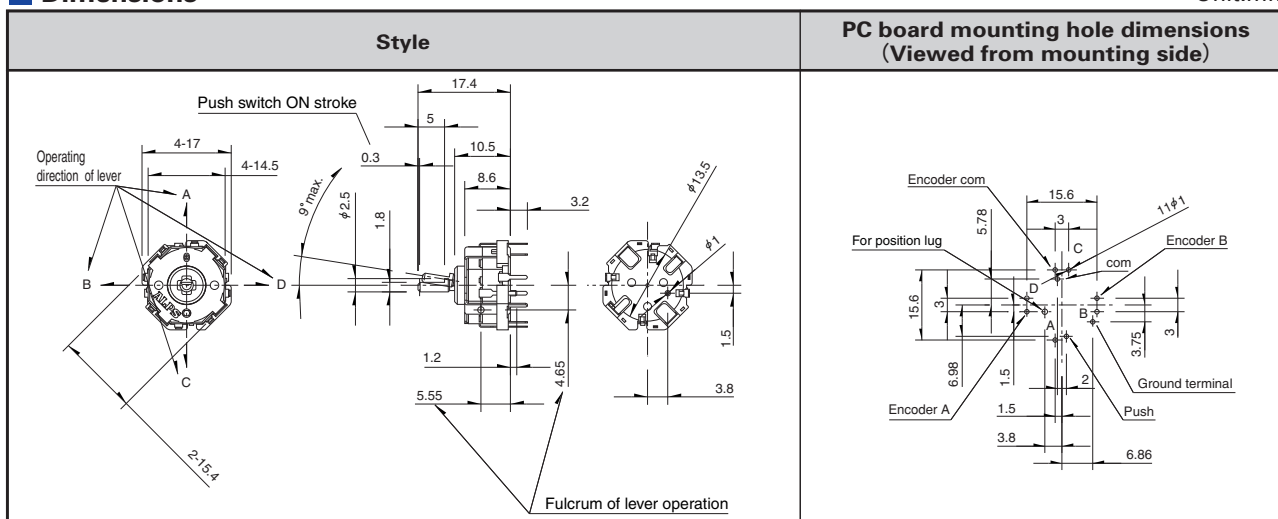
### Packing Specifications

#### Tray

Number of packages (pcs.)		Export package measurements (mm)
1 case /Japan	1 case /export packing	
1,320	2,640	555×375×333

### Dimensions

Unit:mm













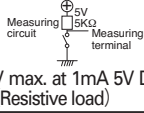


### Output Relation Chart between Lever Position and ON Position.

Terminal	Operation procedure				
	A	B	C	D	Enter push
Push-A	ON				
Push-B		ON			
Push-C			ON		
Push-D				ON	
Push-Com	ON	ON	ON	ON	ON



# List of Varieties

Series		Switch type											
		RKJXT1F	RKJXM	RKJXL	RKJXS	SKRV	SKRH						
Items		SKRHAA, SKRHAB		SKRHA, SKRHAD									
Photo													
Function													
Dimensions (typical value) (mm)	W	17		20.5		13		11.7		6.45		7.35/7.45	
	D	10.5		5.45		6.4		2.3		4		5	
	H												
Outlined specifications	Number of operating shafts	Single-shaft		Single-shaft/Dual-shaft		Single-shaft							
	Shaft material	Metal				Resin							
	Directional resolution	4-direction		8-direction				4-direction					
	Directional operating feeling (tactile feeling)	With			Without		With						
	Lever return mechanism	With											
	Center-push switch	With											
	Encoder	With		Without/With		Without							
Operating temperature range		-40°C to +85°C		-30°C to +70°C		-20°C to +70°C		-30°C to +85°C					
Automotive use		○		○		○							
Rating (max.) (Resistive load)		10mA 5V DC						50mA 12V DC					
Electrical performance	Output voltage					 1V max. at 1mA 5V DC (Resistive load)							
	Directional resolution	4-direction		8-direction				4-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 2s				50V AC for 1min.		100V AC for 1min.					
	Directional operating force	40 ± 25mN · m		Direction A, B, C, D 30 ± 20mN · m Direction AB, BC, CD, DA 25 ± 20mN · m		10 ± 7mN · m		0.8 ± 0.5N		1.2 ± 0.6N		1.23 ± 0.69N	
Mechanical performance	Push operating force	5 ± 2N		3 ± 1.5N		4.5 ± 1N		2.5 ± 1.5N		2.4 ± 0.69N		2.35 ± 0.69N	
	Encoder detent torque	15 ± 8mN · m		12 ± 8mN · m									
	Terminal strength	5N for 1min.											
	Actuator strength	Pushing direction	100N				30N						
Operating direction		0.4N · m		0.3N · m		0.15N · m		20N					
Endurance	Vibration	8.3 ± 1 to 200 ± 4 to 8.3 ± 1Hz, 4.4G fixed (for 15 min./1 cycle), in the 3 direction of X, Y and Z for 2 hours respectively						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 without load												
	Operating life with load (at rated load)												
Environmental performance	Cold	-40 ± 2°C for 500h				-40 ± 2°C for 96h		-30 ± 2°C for 96h					
	Dry heat	85 ± 2°C for 500h				85 ± 2°C for 96h		80 ± 2°C for 96h					
	Damp heat	60 ± 2°C, 90 to 95%RH for 500h				60 ± 2°C, 90 to 95%RH for 96h							
Soldering	Manual soldering	350 ± 5°C 3s max.				350 ± 10°C 3 <sup>+</sup> s		350°C max. 3s max.					
	Dip soldering	260 ± 5°C, 5 ± 1s		260°C max. 6s max.									
	Reflow soldering	Please see P.495											
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**Note**

○marks in "Available for automotive use" indicate that some of the series products can work at the operating temperature range from -40°C to +85°C.