



Illustration	Lamp Voltage	Switching Position	Contact Configuration			Part Number	Outer Dimension
			Left	Center	Right		

Round Selector Switch

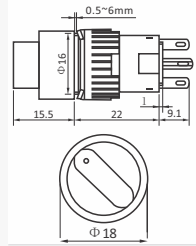


2 Position: Stay Put 90°

-	I - II		-		90P1-LAS1-AY-11X/21/N/P
-	I - II		-		90P1-LAS1-AY-22X/21/N/P

3 Position: Stay Put 45°

-	I - 0 - II							90P1-LAS1-AY-22X/31D/N/P
---	------------	--	--	--	--	--	--	---------------------------------



Round Illuminated Selector Switch

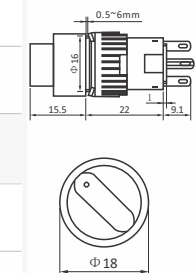


2 Position: Stay Put 90°

● 24V	I - II		-		90P1-LAS1-AY-11X/21/G/024/P
● 24V	I - II		-		90P1-LAS1-AY-22X/21/G/024/P

3 Position: Stay Put 45°

● 24V	I - 0 - II							90P1-LAS1-AY-22X/31D/G/024/P
● 24V	I - 0 - II							90P1-LAS1-AY-22X/31D/R/024/P



Square Selector Switch

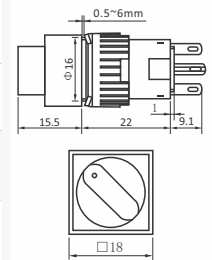


2 Position: Stay Put 90°

-	I - II		-		90P1-LAS1-AF-11X/21/N/P
-	I - II		-		90P1-LAS1-AF-22X/21/N/P

3 Position: Stay Put 45°

-	I - 0 - II							90P1-LAS1-AF-22X/31D/N/P
---	------------	--	--	--	--	--	--	---------------------------------



Square Illuminated Selector Switch



2 Position: Stay Put 90°

■ 24V	I - II		-		90P1-LAS1-AF-11X/21/G/024/P
■ 24V	I - II		-		90P1-LAS1-AF-22X/21/G/024/P
■ 24V	I - II		-		90P1-LAS1-AF-11X/21/R/024/P
■ 24V	I - II		-		90P1-LAS1-AF-22X/21/R/024/P

3 Position: Stay Put 45°

■ 24V	I - 0 - II							90P1-LAS1-AF-22X/31D/G/024/P
■ 24V	I - 0 - II							90P1-LAS1-AF-22X/31D/R/024/P

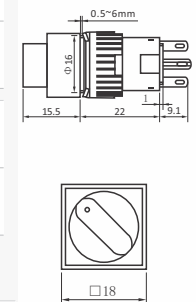


Illustration	Lamp Voltage	Switching Position	Contact Configuration			Part Number	Outer Dimension
			Left	Center	Right		

Rectangle Selector Switch

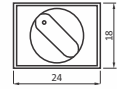
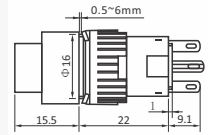
2 Position: Stay Put 90°



-	I - II		NO NC	-	NO NC	90P1-LAS1-AJ-11X/21/N/P
-	I - II		NO NC NO NC [L] C [R] C	-	NO NC NO NC [L] C [R] C	90P1-LAS1-AJ-22X/21/N/P

3 Position: Stay Put 45°

-	I - 0 - II		NO NC NO NC [L] C [R] C	NO NC NO NC [L] C [R] C	NO NC NO NC [L] C [R] C	90P1-LAS1-AJ-22X/31D/N/P
---	------------	--	----------------------------	----------------------------	----------------------------	--------------------------

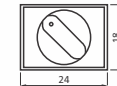
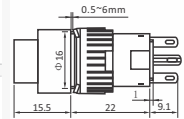


Rectangle Illuminated Selector Switch

2 Position: Stay Put 90°



24V	I - II		NO NC	-	NO NC	90P1-LAS1-AJ-11X/21/G/024/P
24V	I - II		NO NC NO NC [L] C [R] C	-	NO NC NO NC [L] C [R] C	90P1-LAS1-AJ-22X/21/G/024/P
24V	I - II		NO NC	-	NO NC	90P1-LAS1-AJ-11X/21/R/024/P
24V	I - II		NO NC NO NC [L] C [R] C	-	NO NC NO NC [L] C [R] C	90P1-LAS1-AJ-22X/21/R/024/P



3 Position: Stay Put 45°

24V	I - 0 - II		NO NC NO NC [L] C [R] C	NO NC NO NC [L] C [R] C	NO NC NO NC [L] C [R] C	90P1-LAS1-AJ-22X/31D/G/024/P
24V	I - 0 - II		NO NC NO NC [L] C [R] C	NO NC NO NC [L] C [R] C	NO NC NO NC [L] C [R] C	90P1-LAS1-AJ-22X/31D/R/024/P



Illustration	Lamp Voltage	Switching Position	Contact Configuration			Part Number	Outer Dimension
			Left	Center	Right		

Round Key Switch

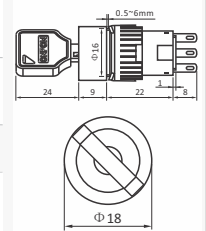


2 Position: Stay Put 90°

-	I - II		NO NC	-	NO NC	90P1-LAS1-AY-11Y/21/P
-	I - II		NO NC NO NC [L] C [R] C	-	NO NC NO NC [L] C [R] C	90P1-LAS1-AY-22X/21/P

3 Position: Stay Put 45°

-	I - 0 - II		NO NC NO NC [L] C [R] C	NO NC NO NC [L] C [R] C	NO NC NO NC [L] C [R] C	90P1-LAS1-AY-22Y/31D/P
---	------------	--	----------------------------	----------------------------	----------------------------	------------------------



Square Key Switch

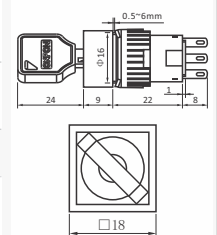


2 Position: Stay Put 90°

-	I - II		NO NC	-	NO NC	90P1-LAS1-AF-11Y/21/P
-	I - II		NO NC NO NC [L] C [R] C	-	NO NC NO NC [L] C [R] C	90P1-LAS1-AF-22X/21/P

3 Position: Stay Put 45°

-	I - 0 - II		NO NC NO NC [L] C [R] C	NO NC NO NC [L] C [R] C	NO NC NO NC [L] C [R] C	90P1-LAS1-AF-22Y/31D/P
---	------------	--	----------------------------	----------------------------	----------------------------	------------------------



Rectangle Key Switch

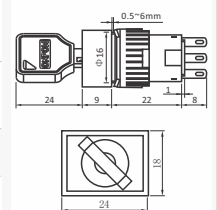


2 Position: Stay Put 90°

-	I - II		NO NC	-	NO NC	90P1-LAS1-AJ-11Y/21/P
-	I - II		NO NC NO NC [L] C [R] C	-	NO NC NO NC [L] C [R] C	90P1-LAS1-AJ-22X/21/P

3 Position: Stay Put 45°

-	I - 0 - II		NO NC NO NC [L] C [R] C	NO NC NO NC [L] C [R] C	NO NC NO NC [L] C [R] C	90P1-LAS1-AJ-22Y/31D/P
---	------------	--	----------------------------	----------------------------	----------------------------	------------------------



TECHNICAL INFORMATION:

Product Description:

+ Specification:

The bezel of the products is available in 3 shapes: **Round** (Ø18mm), **Square** (18 x 18mm), **Rectangle** (18 x 24mm).

Including the Pilot Lights, Pushbuttons, Illuminated Pushbuttons, Selector Switches, Key Switches, Emergency Stops and Buzzers.

The **mounting cut-out is Ø16mm**, some products can be equipped with an adaptor ring to install the product in the **Ø22mm mounting cut-out**.

+ Data:

The product has the characteristics of stable performance, low contact resistance, strong insulation, resistance to vibration and shock, etc.; meets IEC60947-5-1, GB14048.5 and other standards.

+ Construction:

Snap-Action switching element. Each switching element contains a normally Open and a normally Close.

Each button can be configured with a maximum of 2 switching elements. Gold plated terminal gives protection against corrosion in harsh environment.

+ Protection Rating

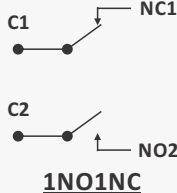
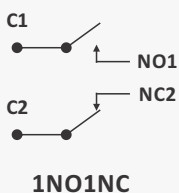
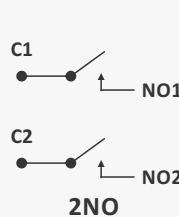
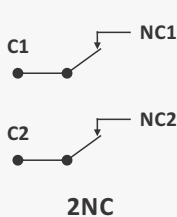
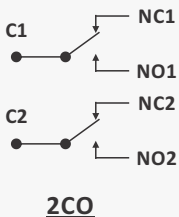
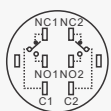
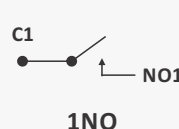
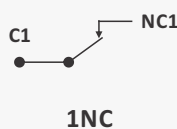
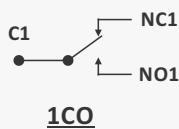
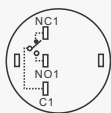
Products have **IP65**. By adding **S09 Sealing Cover**, the protection can be extended to **IP67**.

* *except Buzzer which is IP40.*

Rated Insulation Voltage		250V				
Thermal Current I _{th}		5A temperature do not exceed the highest rated allowed current				
Rated Operating Voltage		12V	24V	110V	220V	
Rated Operating Current	Frequency 50/60 Hz	Resistive Load	-	-	1A	0.5A
		Inductive Load	-	-	0.7A	0.5A
Rated Operating Current	DC	Resistive Load	1A	1A	0.2A	-
		Inductive Load	0.7A	0.7A	0.1A	-
Contact Material		Silver Alloy				

Bulb Type	Dual Direction LED		
Rated Voltage	AC/DC 6V	AC/DC 12V	AC/DC 24V
	AC/DC 110V	AC/DC 220V	
Illumination Colors	R	G	Y O B W
Lifespan	approx. 40,000 hours		

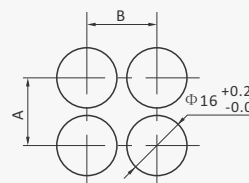
+ Possible Contact Configuration:



+ Specification Features:

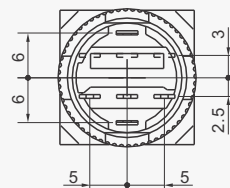
Operation Environment	(-)25°C ~ (+) 55°C (no freezing) Contact Body surroundings must have airflow	
Environment	45-85% RH (no condensation)	
Contact Resistance	≤ 50mΩ	
Insulation Resistance	≥ 100MΩ	
Overvoltage	Between the Contact Terminals & Lamp	2000 V, 50 Hz AC, 1 Minute
	Between the Same Terminal	1500 V, 50 Hz, 1 Minute
	Between the Different Terminal	2000 V, 50 Hz, 1 Minute
Vibration Assistance	50 Hz, Amplitude Approx 1.2mm	
Shock Assistance	Until 10g	
Lifespan	Mechanics	
	Momentary	1,000,000
	Latching, Selector	500,000
Key, Emergency	200,000	
Electrical	50,000 and above	
Wire Connection	Soldering Diameter: 2 x 0.68mm Largest copper wire area: 0.75mm ² Faston Terminals: 2.8 x 0.5	
Solder Heat Resistance	320°C (or 30 watt soldering iron) not more than 2 sec	
Travel	Pushbutton Approx. 3mm travel	
Operating Force	(On Lens Cap) According to no. of contacts 1 ~ 4 Newton (100gf ~ 400gf)	

+ Cut-out Dimensions:



Type	A	B
Circle	≥ 18mm	≥ 18mm
Sqaure	≥ 18mm	≥ 18mm
Rectangle	≥ 18mm	≥ 24mm
Mushroom	≥ 24mm	≥ 24mm

+ Bottom View:



+ Terminal configuration:

