

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	1kΩ 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					
RKJXW1014002	8	2.5±1.5N	3±1.5N	30±20mN·m	30	15	100	100

Packing Specifications

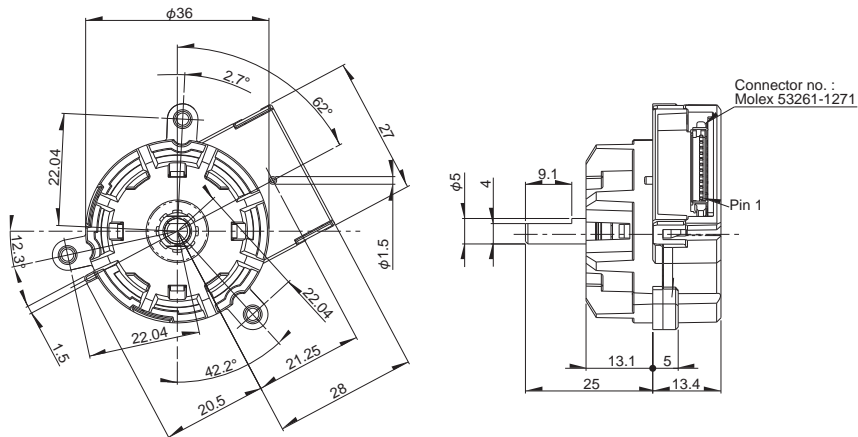
Tray

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

Dimensions

Unit:mm

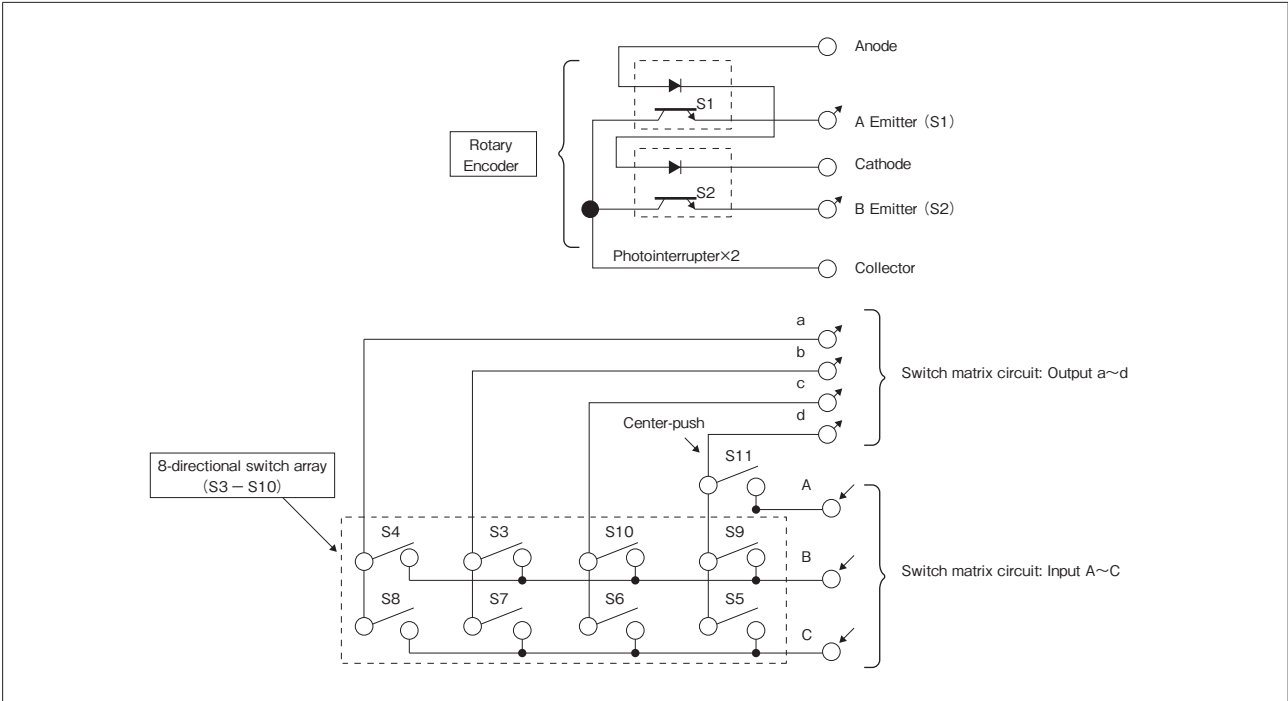
Style



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

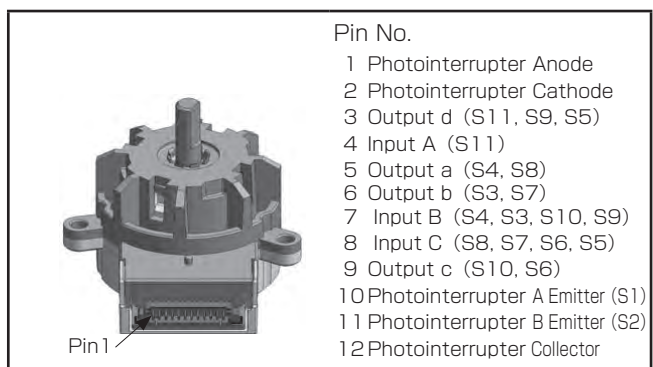
1st signal: S4 On > Standby

2nd signal: S3 On > Discern as direction A

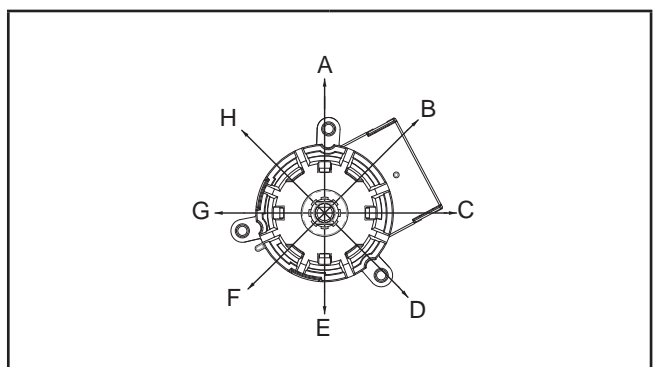
3rd signal: S10 On > Ignore this signal (discern as direction A)









4th signal: S5 On > Ignore this signal (discern as direction A)

■ Pin Configuration



■ 8 Direction Codes



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			
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Note

● Indicates applicability to all products in the series.