

# RKJXW 8-directional Stick Switch (with Encoder / Center-push Function)

Firm operating feel and high robustness ideal for integrated control of automotive equipment



## Typical Specifications (Stick Switch)



Items		Specification
Rating(max.) (Resistive load)		10mA 5V DC
Contact resistance	8-direction	1 kΩ max.
	Center-push	
Travel	8-direction	2±0.8mm
	Center-push	1.4±0.5mm
Operating life	8-direction	Total with 8-direction 30,000 cycles
	Center-push	30,000 cycles

## Typical Specifications (Encoder)

Items	Specification
Rating(max.) (Resistive load)	10mA 5V DC
Operating life	30,000 cycles

## Product Line

Product No.	Stick Switch			Encoders			Minimum order unit (pcs.)	
	Maximum resolution	Operating force		Detent torque	Number of detent	Number of pulse	Japan	Export
		Direction	Center Push					
<b>RKJXW1014002</b>	8	2.5±1.5N	3±1.5N	30±20mN·m	30	15	100	100

## Packing Specifications

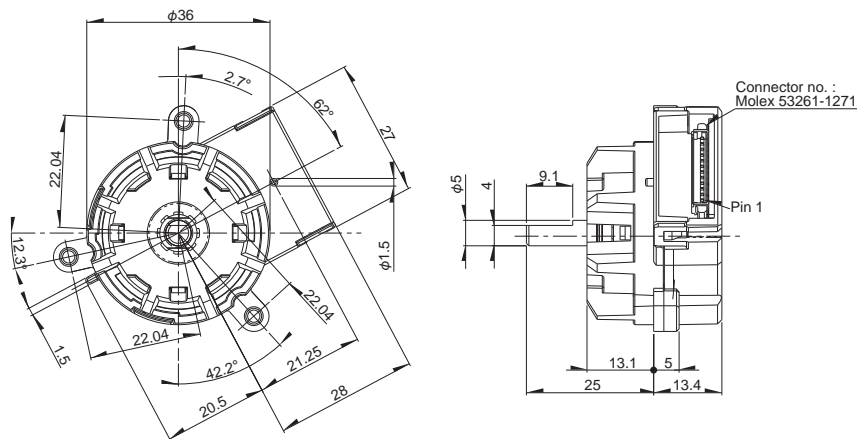
Tray

Number of packages (pcs.)		Export package measurements (mm)
1 case / Japan	1 case / export packing	
100	100	360×270×230

## Dimensions

Unit:mm

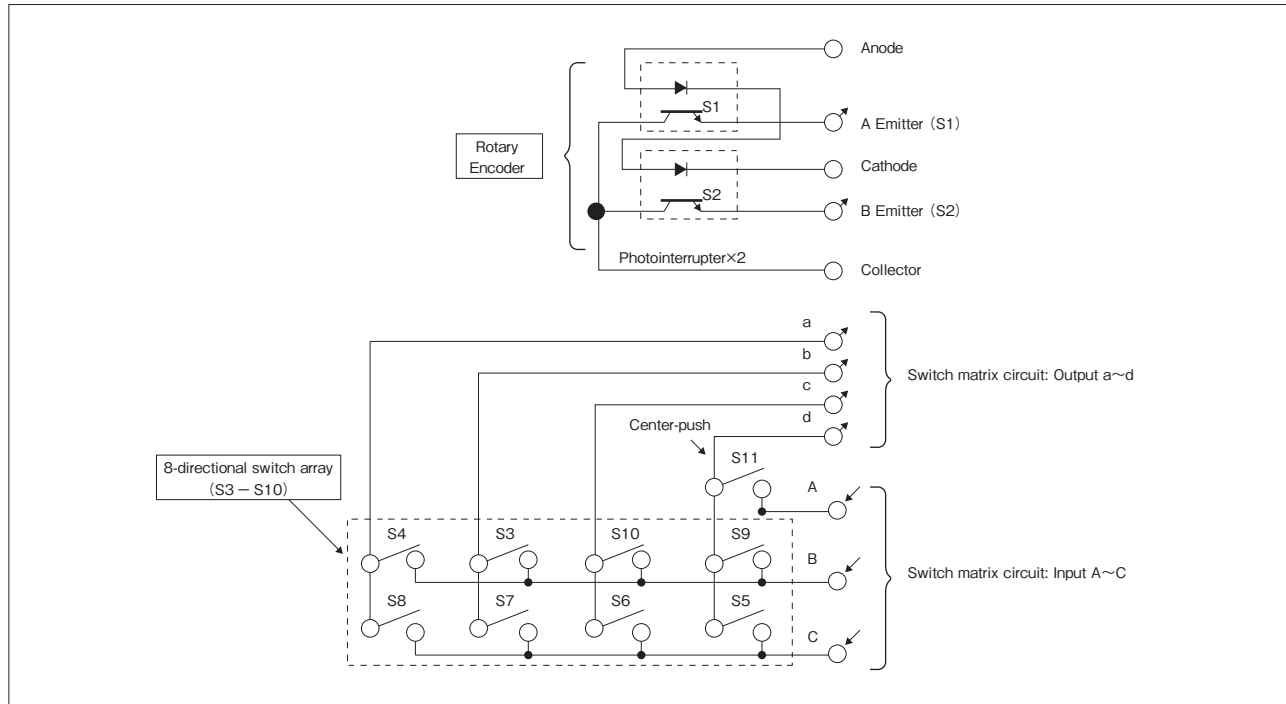
Style



## 8-directional Stick Switch / Specifications

Circuit Diagram/Output Relation Chart/Pin Configuration/8 Direction Codes

### ■ Circuit Diagram



### ■ Output Relation Chart

		Switch No.							
		S3	S4	S5	S6	S7	S8	S9	S10
Direction	A	ON	ON	(ON)					(ON)
	B	(ON)	ON	ON	(ON)				
	C		(ON)	ON	ON	(ON)			
	D			(ON)	ON	ON	(ON)		
	E				(ON)	ON	ON	(ON)	
	F					(ON)	ON	ON	(ON)
	G	(ON)					(ON)	ON	ON
	H	ON	(ON)					(ON)	ON

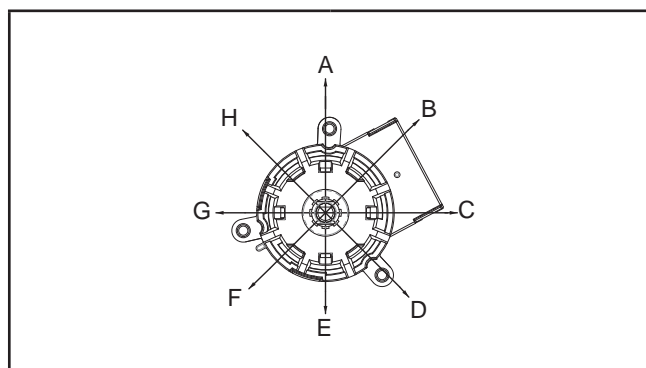
“(ON)” indicates that the switch is either On or Off at the time of the operation.  
 Discern the direction of operation when two switches are On.  
 Ignore any additional switches which may be switched On.  
 Example:  
 Operation in direction A  
 1st signal: S4 On > Standby  
 2nd signal: S3 On > Discern as direction A  
 3rd signal: S10 On > Ignore this signal (discern as direction A)  
 4th signal: S5 On > Ignore this signal (discern as direction A)

### ■ Pin Configuration









Pin No.

- 1 Photointerrupter Anode
- 2 Photointerrupter Cathode
- 3 Output d (S11, S9, S5)
- 4 Input A (S11)
- 5 Output a (S4, S8)
- 6 Output b (S3, S7)
- 7 Input B (S4, S3, S10, S9)
- 8 Input C (S8, S7, S6, S5)
- 9 Output c (S10, S6)
- 10 Photointerrupter A Emitter (S1)
- 11 Photointerrupter B Emitter (S2)
- 12 Photointerrupter Collector

### ■ 8 Direction Codes



Multi Control Devices  
 Variable Resistor Type  
 Switch Type

Type		Switch type			
Series		RKJXT1F	RKJXM	RKJXW	RKJXL
Photo					
Dimensions (mm)	W	17	11	36	13
	D			48.5	
	H	10.5	6.6	26.5	6.4
Shaft material		Metal			
Directional resolution		4-direction	8-direction		
Directional operating feeling (tactile feeling)		With			Without
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
Operating life	Directional operation	Total with 4-direction 50,000 cycles	Total with 8-direction 100,000 cycles	30,000 cycles for each direction	8 directions total: 100,000 cycles
	Center-push			30,000 cycles	100,000 cycles
	Encoder	15,000 cycles	—	30,000 cycles	—
Automotive use		●	●	●	●
Life cycle (availability)					
Rating (max.) (Resistive load)		10mA 5V DC			
Electrical performance	Output voltage	—	—	—	—
	Encoder resolution	15pulses/360°	—	15pulses/360°	—
	Insulation resistance	100MQ min. 250V DC			
	Voltage proof	250V AC for 1min.		360V AC for 2s	300V AC for 1min. or 360V AC for 2s
Mechanical performance	Directional operating force	40±25mN·m	Direction A, B, C, D 30±20mN·m	2.5±1.5N	10±7mN·m
			Direction AB, BC, CD, DA 25±20mN·m		
	Push operating force	5±2N	3±1.5N		4.5±1N
	Encoder detent torque	15±8mN·m	—	30±20mN·m	—
	Terminal strength	5N for 1min.			
Actuator strength	Push / pull directions	100N (Push/Pull)	100N (Push), 50N (Pull)	100N (Push)	100N (Push), 50N (Pull)
	Operating direction	0.4N·m	0.3N·m	50N	100N
Environmental performance	Cold	-40°C 500h			
	Dry heat	85°C 500h			
	Damp heat	60°C, 90 to 95%RH 500h			
Page		398	400	402	404

Multi Control Devices

Variable Resistor Type

Switch Type

Switch Type Multi Control Devices Soldering Conditions	412
Switch Type Multi Control Devices Cautions	413

**Note**

● Indicates applicability to all products in the series.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Multi-Directional Switches](#) category:*

*Click to view products by [ALPS](#) manufacturer:*

Other Similar products are found below :

[MJTP1109AL](#) [RA3CSH6A](#) [APTCFVTR](#) [SRBE210100](#) [T5-NH1118](#) [RKJXW1014002](#) [RKJXW2014001](#) [T4-TCN3332](#) [TSWA-3N-CUP2-LFS](#) [T2-0018](#) [T5-CK2212](#) [CS41001E](#) [RKJXK122000D](#) [RKJXK122400Y](#) [RKJXL100401V](#) [RKJXM2E13001](#) [RKJXM2E13004](#) [RKJXS1004001](#) [RKJXT1F42001](#) [RKJXV1224005](#) [RKJXY100000A](#) [SKRHAAE010](#) [SKRHABE010](#) [SKRHACE010](#) [SKRHADE010](#) [SLLB120100](#) [SLLB120200](#) [SLLB120300](#) [SLLB510100](#) [SLLB510200](#) [SLLB520100](#) [SRBE110301](#) [SRBE210200](#) [AMPTFP2VTR](#) [D16202](#) [PHAP4383V](#) [3302](#) [7G5002C0003](#) [QSA2S3.5NH3G7](#) [K1-1508SA-03](#) [PLJG2-G-V-T/R](#) [PLMG5-GH-V-T/R](#) [RKJXU1210006](#) [SKRHADE011](#) [2200-000301](#) [RKJXM1015004](#) [RKJXV1220001](#) [SLLB310300](#) [SLLB310500](#) [SLLB520200](#)