

Characteristic

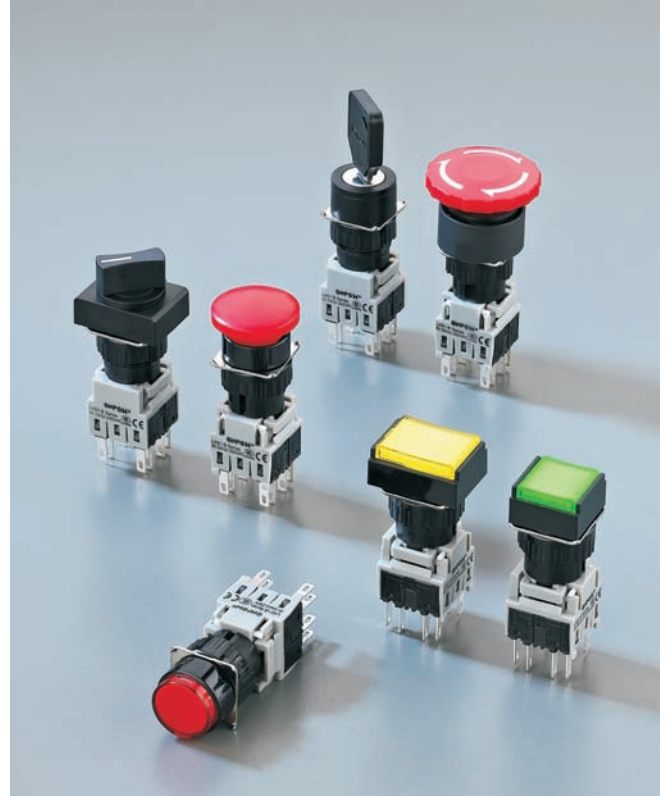
LAS1-B series products have complete range, some products have three types of head shape: round, square and rectangular (see details from content page) and each pushbutton could use 1~3 pcs elements(except for pin terminal version), could meet customer's different requirements.

Specs Including pushbutton, signal light, emergency-stop switch, selector switch, key-lock switch, mushroom switch; mounting hole diameter is $\Phi 16\text{mm}$.

Performance Stable function, low contact resistance, strong insulation resistance and anti-vibration etc. Meet the standards of IEC60947-5-1, GB/T14048.5 etc.

Structure The switch element is "double-break fast-motion, self-cleaning". Each element contains 1NO+1NC contacts, each pushbutton could use 3 pcs elements at most.

Protective Degree IP40

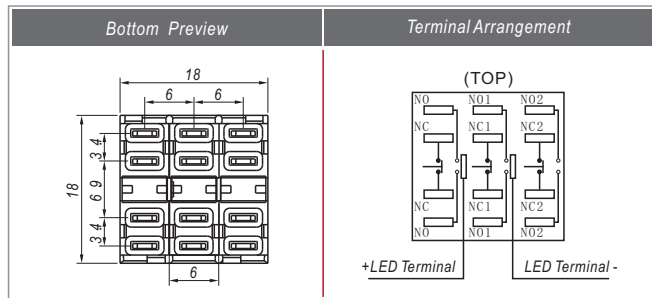


LAS1-B Switch Ratings

| | | | | | | |
|--------------------------------|---------------|--|-----|------|------|------|
| Rated Insulation Voltage U_i | | 250V | | | | |
| Thermal Current I_{th} | | 5A Temperature rise can't over the Max. rating current | | | | |
| Rated Voltage | | 12V | 24V | 110V | 220V | |
| Rated Current | AC 50/60Hz | Resistive Load | — | 5A | 3A | |
| | | Inductive Load | — | 3A | 2A | |
| | DC | Resistive Load | 5A | 5A | 1A | 0.5A |
| | | Inductive Load | 2A | 2A | 0.2A | 0.1A |
| Contact Material | | Silver Alloy | | | | |

Minimum load: 3VAC/DC 5mA (use range depend on operation environment and load type).

Bottom Preview and Terminal Arrangement



Installation Dimension

| | | | |
|---------------|--------------------|--------------------|--------------------|
| | Type | A | B |
| | Round | $\geq 18\text{mm}$ | $\geq 18\text{mm}$ |
| | Square | $\geq 18\text{mm}$ | $\geq 18\text{mm}$ |
| | Rectangular | $\geq 18\text{mm}$ | $\geq 24\text{mm}$ |
| | Mushroom | $\geq 24\text{mm}$ | $\geq 24\text{mm}$ |
| E-stop Switch | $\geq 32\text{mm}$ | $\geq 32\text{mm}$ | |

Specification

| | | |
|--------------------------|--|-----------------------------|
| Operating Temperature | -25°C~+55°C (no freezing) Keep good ventilation round the switch. | |
| Operating Humidity | 45~85%RH(no condensation) | |
| Contact Resistance | $\leq 50\text{m}\Omega$ | |
| Insulation Resistance | $> 100\text{M}\Omega$ (500VDC) | |
| Rated insulation Voltage | 250VAC/DC | |
| Dielectric Strength | Between contact and LED terminals | 2000V, AC 50Hz, 1 min |
| | Between terminals of the same pole | 1500VAC 50Hz, 1 min |
| | Between terminals of different poles | 2000VAC 50Hz, 1 min |
| Vibration Resistance | 50Hz&litude 1.2mm | |
| Mechanical Life | Momentary Pushbutton | 1,000,000 times |
| | Latching Pushbutton, Selector Switch | 500,000 times |
| | Key-lock Switch | 200,000 times |
| Electrical Life | 50,000 times | |
| Wiring | Diameter of wire: | $2 \times 0.8\text{mm}$ max |
| | Area of copper wire: | 0.75mm^2 |
| | Pin Terminal: | $2.8 \pm 0.5\text{mm}$ |
| Solder Heat Resistance | 320j 3s | |
| Operating Travel | About 3mm | |
| Operating Force | About 2.8N(1NO1NC) / About 3.5N(2NO2NC) / | |
| | About 4.7N(3NO3NC) | |

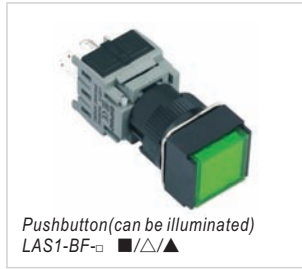
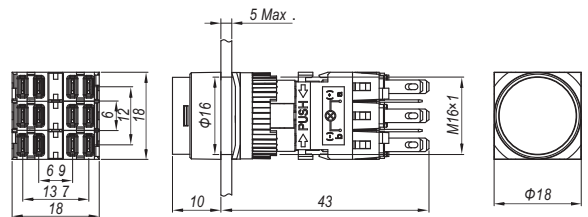
Lamp Ratings

| | | | |
|--------------------|--|-------------------------------------|--|
| LED Life | Current | Allowable Voltage Fluctuation Range | Circuit Diagram |
| ≥ 40000 hours | $\leq 24\text{V}$ about 15mA $\geq 110\text{V}$ about 2mA | DC: $\pm 10\%$ AC: $\pm 20\%$ | <p>Use internal resistor and no distinction between positive and negative poles.</p> |

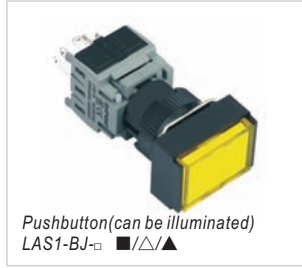
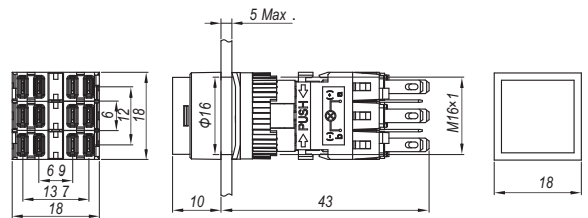
Φ16mm Product Cutline **Specification** **Dimension**



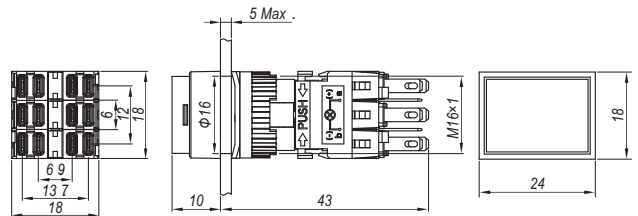
Contact □ 1NO1NC / 2NO2NC / 3NO3NC
 Operation Type ■ No letter means momentary / Z: Latching
 Color △ R G Y B W N
 LED Voltage ▲ 6V / 12V / 24V / 220V
 Protection Degree IP40
 Accessory Switch Guard S01 / Sealing Cover S09-S1Y



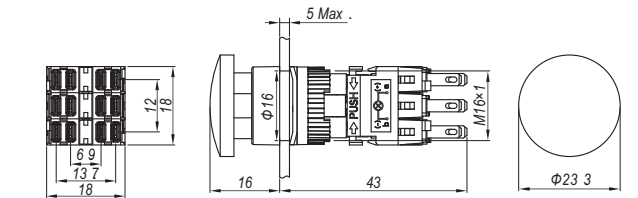
Contact □ 1NO1NC / 2NO2NC / 3NO3NC
 Operation Type ■ No letter means momentary / Z: Latching
 Color △ R G Y B W N
 LED Voltage ▲ 6V / 12V / 24V / 220V
 Protection Degree IP40
 Accessory Switch Guard S01 / Sealing Cover S09-S1F



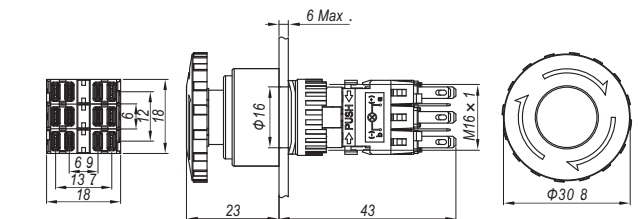
Contact □ 1NO1NC / 2NO2NC / 3NO3NC
 Operation Type ■ No letter means momentary / Z: Latching
 Color △ R G Y B W N
 LED Voltage ▲ 6V / 12V / 24V / 220V
 Protection Degree IP40
 Accessory Switch Guard S01 / Sealing Cover S09-S1J



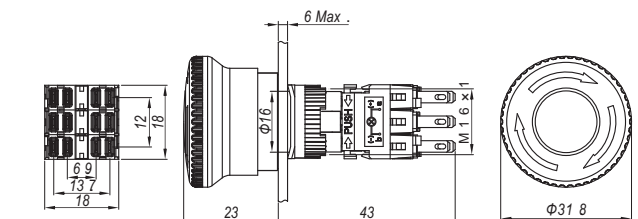
Contact □ 1NO1NC / 2NO2NC / 3NO3NC
 Operation Type ■ No letter means momentary / Z: Latching
 Color △ R G
 LED Voltage ▲ 6V / 12V / 24V / 220V
 Protection Degree IP40
 Accessory T34-16


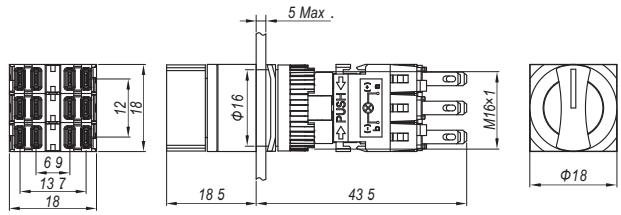

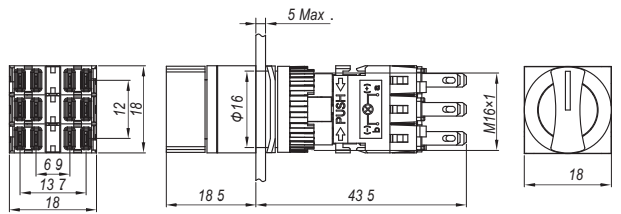

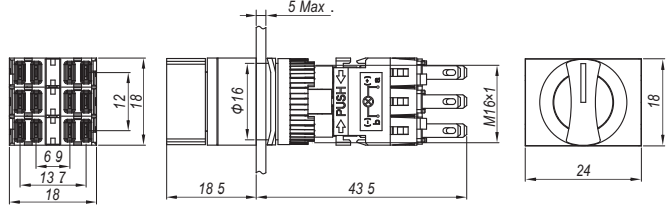


Contact □ 1NO1NC / 2NO2NC / 3NO3NC
 LED Voltage ▲ 6V / 12V / 24V / 220V
 Protection Degree IP40




Contact □ 1NO1NC / 2NO2NC / 3NO3NC
 Protection Degree IP40





| Φ16mm Product Outline | Specification | Dimension | | |
|--|---|---|--|--|
|  Selector Switch LAS1-BY X/◇ ◆ | Contact □ 1NO1NC / 2NO2NC / 3NO3NC Operation Type ◇ ◆ Refer to notes Protection Degree IP40 |  | | |
|  Selector Switch LAS1-BF X/◇ ◆ | Contact □ 1NO1NC / 2NO2NC / 3NO3NC Operation Type ◇ ◆ Refer to notes Protection Degree IP40 |  | | |
|  Selector Switch LAS1-BJ X/◇ ◆ | Contact □ 1NO1NC / 2NO2NC / 3NO3NC Operation Type ◇ ◆ Refer to notes Protection Degree IP40 |  | | |


Notes


- ⦿ Operation Position ◇ ◆


 21: L → R


 23: L → R


 31: L — C — R


 32: L — C — R


 33: L — C — R

32 is return from right, could customize for return from left
- ⦿ All caps are black; can't be illuminated; could control 3 circuits output separately

Contact State of Selector and Key-lock Switch

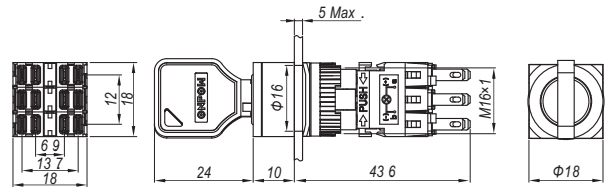
| Switch Type / Operation Position | 90° 2 Position | | | 90° 3 Position | | | |
|----------------------------------|----------------|------------------|-------------------------|------------------|------------------|------------------|-------------------------|
| | 1NO1NC | 2NO2NC | 3NO3NC | 2NO2NC | 2NO2NC | 2NO2NC | 3NO3NC |
| ↙ | ●● ○ ○ | ●● ●● ○ ○ ○ ○ | ●● ●● ●● ○ ○ ○ ○ ○ ○ | ●● ●● ○ ○ ○ ○ | ●● ●● ○ ○ ○ ○ | ●● ●● ○ ○ ○ ○ | ●● ●● ●● ○ ○ ○ ○ ○ ○ |
| ↑ | | | | ●● ●● ○ ○ ○ ○ | ●● ●● ○ ○ ○ ○ | ●● ●● ○ ○ ○ ○ | ●● ●● ●● ○ ○ ○ ○ ○ ○ |
| ↘ | ●● ○ ○ | ●● ●● ○ ○ ○ ○ | ●● ●● ●● ○ ○ ○ ○ ○ ○ | ●● ●● ○ ○ ○ ○ | ●● ●● ○ ○ ○ ○ | ●● ●● ○ ○ ○ ○ | ●● ●● ●● ○ ○ ○ ○ ○ ○ |



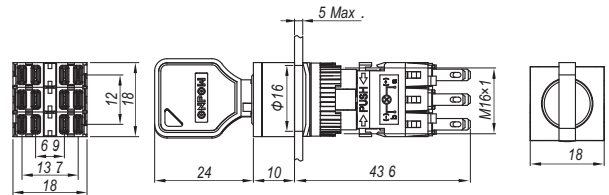
Φ16mm Product Cutline **Specification** **Dimension**



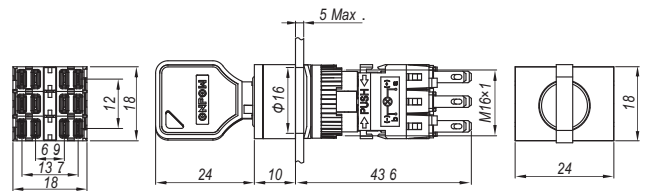
Contact □ 1NO1NC / 2NO2NC / 3NO3NC
 Operation Type ◇ ◆ Refer to notes
 Protection Degree IP40



Contact □ 1NO1NC / 2NO2NC / 3NO3NC
 Operation Type ◇ ◆ Refer to notes
 Protection Degree IP40



Contact □ 1NO1NC / 2NO2NC / 3NO3NC
 Operation Type ◇ ◆ Refer to notes
 Protection Degree IP40



Notes

- ⦿ Operation Position
 - 21:
 - 23:
 - 31:
 - 32:
 - 33:
 - ⦿ Provide 2 keys, need rotate into position when using. The keys are removable at each position, also can be customized for maintained at specified position. All keys are same.
- 32 is return from right, could customize for return from left

Contact State of Selector and Key-lock Switch

| Switch Type / Operation Position | 90° 2 Position | | | 90° 3 Position | | | |
|----------------------------------|----------------|--------|--------|----------------|--------|--------|--------|
| | 1NO1NC | 2NO2NC | 3NO3NC | 2NO2NC | 2NO2NC | 2NO2NC | 3NO3NC |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

