

Characteristic

LAS1-A series products have complete range, wide market application, some products have three types of head shape: round, square and rectangular (see details from content page) the structure is used by multi-series products of our company's products, is well received by users. The P(W) type pushbutton and signal light use veneering installation, the front frame is only 2mm higher over panel, is fashionable and goodlooking.

Specs Including pushbutton, signal light, emergency-stop switch, key-lock switch, selector switch and mushroom switch; mounting hole diameter is $\Phi 16\text{mm}$, $\Phi 22\text{mm}$, $21 \times 21\text{mm}$ (square) and $21 \times 27\text{mm}$ (rectangular).

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 "fast-motion". Each element contains 1NO+1NC contacts, each pushbutton could use 2 pcs elements at most.

Protective Degree The standard is IP40, some can be customized for IP65.



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	—	—	1A	0.5A
		Inductive Load	—	—	0.7A	0.5A
	DC	Resistive Load	1A	1A	0.2A	—
		Inductive Load	0.7A	0.7A	0.1A	—
Contact Material		Silver Alloy				

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

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	$\geq 24\text{mm}$	$\geq 24\text{mm}$
	Big Square	$\geq 24\text{mm}$	$\geq 24\text{mm}$
	Big Rectangular	$\geq 18\text{mm}$	$\geq 24\text{mm}$

Bottom Preview and Terminal Arrangement

Bottom Preview	Terminal Arrangement

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	2000VAC, 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, amplitude 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	$2.8 \times 0.5\text{mm}$
Solder Heat Resistance	320°C 3s	
Operating Travel	About 3mm	
Operating Force	About 1.7N (1NO1NC) / About 3N (2NO2NC)	

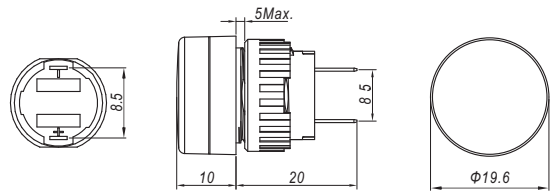
Lamp Ratings

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>

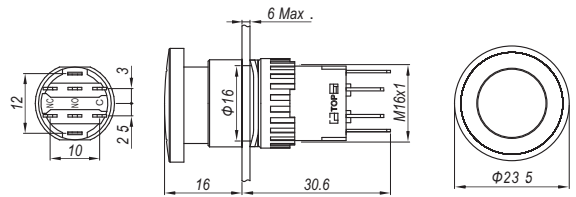
Φ16mm Product Cutline Specification Dimension



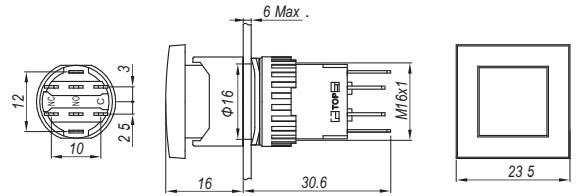
LED Color△ **R G Y B W**
 LED Voltage▲ 6V / 12V / 24V / 110V / 220V
 Protection Degree※ No letter means IP40 / P:IP65
 Accessory Switch Guard S01 / Scutcheon Frame S19 / Sealing Cover S09-S1Y



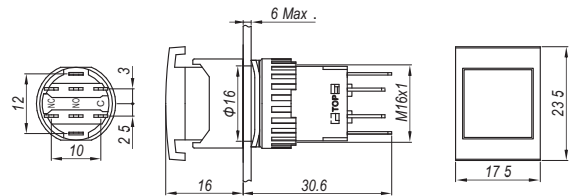
Contact□ 11: 1NO1NC / 22: 2NO2NC
 Operation Type No letter means momentary / Z: Latching
 Color△ **R G**
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 Accessory Solder Terminal S04 / PCB Terminal S05 / Switch Guard T34-16



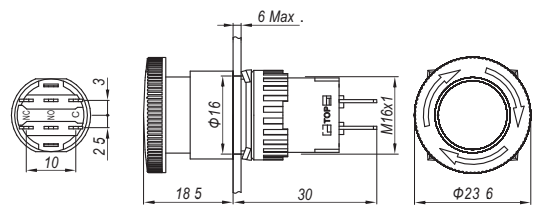
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 Accessory Solder Terminal S04 / PCB Terminal S05



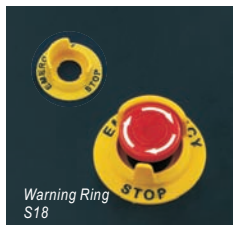
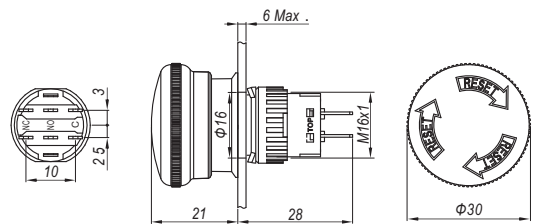
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 Protection Degree※ No letter means IP40 / P:IP65
 Accessory Solder Terminal S04 / PCB Terminal S05



Contact□ 11: 1NO1NC / 22: 2NO2NC
 Protection Degree※ No letter means IP40 / P:IP65
 Accessory Solder Terminal S04 / PCB Terminal S05 / Warning Ring S18



Contact□ 11: 1NO1NC / 22: 2NO2NC
 Protection Degree※ No letter means IP40 / P:IP65
 Accessory Solder Terminal S04 / PCB Terminal S05 / Switch Guard T34-16



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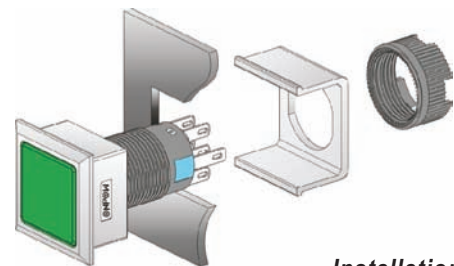
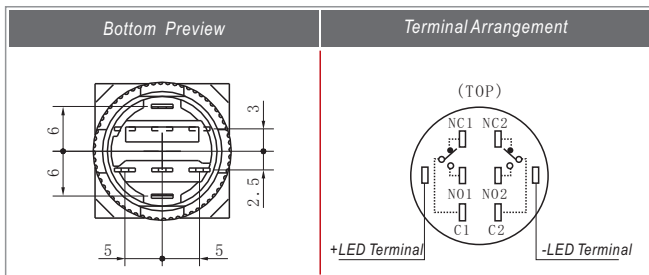
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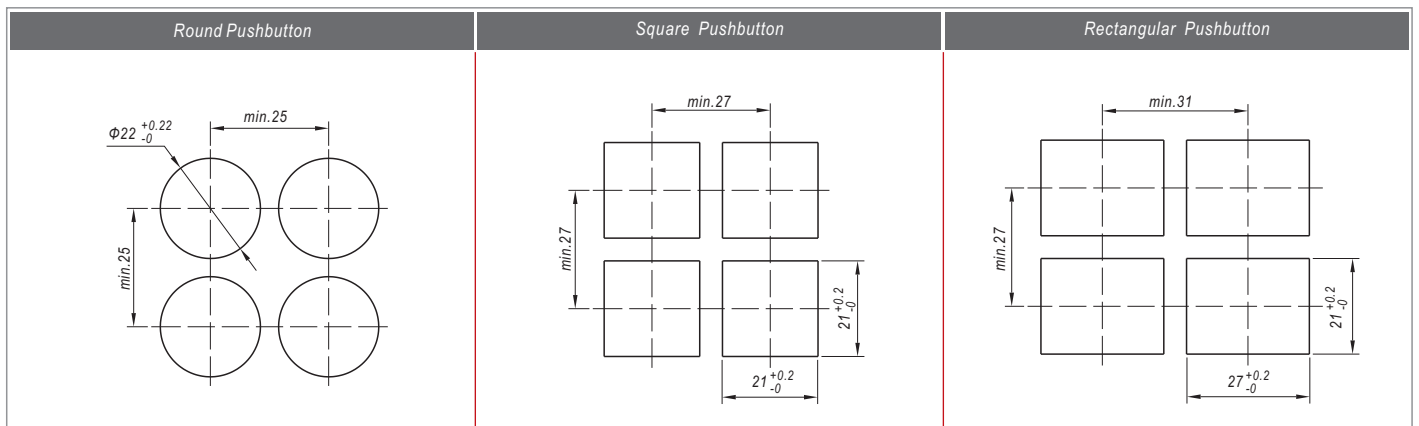
Bottom Preview and Terminal Arrangement



Installation Diagram

Ultrathin, could be customized for symbol, illuminated pushbutton
Thickness over the panel is only 2mm

Installation Dimension



Black Frame Product (can refer to LAS1-AW silvery frame product to choose part number)

Part Number	LAS1-APY-□ ■/△/▲/※	LAS1-APF-□ ■/△/▲/※	LAS1-APJ-□ ■/△/▲/※
Shape			
Part Number	LAS1-APY-□ XB/◇◆/△/▲/※	LAS1-APF-□ XB/◇◆/△/▲/※	LAS1-APJ-□ XB/◇◆/△/▲/※
Shape			
Part Number	LAS1-AWY-□ Y/◇◆●/※	LAS1-AWF-□ Y/◇◆●/※	LAS1-AWJ-□ Y/◇◆●/※
Shape			

LAS1-A22 Short-body Emergency Stop Switch

Shape	Contact	Part Number	Dimension and Explanation
<p>Round</p>	1NC	LAS1-A22Y-01TSB LAS1-A22Y-01TSB/R/▲	<p>Terminal Arrangement</p> <p>Top View</p> <p>○ Protection Degree: IP65 ○ Can be illuminated, LED Color: red ◎ LED Voltage(▲): 6V/12V/24V/110V/220V</p>
	2NC	LAS1-A22Y-02TSB LAS1-A22Y-02TSB/R/▲	
	1NO1NC	LAS1-A22Y-11TSB LAS1-A22Y-11TSB/R/▲	
<p>Round</p>	1NC	LAS1-A22Y-01TSB/L LAS1-A22Y-01TSB/L/R/▲	<p>Top View</p> <p>○ Protection Degree: IP65 ○ Can be illuminated, LED Color: red ◎ LED Voltage(▲): 6V/12V/24V/110V/220V</p>
	2NC	LAS1-A22Y-02TSB/L LAS1-A22Y-02TSB/L/R/▲	
	1NO1NC	LAS1-A22Y-11TSB/L LAS1-A22Y-11TSB/L/R/▲	