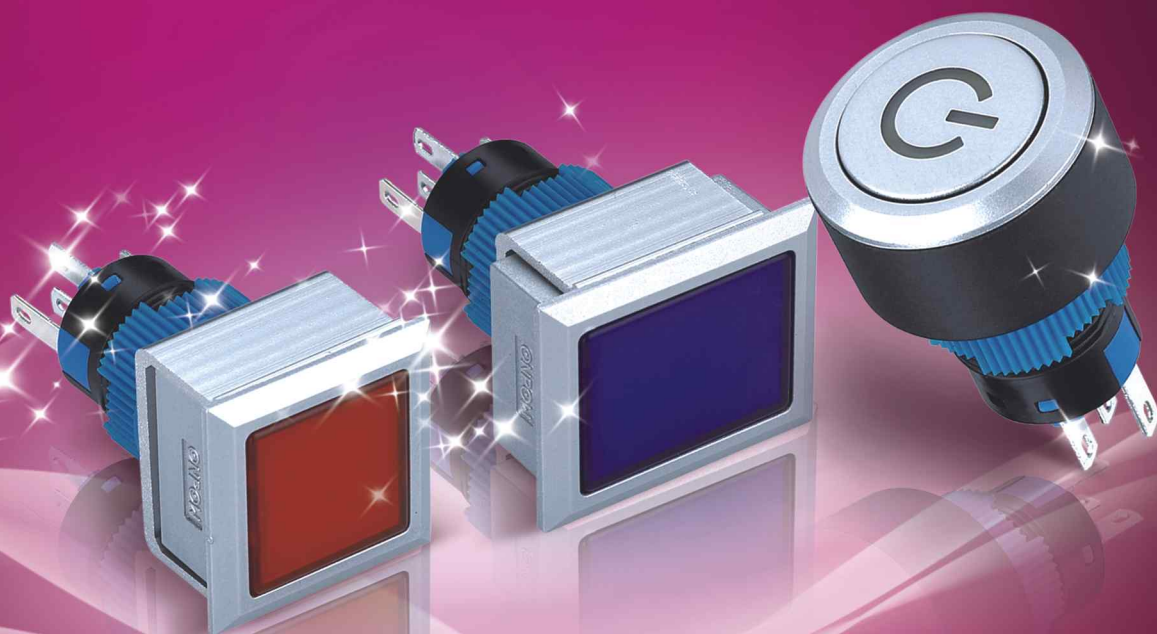


ONPOW

LAS1 series A type ($\Phi 22\text{mm}$)

Pushbutton Switch



LAS1 Series A Type Φ 22 Pushbutton Switch

Characteristic

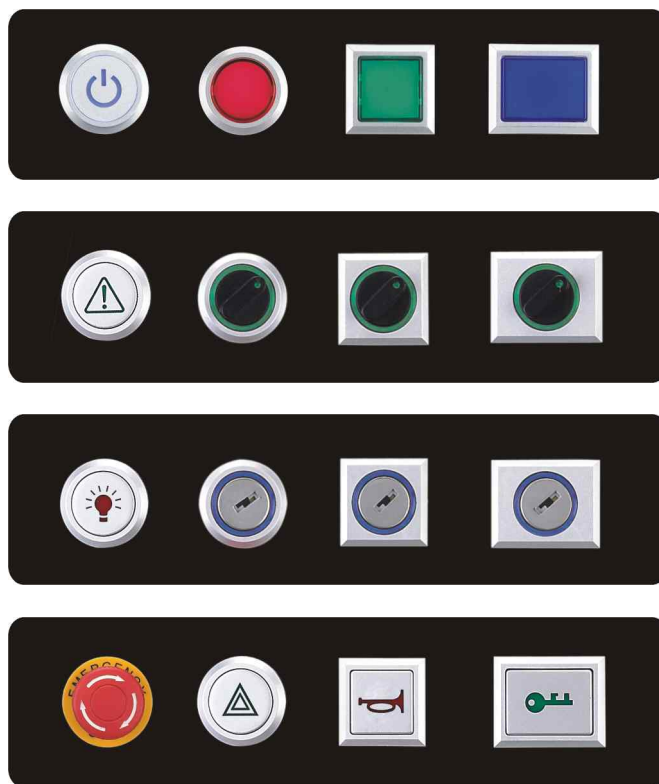
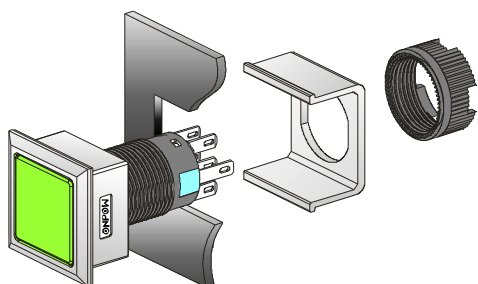
Specs It includes pilot lamp, pushbutton, illuminated pushbutton, selector switch, key-lock switch and emergency switch; the head shape could be round (Φ 25mm), square (25 × 25mm) and rectangular (25 × 31mm).

Functions With stable property, low contact resistance, strong insulation resistance, anti-vibration and anti-impact feature, products meet the standards of IEC60947-5-1, GB14048.5, etc.

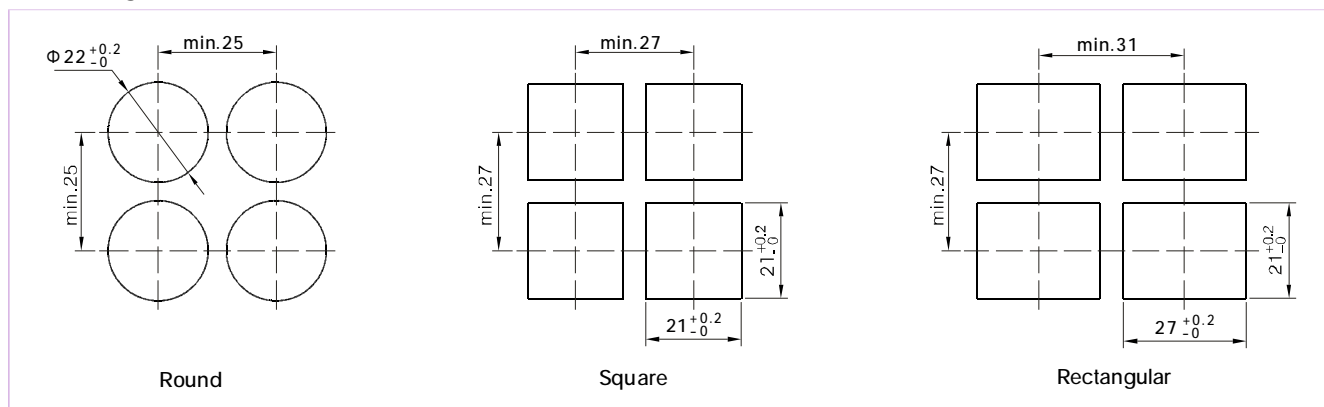
Structure The switch elements are of fast-break structure, and every elements consist of 1NO1NC. One pushbutton can collocate not more than 2 elements.

Feature Using veneering installation, the front frame of the product is only 2mm higher over the panel. The top face could be customized of various patterns.

Protective Degree IP40 or IP65.



Mounting hole dimension



Model Number Description

LAS1-A	☆	★	-	□	■	○	/	◇	◆	●	/	△	/	▲	/	◎
Code of series	Code of variety: P black frame W silvery frame	The front shape: Y round F square J rectangular	Contact Structure: 11 1NO1NC 22 2NO2NC	Code name of derivative products: D pilot lamp Z alternate type X selector type Y key-lock type TS emergency No letter means momentary	Type of illuminated symbol: T power sign No letter means normal type. Note: T type is special for round silvery frame. Other symbol can be made to order.	◇: operating position of selector and key switch: 2 two position 3 three position ◆: operation type: 1 maintain 2 right return 3 return 4 left return ● key-lock maintain position	Color: R red G green Y yellow O orange B blue W white N black	Lamp voltage (Please see the chart of lamp rating)	Protective degree: P IP65 No letter means IP40							

Note: Pls check other specification, lamp ratings, structure and terminal explanation from LAS1 series A type in ONPOW plastic products catalogue.

Switch Ratings

Rated Insulation Voltage U_i			250V			
Thermal Current I_{th}			5A			
Rated Voltage			12V	24V	110V	220V
Rated Current	Alternating Current 50/60Hz	Resistive load	—	—	1A	0.5A
		inductive load	—	—	0.7A	0.5A
	Direct Current	resistive load	1A	1A	0.2A	—
		inductive load	0.7A	0.7A	0.1A	—
Contact Material			Silver Alloy			

Minimum load: 3V AC/DC 5mA (reference) (range of use depend on operation environment and load type)

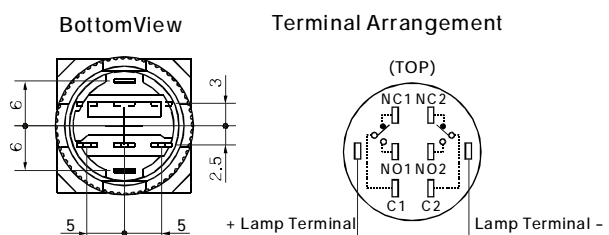
Specification

Operating Temperature		-25°C ~ +55°C (no freezing) keep the air flowing around illuminated pushbutton	
Operating Humidity		45 ~ 85%RH (no condensation)	
Contact Resistance		$\leq 50m\Omega$	
Insulation Resistance		$\geq 100M\Omega$	
Dielectric strength	Between contact and lamp terminals	2000V, AC 50Hz, 1 min	
	Between terminal of the same pole:	1000V, AC 50Hz, 1 min	
	Between terminal of different pole:	2000V, AC 50Hz, 1 min	
Vibration Resistance		50Hz, Amplitude 1.2mmp - p	
Shock Resistance		$\geq 10g$	
Life	Mechanical	Momentary Type	1,000,000 times
		Alternate and Selector Type	500,000 times
		Key- lock and Emergency Type	200,000 times
	Electrical	$\geq 50,000$ times	
Terminal		Diameter of welded wire: $2 \times 0.8mm$ Area of copper wire: $0.75mm^2$ max Connecting link: $2.8 \times 0.5mm$	
Solder Heat Resistance		230°C (no more than 3 second)	
Operating Travel		(Pushbuttons) about 3mm	

Lamp Ratings

Lamp Type	AC LED Lamp (Standard)			Neon Lamp		
Rated Voltage	AC/DC 6V	AC/DC 12V	AC/DC 24V	AC 110V	AC 220V	
	AC/DC 110V	AC/DC 220V				
Cover Color	R	G	Y	O	B	W
Life	About 40000 hours			About 20000 hours		

Note: the lamp contains a current-limiting resistor inside and doesn't need external connection.
DC LED lamp, dual-color LED lamp and other voltages can be customized.








Selector and key lock switch contact operation

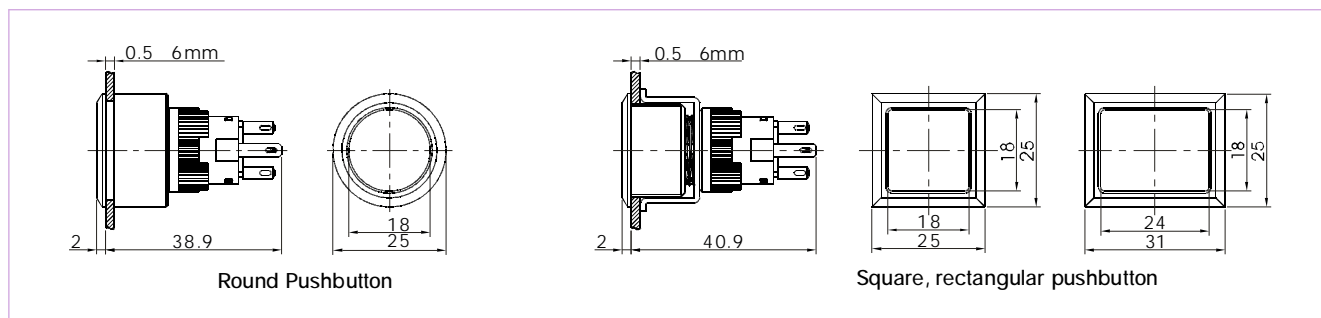
Position	Contact	Operating Position & Contact Operation		
		Left	Center	Right
90° 2 Position	1NO1NC			
	2NO2NC			
45° 3 Position	2NO2NC			

LAS1 Series A Type $\Phi 22$ pushbutton, illuminated pushbutton

Product Outline

Shape	Contact	Operation type	Model Type	Mark
Round(can be illuminated)  Silvery Frame	—	Pilot lamp	LAS1-AWY-DT/ Δ / \blacktriangle / \odot	 <ul style="list-style-type: none"> \odot The black cover can not be used for illuminated pushbutton. \odot Protective Degree: IP40 and IP65 can be chosen.
	1NO1NC	Momentary	LAS1-AWY-11T/ Δ / \blacktriangle / \odot	
		Alternate	LAS1-AWY-11ZT/ Δ / \blacktriangle / \odot	
	2NO2NC	Momentary	LAS1-AWY-22T/ Δ / \blacktriangle / \odot	
		Alternate	LAS1-AWY-22ZT/ Δ / \blacktriangle / \odot	
	Round(can be illuminated)  Silvery Frame	—	Pilot lamp	
1NO1NC		Momentary	LAS1-AWY-11/ Δ / \blacktriangle / \odot	
		Alternate	LAS1-AWY-11Z/ Δ / \blacktriangle / \odot	
2NO2NC		Momentary	LAS1-AWY-22/ Δ / \blacktriangle / \odot	
		Alternate	LAS1-AWY-22Z/ Δ / \blacktriangle / \odot	
Square(can be illuminated)  Silvery Frame		—	Pilot lamp	
	1NO1NC	Momentary	LAS1-AWF-11/ Δ / \blacktriangle / \odot	
		Alternate	LAS1-AWF-11Z/ Δ / \blacktriangle / \odot	
	2NO2NC	Momentary	LAS1-AWF-22/ Δ / \blacktriangle / \odot	
		Alternate	LAS1-AWF-22Z/ Δ / \blacktriangle / \odot	
	Rectangular(can be illuminated)  Silvery Frame	—	Pilot lamp	LAS1-AWJ-DT/ Δ / \blacktriangle / \odot
1NO1NC		Momentary	LAS1-AWJ-11T/ Δ / \blacktriangle / \odot	
		Alternate	LAS1-AWJ-11ZT/ Δ / \blacktriangle / \odot	
2NO2NC		Momentary	LAS1-AWJ-22T/ Δ / \blacktriangle / \odot	
		Alternate	LAS1-AWJ-22ZT/ Δ / \blacktriangle / \odot	

Product overall dimension



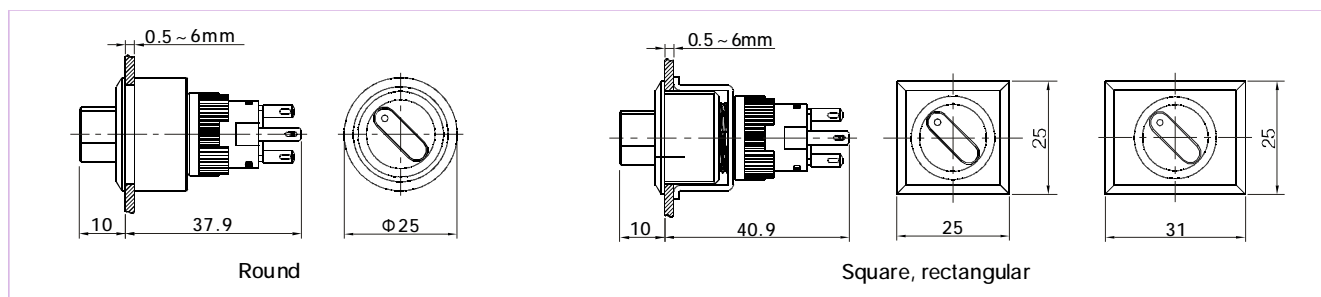
LAS1 Series A type $\Phi 22$ Selector switch

Product cutline

Shape	Operating Position	Contact	Model Number	Mark
Round(can be illuminated)  Silvery Frame	 90° 2 position maintain	1NO1NC	LAS1-AWY-11X/21/ Δ / \blacktriangle / \odot	 <ul style="list-style-type: none"> \odot The black cover can not be used for illuminated pushbutton. \odot Protective Degree: IP40 and IP65 can be chosen.
		2NO2NC	LAS1-AWY-22X/21/ Δ / \blacktriangle / \odot	
	 90° 2 position return	1NO1NC	LAS1-AWY-11X/23/ Δ / \blacktriangle / \odot	
		2NO2NC	LAS1-AWY-22X/23/ Δ / \blacktriangle / \odot	
	 45° 3 position maintain	2NO2NC	LAS1-AWY-22X/31/ Δ / \blacktriangle / \odot	
	 45° 3 position right return	2NO2NC	LAS1-AWY-22X/32/ Δ / \blacktriangle / \odot	
 45° 3 position left return	2NO2NC	LAS1-AWY-22X/34/ Δ / \blacktriangle / \odot		
 45° 3 position return	2NO2NC	LAS1-AWY-22X/33/ Δ / \blacktriangle / \odot		
Square(can be illuminated))  Silvery Frame	 90° 2 position maintain	1NO1NC	LAS1-AWF-11X/21/ Δ / \blacktriangle / \odot	
		2NO2NC	LAS1-AWF-22X/21/ Δ / \blacktriangle / \odot	
	 90° 2 position return	1NO1NC	LAS1-AWF-11X/23/ Δ / \blacktriangle / \odot	
		2NO2NC	LAS1-AWF-22X/23/ Δ / \blacktriangle / \odot	
	 45° 3 position maintain	2NO2NC	LAS1-AWF-22X/31/ Δ / \blacktriangle / \odot	
	 45° 3 position right return	2NO2NC	LAS1-AWF-22X/32/ Δ / \blacktriangle / \odot	
 45° 3 position left return	2NO2NC	LAS1-AWF-22X/34/ Δ / \blacktriangle / \odot		
 45° 3 position return	2NO2NC	LAS1-AWF-22X/33/ Δ / \blacktriangle / \odot		
Rectangular(can be illuminated)  Silvery Frame	 90° 2 position maintain	1NO1NC	LAS1-AWJ-11X/21/ Δ / \blacktriangle / \odot	
		2NO2NC	LAS1-AWJ-22X/21/ Δ / \blacktriangle / \odot	
	 90° 2 position return	1NO1NC	LAS1-AWJ-11X/23/ Δ / \blacktriangle / \odot	
		2NO2NC	LAS1-AWJ-22X/23/ Δ / \blacktriangle / \odot	
	 45° 3 position maintain	2NO2NC	LAS1-AWJ-22X/31/ Δ / \blacktriangle / \odot	
	 45° 3 position right return	2NO2NC	LAS1-AWJ-22X/32/ Δ / \blacktriangle / \odot	
 45° 3 position left return	2NO2NC	LAS1-AWJ-22X/34/ Δ / \blacktriangle / \odot		
 45° 3 position return	2NO2NC	LAS1-AWJ-22X/33/ Δ / \blacktriangle / \odot		


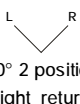



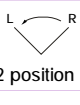

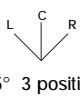







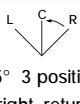



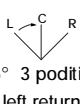





Mark: Contact condition of different operating position refer to P02 (Selector and key lock switch contact operation).

Product overall dimension



● LAS1 Series A type $\Phi 22$ Key-lock Switch

Product cutline

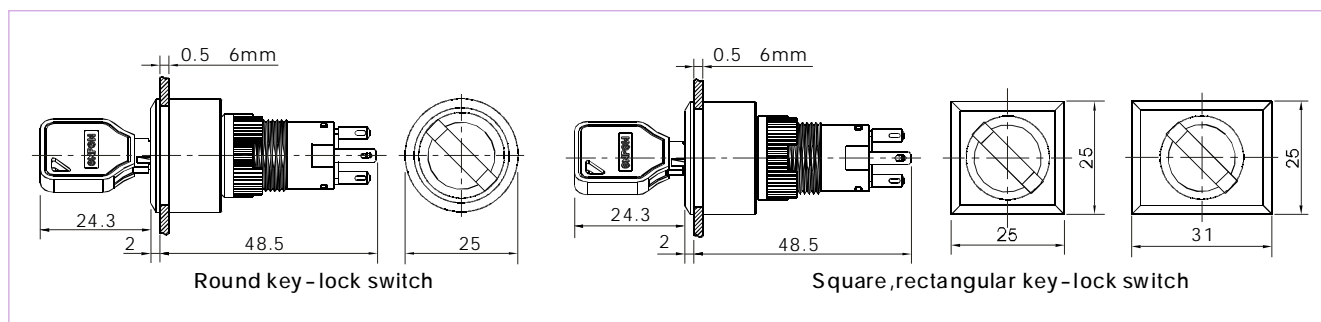
Shape	Operating position	Key Retained at Position	Contact	Model Number	Mark		
Key-Lock switch (can be illuminated) Silvery Frame  Round: LAS1-AWY	 90° 2 position right return	A		1NO1NC 2NO2NC	LAS1-AW★-11Y/21A/ Δ / \blacktriangle / \circ LAS1-AW★-22Y/21A/ Δ / \blacktriangle / \circ		
		B		1NO1NC 2NO2NC	LAS1-AW★-11Y/21B/ Δ / \blacktriangle / \circ LAS1-AW★-22Y/21B/ Δ / \blacktriangle / \circ		
		C		2NO2NC 2NO2NC	LAS1-AW★-11Y/21C/ Δ / \blacktriangle / \circ LAS1-AW★-22Y/21C/ Δ / \blacktriangle / \circ		
		 90° 2 position return	C		1NO1NC 2NO2NC	LAS1-AW★-11Y/23C/ Δ / \blacktriangle / \circ LAS1-AW★-22Y/23C/ Δ / \blacktriangle / \circ	
			 45° 3 position maintain	A		2NO2NC	LAS1-AW★-22Y/31A/ Δ / \blacktriangle / \circ
				B		2NO2NC	LAS1-AW★-22Y/31B/ Δ / \blacktriangle / \circ
	C				2NO2NC	LAS1-AW★-22Y/31C/ Δ / \blacktriangle / \circ	
	D				2NO2NC	LAS1-AW★-22Y/31D/ Δ / \blacktriangle / \circ	
	E				2NO2NC	LAS1-AW★-22Y/31E/ Δ / \blacktriangle / \circ	
	G			2NO2NC	LAS1-AW★-22Y/31G/ Δ / \blacktriangle / \circ		
	H			2NO2NC	LAS1-AW★-22Y/31H/ Δ / \blacktriangle / \circ		
	 45° 3 position right return	B			2NO2NC	LAS1-AW★-22Y/32B/ Δ / \blacktriangle / \circ	
D			2NO2NC	LAS1-AW★-22Y/32D/ Δ / \blacktriangle / \circ			
G			2NO2NC	LAS1-AW★-22Y/32G/ Δ / \blacktriangle / \circ			
 45° 3 position left return		C		2NO2NC	LAS1-AW★-22Y/34C/ Δ / \blacktriangle / \circ		
		D		2NO2NC	LAS1-AW★-22Y/34D/ Δ / \blacktriangle / \circ		
		H		2NO2NC	LAS1-AW★-22Y/34H/ Δ / \blacktriangle / \circ		
		 45° 3 position return	D		2NO2NC	LAS1-AW★-22Y/33D/ Δ / \blacktriangle / \circ	

R G Y O B W N

- ⊙ The black cover can not be used for illuminated pushbutton.
- ⊙ Protective Degree: IP40 and IP65 can be chosen.
- ⊙ ★The front shape: Y round; F square; J rectangular


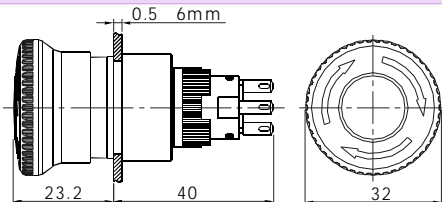
Mark: Contact condition of different operating position refer to P02 (Selector and key lock switch contact operation).

Product overall dimension



● LAS1 Series A Type Φ 22 Emergency Switch




Product Outline




Shape	Contact	Model Number	Dimension and Description
	1NO1NC	LAS1-APY-11TS/⊙	
	2NO2NC	LAS1-APY-22TS/⊙	

⊙ R ⊙ Protective degree: IP40, IP65 for chosen

● Black Frame Product

Model selection refer to LAS1-AW Silver Frame Type

Type	Round signal lamp, round pushbutton, round illuminated pushbutton LAS1-APY-□■/△/▲/⊙	Square signal lamp, pushbutton, illuminated pushbutton LAS1-APF-□■/△/▲/⊙	Rectangular signal lamp, pushbutton, illuminated pushbutton LAS1-APJ-□■/△/▲/⊙
Shape			

Type	Round selector, illuminated selector LAS1-APY-□X/◇◆/△/▲/⊙	Square selector, illuminated selector LAS1-APF-□X/◇◆/△/▲/⊙	Rectangular selector, illuminated selector LAS1-APJ-□X/◇◆/△/▲/⊙
Shape			

Type	Round key switch, illuminated key switch LAS1-APY-□Y/◇◆●/△/▲/⊙	Square key switch, illuminated key switch LAS1-APF-□Y/◇◆●/△/▲/⊙	Rectangular key switch, illuminated key switch LAS1-APJ-□Y/◇◆●/△/▲/⊙
Shape	