

Button Switch LAK39 Series

LAK39C (LA39/LA38) Button Switch Series

LAK39C Button Switch is suitable for remote control of electromagnetic starter contactors, relays and other electrical circuits with AC 50Hz (or 60Hz) below 660V and DC 440V and below. Those with indicator light find use in occasions for light signal indication.

Working Conditions and Installation

- ◆Ambient temperature: No. more than +40℃. The average temperature of 24h should not exceed +35℃, and the lower limit stands at -5℃;
- ◆Altitude: No more than 2,000m;
- Atmospheric conditions: When the maximum temperature reaches +40℃, the relative humidity of the air should not exceed 50%. Higher relative humidity comes at lower temperatures, such as 90% at 20℃; special measures should be taken for occasional condensation due to temperature changes;
- ◆Pollution level: 3
- ◆Installation category: Category II.

Structure and Features

- ◆The contact system adopts a lever-type supercritical flip mechanism. Even if the pressing stroke is not enough during operation, as long as it exceeds the critical flip position, it acts quickly and reliably, contact or disconnect. The tension spring ensures that the necessary contact pressure and self-cleaning function make the contact reliable and the arc extinguishing performance good. When the switch is on and off, the metal sheet vibrates and emits a crisp sound, giving the user a signal to let him know whether the command is executed or not;
- Combined installation: Flexible, convenient and reliable installation and disassembly; access to two-section switch elements and 1-4 pairs of contacts for 1-14
- ◆Normally open and normally closed are electrically insulated and work with different poles;
- ◆The wiring part is equipped with a partition plate to form a screw pressure wire. Its tile-shaped washer rises or falls as the screw is screwed out or in, making wiring convenient;
- ◆Oblique screw fixing is not only convenient but also safe and reliable.

Key Technical Parameters

Key Performance Indicators

Rated insulation voltage Ui	AC 600V,50Hz						
Power frequency withstand voltage	AC2500V,50Hz Imin						
Conventional thermal current	10A						
Contact resistance	≤50mΩ						
Protection level	IP40						
Use category	AC-15			DC-13			
Rated working voltage	220V	380V	660V	110V	220V	440V	
Rated working current	4.5A	2.5A	1.5A	0.5A	0.5A	0.2A	

Key Technical Parameters

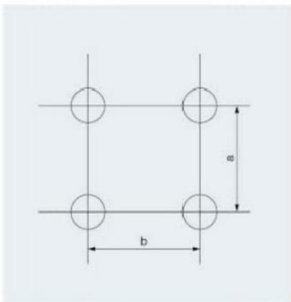
Service life

Name	Item	
	Mechanical life	Electrical life
General button, lighted button	3 million times	600,000 times
Knob	300,000 times	100,000 times
Key button, self-locking button	50,000 times	50,000 times

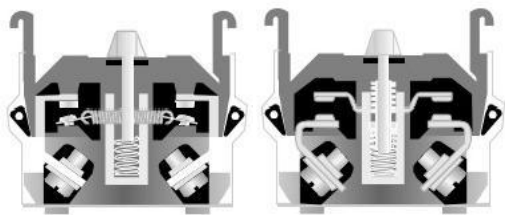
Appearance and Installation Dimensions (mm)

- ◆ It takes  $\phi 22$  to install. The button head should be inserted into the installation hole from the front of the panel, and then screwed into the middle seat behind the panel. The set screws at both ends then should be tightened at the same time (Note: Do not use excessive force, the maximum torque is 25N.cm). Next connect the switch element or lamp holder directly, no other tools are needed. Press the button after installation. Possible stuck is caused by the uneven tightness or over-tightening of the two set screws during installation. Check whether the switch element is fully buckled to address the problem.
- In case several buttons are installed side by side on the control panel, the distance between the center lines of the copper bar button and the center line distance between the spare row buttons must be less than the values listed in the table below.

Name	Size	
	a	b
General button, lighted button, knob, key button	30	50
Mushroom button, long handle knob, emergency stop button	45	50



Switch element contact



Status

Contact code	01	10	02	20	11
	One closed	One open	Two closed	Two open	One open and one closed

Open-press contacts are a product launched by our factory, which withstands greater current than spring-type contacts.

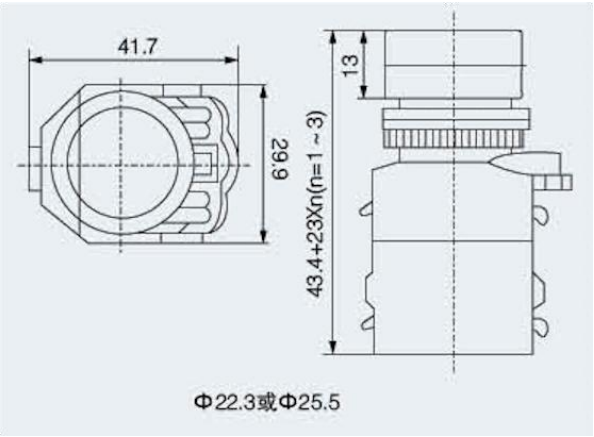
Lighted button indicator specifications



Light source	LED									
Code	21	22	23	24	25	26	27	28	31	32
Power supply	AC.DC								AC	
Voltage (V)	6	12	24	36	48	110	127	220	220	380

Button Switch                      Model: LAK39C-11 Transient  
LAK39C-11T    Self-locking

Size: φ22mm  
Color: RGBYW K  
Switch combination: NO+NC  
Protection level: IP40  
Product Dimensions↓↓



Model: LAK39C-11D Transient

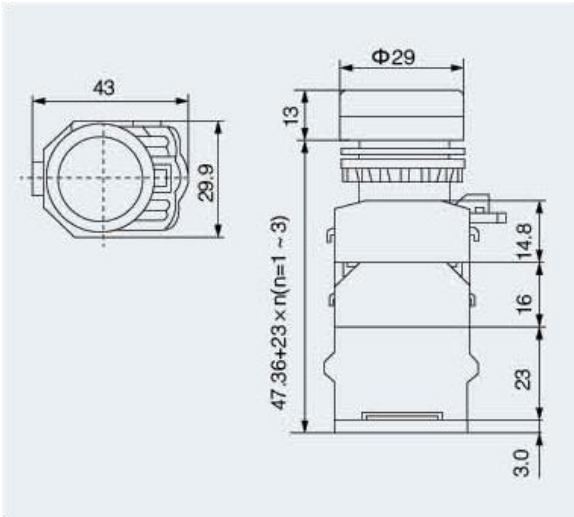
Size:  $\varnothing 22\text{mm}$

Color: RGBW

Switch combination: NO+NC

Protection level: IP40

Product Dimensions↓↓



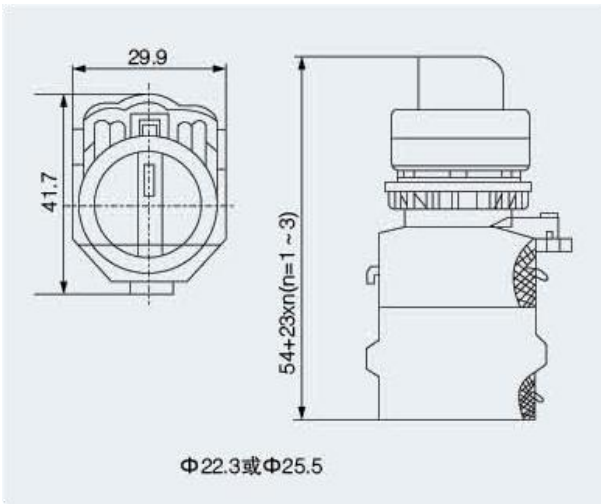
Knob Switch      Model: LAK39C-11X/2    Two-position knob

Size:  $\varnothing 22\text{mm}$

Color: RGBK

Protection level: IP40

Product Dimensions↓↓



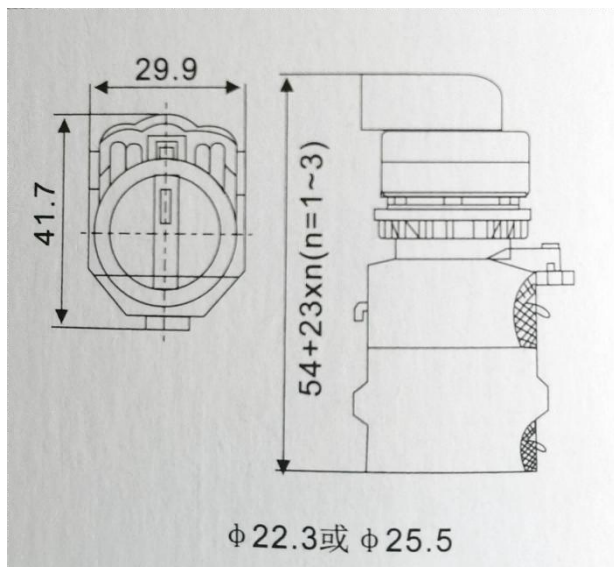
Knob switch      Model: LAK39C-20CX/3    Three-position knob with handle

Size:  $\varnothing 22\text{mm}$

Color: RGBK

Protection level: IP40

Product Dimensions↓↓



Lighted knob

Model: LAK39C-11XD/3

Three-position self-locking

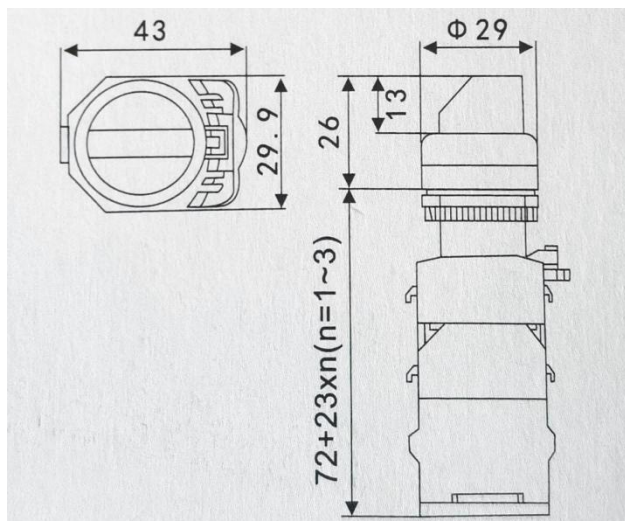


Size:  $\phi$

Color: R G Y W

Protection level: IP40

Product Dimensions↓↓



Mushroom button

Model: LAK39C-11M

Transient

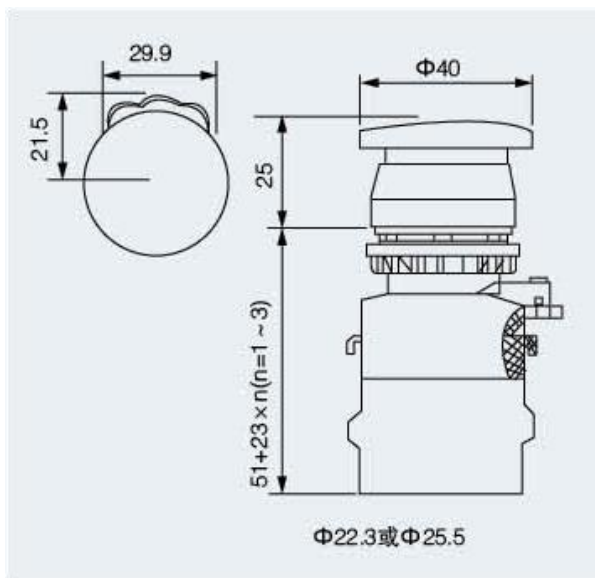
Size:  $\phi 22\text{mm}$

Color: R G Y

Switch combination: NO+NC

Protection level: IP40

Product Dimensions↓↓



Emergency Stop      Model: LAK39C-11ZS

Size:  $\varnothing$

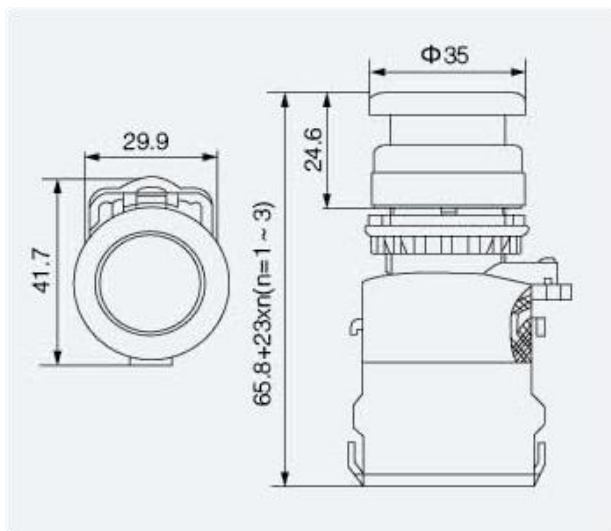
Color: R

Switch combination: NO+NC

Protection level: IP40


Press to lock. Turn clockwise to reset

Product Dimensions↓↓



Key Button

Model: LAK39C-11Y/2

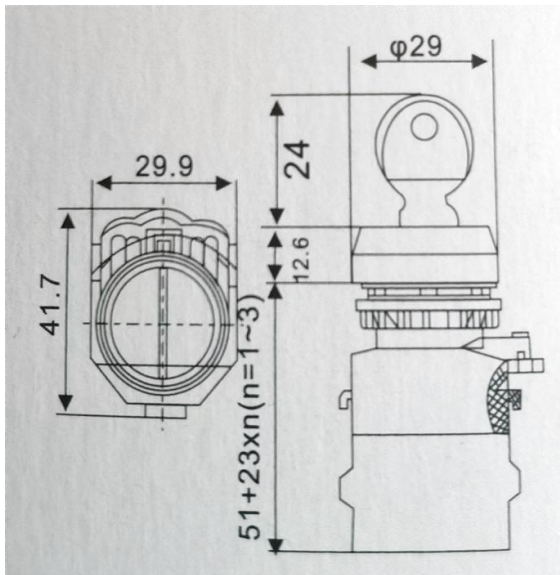
Two-position self-locking 

Size:  $\varnothing$

Color:

Protection level: IP40

Product Dimensions↓↓



Double-position push button

Model: LAK39C-11RG

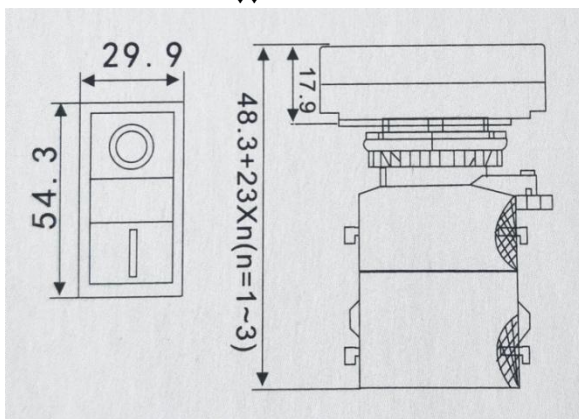
Size:  $\phi$

Color: R G

Switch combination: NO+NC

Protection level: IP40

Product Dimensions↓↓



### Button Switch LAK39E Series

#### LAK39E Series

LAK39E push button switch is suitable for industrial control circuits with AC 50Hz (or 60Hz), rated working voltage up to 380V and DC working voltage 220V. It can be used as remote control in electromagnetic starter contactors, relays and other electrical circuits. Those with indicator light are for occasions where light signals are indicated.

#### Working Conditions and Technical Reference

- |  |   |
|--|---|
| ◆ Air temperature: $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$ | ◆ Air humidity: $45^{\circ}\text{C} \sim +85^{\circ}\text{C}$ |
| ◆ Withstand voltage: 2500V, 1min                                 | ◆ Contact resistance: $\leq 50\text{m}\Omega$                 |
| ◆ $U_i$ Rated insulation voltage: 660v                           | ◆ $I_{th}$ : 10A  |
| ◆ Electrical life: $50 \times 10$                                | ◆ Protection level: IP40                                      |
| ◆ Rated working voltage: 380V 220V 110V 48V 24V                  |   |
| ◆ Rated working current: AC - 15 2.5A 4.5A 6A 8A -               |   |
| DC - 13 - 0.3A 0.6A 1.3A 2.5                                     |   |

Rated voltage Electric light source	Direct						Resistor		Transformer	
	6V	12V	24V	48V	110V	220V	380V	220V	220V	380V
LED light	√	√	√	–	–	–	–	–	√	√
Neon light	–	–	–	–	√	√	√	√	–	–
Incandescent light	√	√	√	√	√	√	√	–	√	√

### Structure and Performance

The metal button adopts an anti-movement head and cannot be removed from the front;

All contacts have the dual functions of switching circuits and self-cleaning, and can still maintain contact reliability when used at low voltage and low current (5V.5mA);

Normally open and normally closed contact groups are independent of each other and can be combined as needed.

Concealed wiring terminals are safer and more reliable. The metal button operating head and base are made of zinc alloy, with beautiful and sturdy appearance.

The illuminated buttons and signal lights agree to use BA9S lamp holders, and different light sources can be selected as needed.

Button Switch      Model: LAK39E-BA31

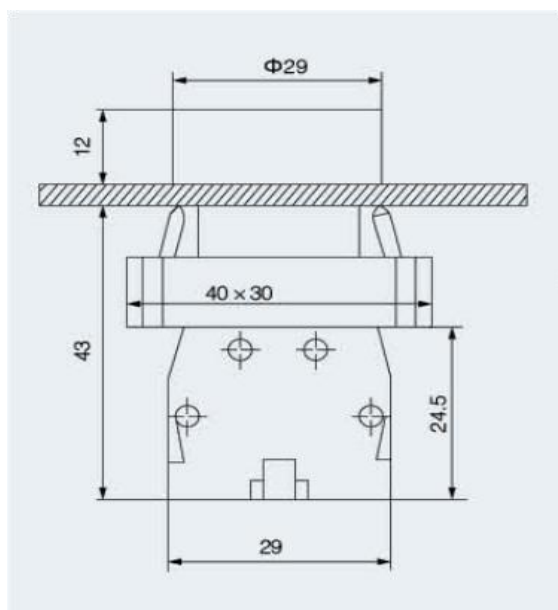
Size: φ

Color: **R** **G** **Y** **B** **W** **K**

Swith combination: NO

Protection level: IP40

Product Dimensions↓↓



High position button switch      Model: LAK39E-BL61

Size: φ

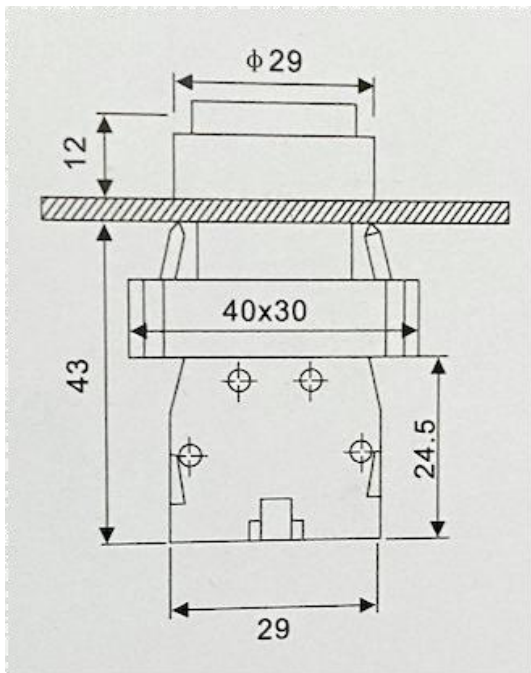
Color: **R** **G** **Y** **B** **W** **K**

Switch combination: NO

Protection level: IP40

Product Dimensions↓↓





Marked Button Switch      Model: LAK39E-BA3341

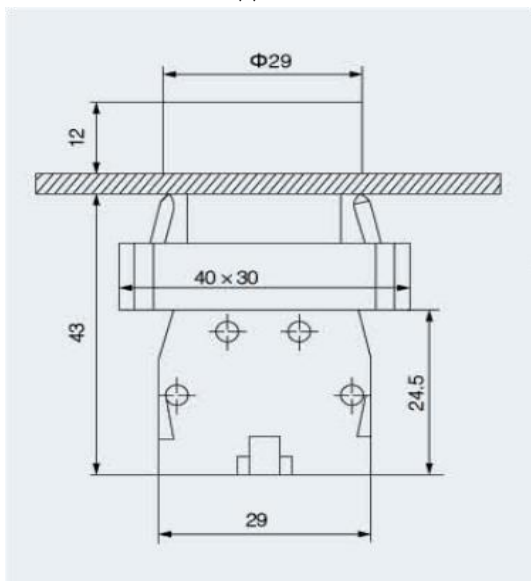
Size:  $\varnothing$


Color:

Switch combination: NO


Protection level: IP40

Product Dimensions↓↓



Knob Switch      Model: LAK39E-BD21      Two-position lock 

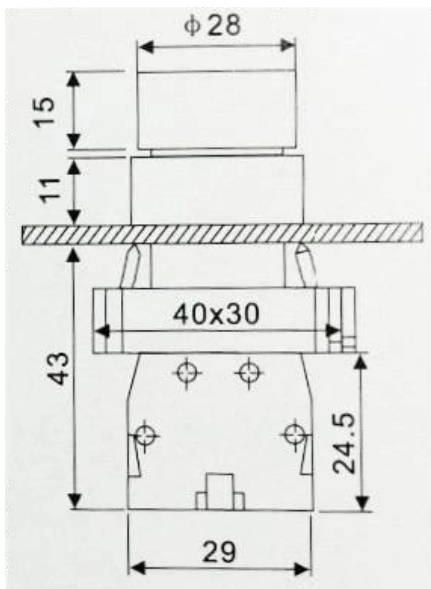
Size:  $\varnothing$

Color: 

Switch combination: NO

Protection level: IP40

Product Dimensions↓↓



Knob switch with handle

Model: LAK39E-BJ33

Three-position lock



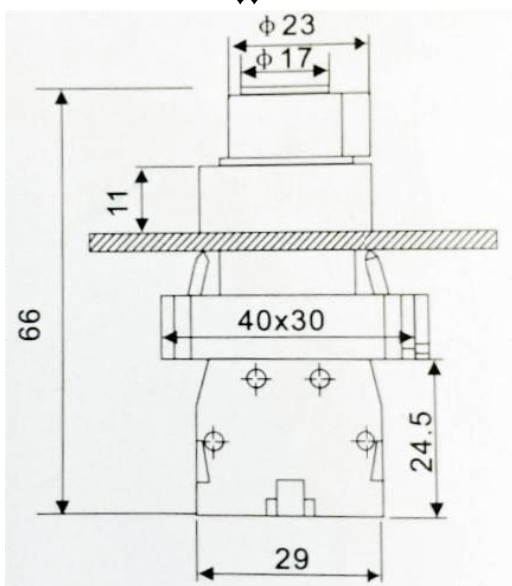
Size:  $\phi$

Color: **R** **G** **Y**

Switch combination: 2NO+NO

Protection level: IP40

Product Dimensions↓↓



Mushroom button

Model: LAK39E-BC31

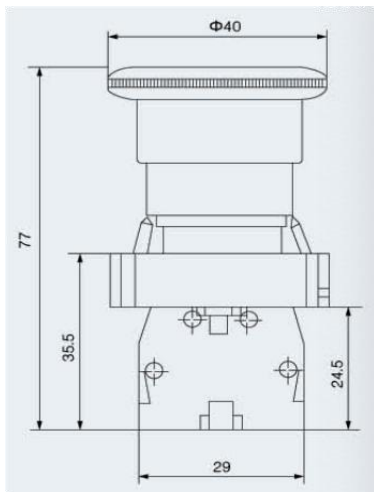
Size:  $\phi 40\text{mm}$

Color: **R** **G** **Y** **K**

Switch combination: NO

Protection level: IP40

Product Dimensions↓↓




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Emergency Stop      Model: LAK39E-BS542

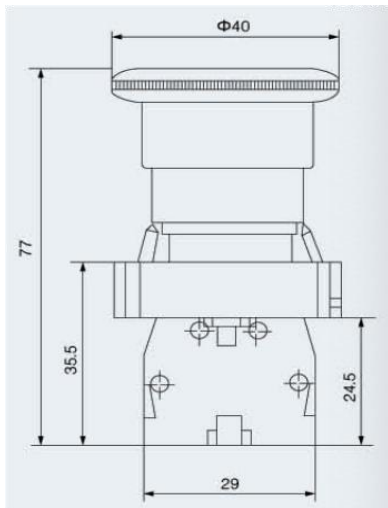
Size:  $\varnothing 40\text{mm}$

Color: **R**

Switch combination: NC

Protection level: IP40

Product Dimensions ↓↓




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Lighted Button      Model: LAK39E-BW3361

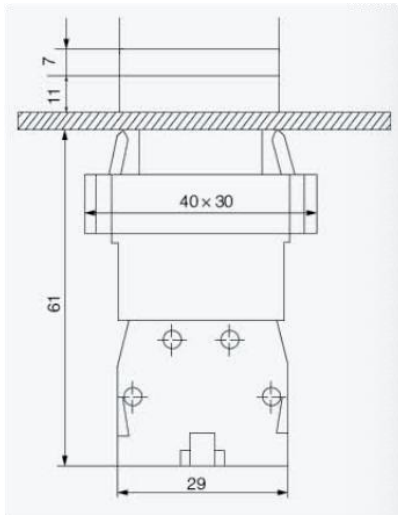
Size:  $\varnothing$

Color: **R G Y B W**

Switch combination Contact Structure: NO

Protection level: IP40

Product Dimensions ↓↓




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Key Button      Model LAK39E-BG21      Two-position lock

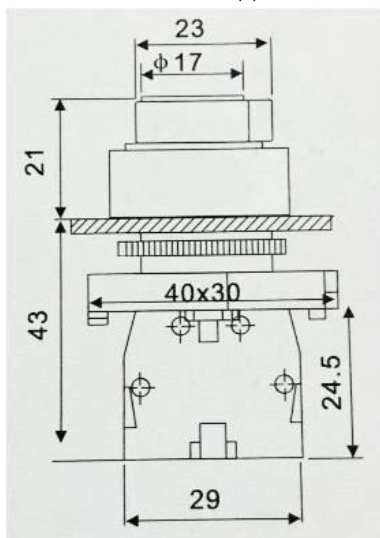
Size:  $\varnothing$

Color:

Switch combination: NC

Protection level: IP40

Product Dimensions↓↓




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Double position button      Model: LAK39E-BL8325

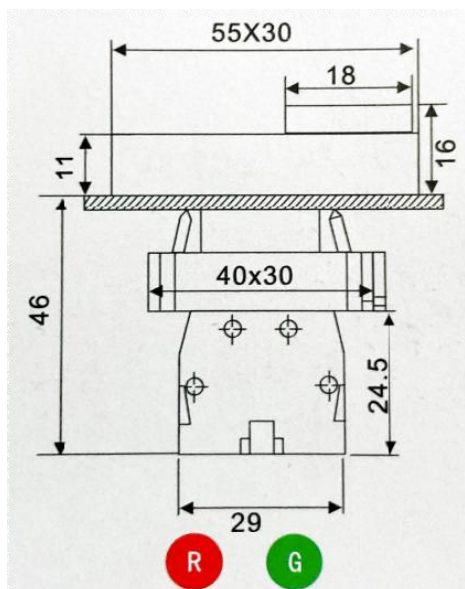
Size:  $\varnothing$

Color: R G

Switch combination: NO+NC

Protection level: IP40

Product Dimensions↓↓



Double-position lighted button

Model LAK39E-BL8425

Size:  $\varnothing 40$

Color: R G

Switch combination: NO+NC

Protection level: IP40

Product Dimensions↓↓

