



ZHEJIANG HANSHANG ELECTRIC CO., LTD.

# PRODUCT GUIDE

Button Switch | Indicator Light | Warning Light









ZHEJIANG HANSHANG ELECTRIC CO., LTD.

# About HungSing

**Zhejiang Hanshang Electric Co., Ltd.** is a production-oriented enterprise specializing in the production and technology development of button switch and supporting products. Products are widely used in sports equipment, biopharmaceutical, precision machinery testing, ship control system, automatic machine tools, textile machinery, printing and packaging machinery, food processing machinery, plastic machinery and other industries.

Over the years, the company has focused on the production of metal button switches, plastic button switches, signal button lights and other products as one of the manufacturers, for the world famous brand OEM production of various models of button switches, products with the world's advanced technology, but adhere to the domestic product sales with high quality and low price, the company's production of buttons, signal lamp series has been loved and welcomed by the majority of customers.

The company has a sound management system. Committed to quality, brand, service, price for the purpose of enterprise and development, to win the trust and praise of customers around the world, always looking forward to become your partner, create a better future.



Fine intelligence makes the quality more outstanding



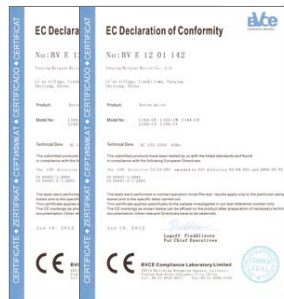
Intimate custom and meticulous service



ZHEJIANG HANSHANG ELECTRIC CO., LTD.

# QUALIFICATIONS

Authoritative certification, excellent quality;  
Condensed Han Shang people's hard work and wisdom;  
It also sets off the Hanshang people's pursuit of quality first, and the impression of  
honor accumulation and growth again and again; It is also a spur to the future...







## Pattern enumeration

Text										
	1	2	3	4	5	6	7	8	9	10
Numbers and symbols	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30
ISO symbols										
	31	32	33	34	35	36	37	38	39	40
Special symbols	41	42	43	44	45	46	47	48	49	50
	51直线移动	52转动	53启动	54停止	55启动停止	56点动				
Special symbols										
Special symbols										
	63	64	65	66	67	68				

Note: The above icon symbols need to be customized.



# X SERIES

X Series destruction-resistant waterproof metal signal indicator

Waterproof IP65/IP67, can be used directly in outdoor scenes. Metal shell to prevent switch failure caused by various impacts during use.

The luminous surface can be customized with various patterns, so that the signal indication is clear and unmistakable.



shock-resistant



Waterproof and dustproof



Safe and practical



Quality assurance









ZHEJIANG HANSHANG ELECTRIC CO., LTD.

X Series destruction-resistant waterproof metal indicator light

## Model description

												
Business code		Housing material		Mounting hole size		Head shape		Wiring type		LED color		LED voltage
H	JU	Nickel-plated brass	6	Φ6mm	X	Flat round	S	Welding pins	R	Red	AC/DC 3V	
			8	Φ8mm							AC/DC 6V	
	JA	Aluminum oxide	10	Φ10mm	XA	Spherical	M	Terminal	G	Green	AC/DC 12V	
			12	Φ12mm							AC/DC 24V	
	JG	Stainless steel	14	Φ14mm	XS	Short flat round	L	Equipped with wiring harness	Y	Yellow	AC/DC 36V	
			16	Φ16mm							AC/DC 48V	
			19	Φ19mm	XB	Hemi-spherical			B	Blue	AC/DC 110V	
			22	Φ22mm							AC/DC 220V	
			25	Φ25mm	XC	Circular arc						
			30	Φ30mm								

Note: Please read the specific description of the product carefully, and select the corresponding code in the table according to different symbols.

## Summary

Mounting hole size	Φ6-Φ30mm
Voltage level	220V and below
le Rated current Ie	3~48V 约 15mA; 110~220V 约 2mA 3~48V about 15mA; 110~220V about 2mA
LED type	wo way LED beads (AC and DC universal)
LED color	<span style="border: 1px solid black; padding: 0 2px;">R</span> <span style="border: 1px solid black; padding: 0 2px;">Y</span> <span style="border: 1px solid black; padding: 0 2px;">G</span> <span style="border: 1px solid black; padding: 0 2px;">B</span> <span style="border: 1px solid black; padding: 0 2px;">W</span> Three or two colors can be customized
Housing material	tainless steel / Nickel-plated brass / Aluminum (oxidized)
Protection level	IP65/IP67 IK10

Note: If unidirectional DC LED lamp beads are required, they can be customized; Other voltage specifications can be customized as required.

## Performance characteristics

Product specifications		HJ □ □ X- ◆ ○
Bottom configuration		(2.8×0.5mm) Wiring pins (2.8×0.5mm)
Dielectric strength		1100VAC
Ambient temperature		-20℃ ~ +55℃
Panel thickness		1~8mm
Nut torque		5~14Nm
Protection level		IP65/IP67 IK10
Material	LED shade	Polycarbonate
	Housing	Stainless steel / Nickel-plated brass / Aluminum (oxidized)
	Pedestal	PBT
	<span style="background-color: #008000; color: white; padding: 0 2px;">RoHS</span>	Customizable
LED specification	LED type	Two way LED beads (AC and DC universal)
	Ue Rated voltage Ue	3V / 6V / 12V / 24V / 36V / 48V / 110V / 220V
	LED color	<span style="border: 1px solid black; padding: 0 2px;">R</span> <span style="border: 1px solid black; padding: 0 2px;">Y</span> <span style="border: 1px solid black; padding: 0 2px;">G</span> <span style="border: 1px solid black; padding: 0 2px;">B</span> <span style="border: 1px solid black; padding: 0 2px;">W</span> Three or two colors can be customized
	LED life	40,000 hours

## Metal signal indicator



Φ8

HJ □ 8X/ □ /S



Φ12

HJ □ 12XS/ □ /S



Φ12

HJ □ 12XS/ □ /M



Φ16

HJ □ 16XS/ □ /S



Φ16

HJ □ 16XS/ □ /M



Φ12

HJ □ 12X/ □ /S



Φ16

HJ □ 16X/ □ /S



Φ16

HJ □ 16X/ □ /M

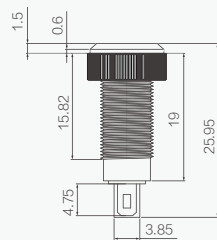


Φ19

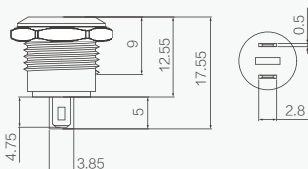
HJ □ 19X/ □ /S

## Outline size

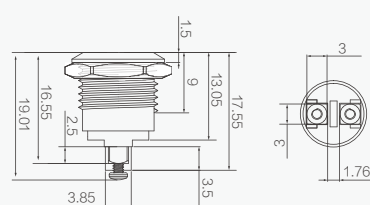
\*HJ □ 8X



\*\*HJ □ □ XS/S



\*\*HJ □ □ XS/M



Note: \* Optional button opening diameter Φ8mm

\*\*Optional button opening diameter Φ16、19mm



## Metal signal indicator



Φ19

HJ □ 19X/ □ /M



Φ22

HJ □ 22X/ □ /S



Φ22

HJ □ 22X/ □ /M



Φ6

HJ □ 6XA/ □ /S



Φ8

HJ □ 8XA □ /S



Φ8

HJ □ 8XAP □ /S



Φ10

HJ □ 10XA □ /S



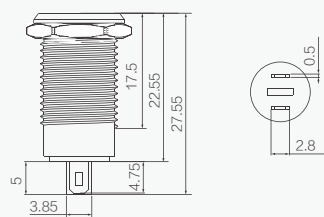
Φ12

HJ □ 12XA □ /S

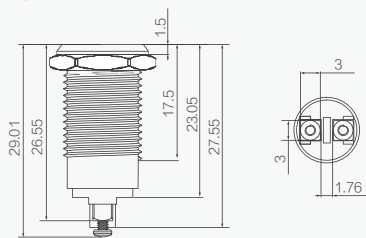
More Product Information  
Please contact us for details!

## Outline size

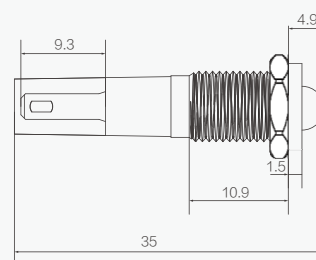
\*HJ □ □ X/S



\*\*HJ □ □ X/M



HJ □ □ XA



Note: \* Optional button opening diameter Φ12、16、19、22、25、30mm

\*\*Optional button opening diameter Φ6、8、10、12mm

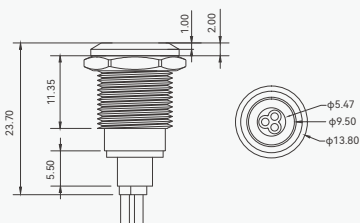


## Metal signal indicator



## Outline size

\*HJ □ □ XB



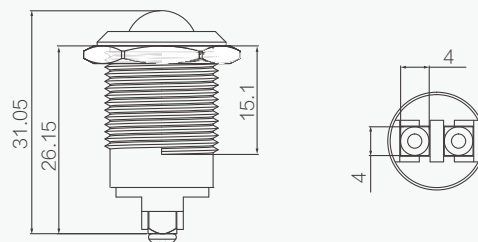
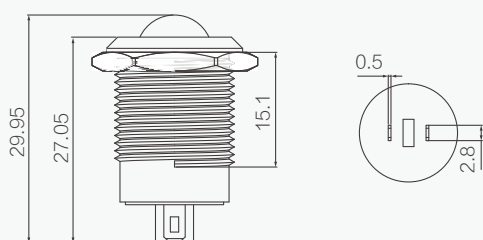
Note: \* Optional button opening diameter Φ6、8、10、12mm



## Metal signal indicator



## Outline size



Note: Optional button opening diameter Φ16、19、22mm





# A SERIES

## A Series metal push button switch

Waterproof IP65/IP67, can be used directly in outdoor scenes.

Metal shell to prevent switch failure caused by various impacts during use.

The luminous surface can be customized with various patterns, so that the signal indication is clear and unmistakable.



shock-resistant



Waterproof and dustproof



Safe and practical



Quality assurance


## Model description

Business code	Housing material	Mounting hole size	Serial number	Contact structure	Operation mode	With LED	Head shape	Wiring type	LED color	LED voltage
H	JU Nickel-plated brass	16 Φ16mm	A	11 1NO 1NC	D Signal indicator	D Entire urface	P flat head	Q Welding pins	R Red	AC/DC 3V
		19 Φ19mm	A1	22 2NO 2NC		D1 Dot	T High flat head		G Green	AC/DC 6V
		22 Φ22mm	A3			D2 Ring	Q Spherical		Y Yellow	AC/DC 12V
		25 Φ25mm	A6			D3 Power icon			B Blue	AC/DC 24V
	JA Aluminum oxide				NONE Momentary					AC/DC 36V
	JG Stainless steel									AC/DC 48V
	L Plastics				CY Knob				WT White	AC/DC 110V
					CK key push button	D4 Power icon with ring				AC/DC 220V
					CV Emergency stop button					
					CU Buzzer					

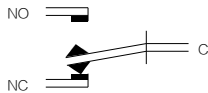
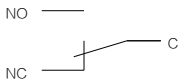
Note: Please read the specific description of the product carefully, and select the corresponding code in the table according to different symbols.

Customize special patterns, please communicate with sales staff to confirm. aluminum oxide (color), Please specify color when ordering, HJ □ 16A default housing Nickel-plated brass, the rest default housing stainless steel.

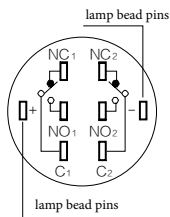
## Summary

Mounting hole size	Φ16、19、22、25mm
Switch rating	ith 3A/250V
Switch combinations	1NO 1NC / 2NO 2NC
Operation mode	Momentary / Latching
Head shape	Flat head / High flat head/Spherical
Housing material	Stainless steel / Aluminum (oxidized) / Nickel-plated brass
With LED	Entire urface / Dot / Ring /power indicator light / Power icon with ring
Protection level	IP65/IP67 IK09
le Rated current Ie	5~48V 约 15mA; 110~250V 约 2mA 5~48V about 15mA; 110~250V about 2mA
Voltage reduction method	Built-in resistance
LED type	Using AC and DC universal two way LED lamp beads, the terminal has no positive and negative poles to distinguish the built-in protection resistance of the lamp beads, and does not need to be connected.
Circuit	

## Switch structure description

Type	Schematic diagram	Symbol
C		

## Pin description



Up to two sets of switches can be configured.

C, NO, NC and C, NO, NC are a set of switches; C foot is common foot, NO foot is normally open foot, NC foot is normally closed foot; +, - pins are lamp bead pins, and conventional lamp bead configuration has no positive and negative polar distinction. The lamp beads are relatively independent of the switch, and the lamp bead status can be controlled by the switch or peripheral circuit. Lamp bead terminals

## Performance characteristics

Product specifications		HJ □ □ A- □ ■ / □ /Q	Mechanical life		More than 200,000 times
Dielectric strength		1500VAC	Electrical life		More than 100,000 times
Insulation resistance		≥ 1000MΩ	Panel thickness		1~10mm
Contact resistance		≤ 50mΩ	Nut torque		5~14Nm
Switch specifications		ith 3A/250V	Operating pressure		3N~5N
Bottom configuration		(2.8×9mm) Wiring pins (2.8×9mm)	Operation travel		About 3.1mm
Head shape		High flat head/flat head	Protection level		IP65/IP67 IK09
Ambient temperature		- 20℃ ~+55℃			
Material	Contact	Silver contact / Customizable	LED parameter	LED type	Two way LED beads (AC and DC universal)
	Button	Stainless steel / Chrome plated brass / Aluminum (oxidized)		Ue Rated voltage Ue	3V / 6V / 12V / 24V /36V / 48V /110V / 220V
	Housing	Stainless steel / Chrome plated brass / Aluminum (oxidized)		LED color	<div><div>R</div><div>Y</div><div>G</div><div>B</div><div>W</div></div>
	Pedestal	PBT		LED life	40,000 hours
RoHS		Customizable			

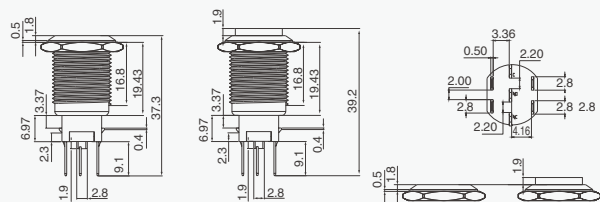


## Metal push button switch



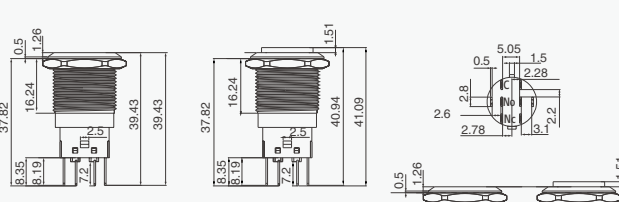
## Outline size

\*HJ □ 16A



Note: \* Optional button opening diameter Φ16mm

\*\*HJ □ □ A

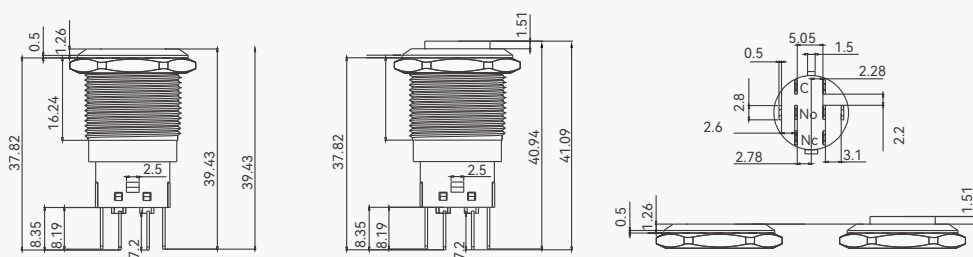


\*\*Optional button opening diameter Φ19、22、25mm

## Metal push button switch



## Outline size



Note: Optional button opening diameter Φ19、22、25mm

## Metal push button switch



Φ22

HJ □ 22A- □ □ C □ K/Q



Φ25

HJ □ 25A- □ / □ / T/Q



Φ25

HJ □ 25A- □ / □ / P/Q



Φ25

HJ □ 25A- □ / □ / D2/P/Q



Φ25

HJ □ 25A- □ / □ / D3/P/Q



Φ25

HJ □ 25A- □ / □ / D4/P/Q



Φ25

HJ □ 25A- □ / □ / D2/T/Q



Φ16

HJ □ 16A3-11 □ D/T/Q



Φ16

HJ □ 16A3-11 □ D1/Q/Q



Φ16

HJ □ 16A3-11 □ /Q/Q



Φ16

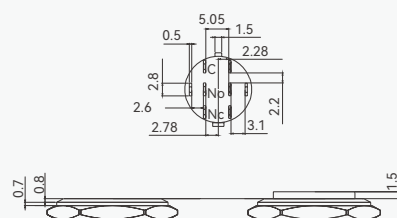
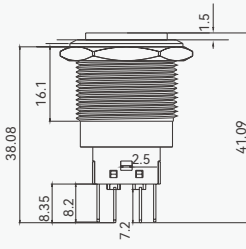
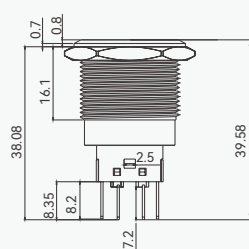
HJ □ 16A6/22 □ /T/Q



Φ16

HJ □ 16A6/22 □ D4/P/Q

## Outline size



Note: Optional button opening diameter Φ19、22、25mm

## Metal push button switch



Φ16

HJ □ 16D/D- ▲ / △ / ☆ / ● / ◆ / ◇



Φ16

HJ □ 16D/D- ▲ / △ / ☆ / ● / ◆ / ◇



Φ19

HJ □ 19D/D- ▲ / △ / ☆ / ● / ◆ / ◇



Φ19

HJ □ 19D/D- ▲ / △ / ☆ / ● / ◆ / ◇



Φ19

HJ □ 19D/D- ▲ / △ / ☆ / ● / ◆ / ◇

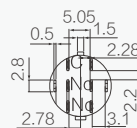
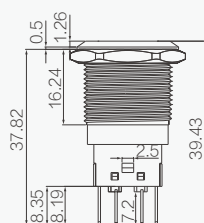


Φ19

HJ □ 19D/D- ▲ / △ / ☆ / ● / ◆ / ◇

## Outline size

HJS19D



带灯底座

Note: Optional button opening diameter Φ19mm



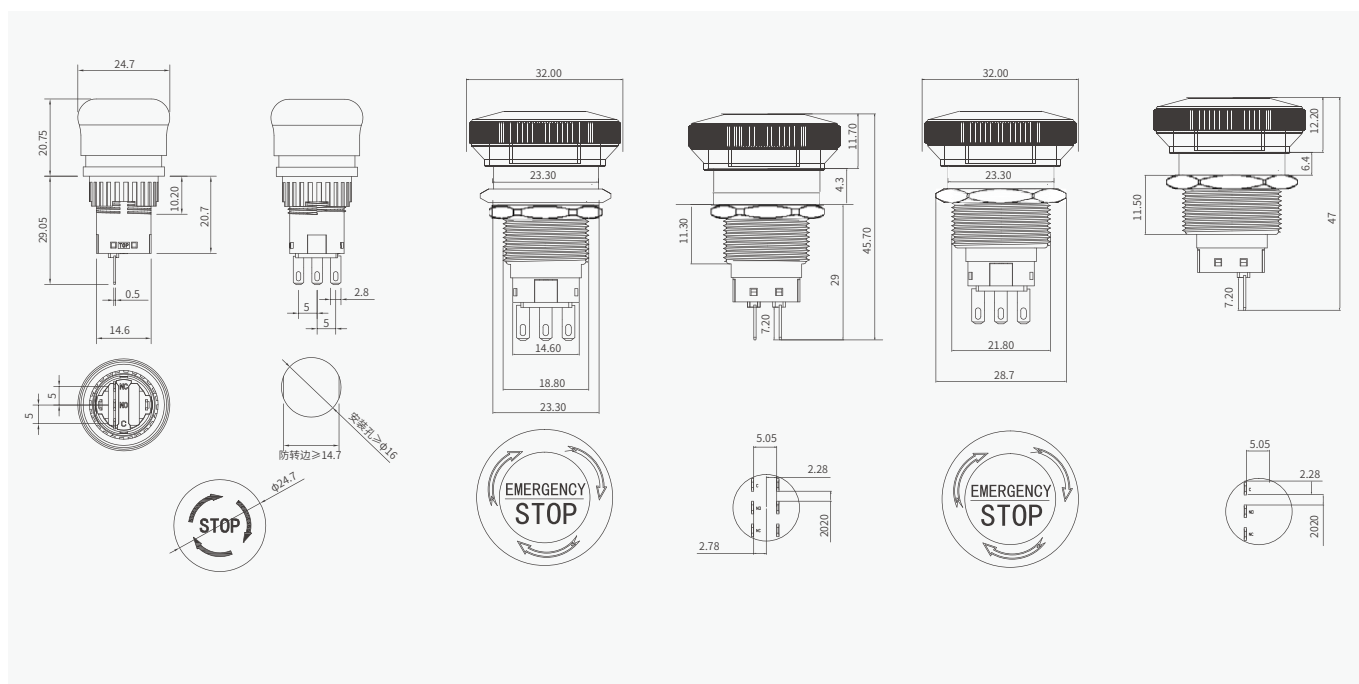


## Metal push button switch



More Product Information Please contact us for details!

## Outline size





# A7 new Metal push button switch

NEW

Product model

## A2 Series

## A7 Series

Waterproof class

Waterproof class  $\leq$ IP65

Waterproof rating **IP65/IP67**, suitable for more environments

Volume

Compared with the new model, the volume is larger

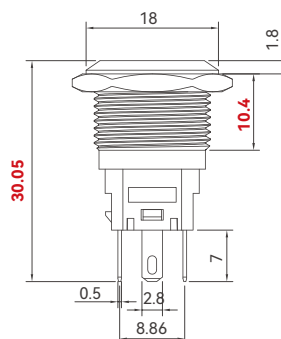
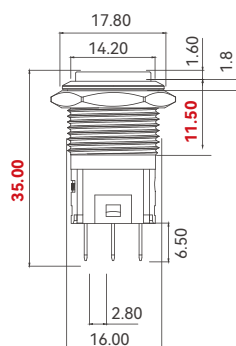
housing length **15mm**, fully utilize the space

Electrical performance

the length of momentary/latching model is the same

the length of momentary/latching model is the same

Overall dimension





# A2 SERIES

## A2 series push button switch

Metal shell to prevent switch failure caused by various impacts during use. The button surface can be customized with various patterns to distinguish the switch function.

The slightly shorter volume allows for a smaller installation space.



shock-resistant



Waterproof and dustproof



Safe and practical



Quality assurance



## Model description

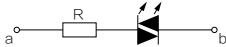
<div><div><div></div></div><div>-</div><div><div></div></div><div><div></div></div><div>/</div><div><div></div></div><div>/</div><div><div></div></div><div>/</div><div><div></div></div><div>/</div><div><div></div></div><div>/</div></div>																					
Business code	Housing material		Mounting hole size		Serial number		Contact structure		Operation mode		With LED		Head shape		Wiring type		LED color		LED voltage		
H	JU	Nickel-plated brass	12	Φ12mm	A2	10	1NO	D	Signal indicator	D	Entire urface		P	Flat head		Q	Welding pins	R	Red	AC/DC 3V	
16			Φ16mm	11		1NO 1NC					G	Green		AC/DC 6V							
19			Φ19mm	22		2NO 2NC															
	JA	Aluminum oxide	22	Φ22mm				Z	Latching	D1	Dot		T	High flat head				Y	Yellow	AC/DC 24V	
25			Φ25mm											AC/DC 36V							
30			Φ30mm																		
	JG	Stainless steel	35	Φ35mm				无	Momentary	D2	Ring							B	Blue	AC/DC 48V	
40			Φ40mm											AC/DC 110V							
	L	Plastics								D3	Power icon									AC/DC 220V	

Note: Please read the specific description of the product carefully, and select the corresponding code in the table according to different symbols.

Customize special patterns, please communicate with sales staff to confirm.

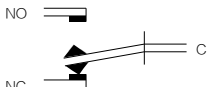
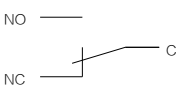
Housing material: Chrome plated brass, brass nickel plated, stainless steel, aluminum oxidation (color), please indicate the shell material when placing an order, HJ □ 16A defaults to Chrome plated brass shell, and the rest defaults to stainless steel shell.

## Summary

Mounting hole size	Φ12、16、19、22、25、30、35、40mm
Switch rating	12mm current ith 2A, other ith 5A
Switch combinations	1NO 1NC / 2NO 2NC
Operation mode	Momentary/Latching
Head shape	Flat head / High flat head
Housing material	Stainless steel / Aluminum (oxidized)/ Nickel-plated brass
With LED	Ring /power indicator light
Protection level	IP65 IK09
LED type	Two way LED beads (AC and DC universal Three or two colors can be customized)
Ie Rated current Ie	5~48V about 15mA; 110~250V about 2mA
Voltage reduction method	Built-in resistance
Beads equivalent	Using AC and DC universal LED lamp beads, the terminal has no positive and negative poles to distinguish the built-in protection resistance of the lamp beads, and does not need to be connected.
Circuit	



## Switch structure description

Type	Schematic diagram	Symbol
C		

## Pin description

Up to two sets of switches can be configured.

C, NO, NC and C, NO, NC are a set of switches; C foot is common foot, NO foot is normally open foot, NC foot is normally closed foot; +, - pins are lamp bead pins, and conventional lamp bead configuration has no positive and negative polar distinction. The lamp beads are relatively independent of the switch, and the lamp bead status can be controlled by the switch or peripheral circuit. Lamp bead terminals

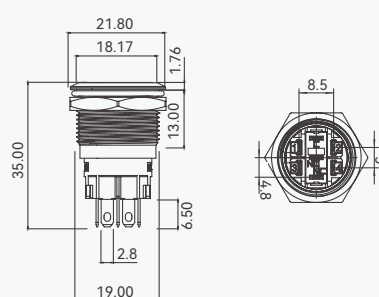
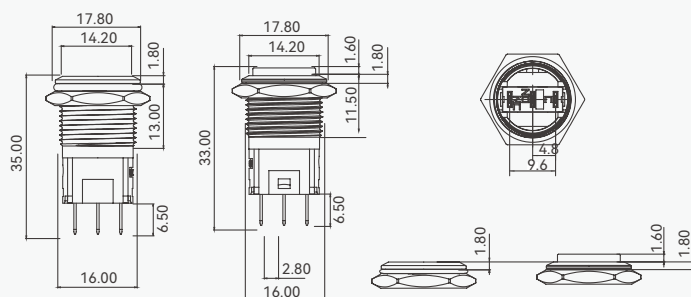
## Performance characteristics

Product specifications		HJ □ □ A2- □ ■ / □ /Q	Mechanical life		More than 200,000 times
Dielectric strength		1500VAC	Electrical life		More than 100,000 times
Insulation resistance		≥ 1000MΩ	Panel thickness		1~10mm
Contact resistance		≤ 50mΩ	Nut torque		5~14Nm
Switch specifications		ith 3A/250V	Operating pressure		3N~5N
Bottom configuration		(2.8×6.5mm) Wiring pins (2.8×6.5mm)	Operation travel		About 3.1mm
Head shape		High flat head/flat head	Protection level		IP65 IK09
Ambient temperature		-20℃ ~+55℃			
Material	Contact	Complex silver	LED parameter	LED type	Two way LED beads (AC and DC universal)
	Button	Stainless steel / Aluminum (Oxidized)		Rated voltage Ue	3V / 6V / 12V / 24V /36V / 48V /110V / 220V
	Housing	Stainless steel / Nickel-plated brass / Aluminum (oxidized)		LED color	<div><div>R</div><div>Y</div><div>G</div><div>B</div><div>W</div></div>
	Pedestal	PA		LED life	40,000 hours
RoHS		Customizable			

## Metal push button switch



## 外形尺寸 / Outline size



Note: Optional button opening diameter Φ16、19、22mm

## Metal push button switch



Φ19

HJ □ 19A2- □ /P/Q



Φ19

HJ □ 19A2- □ D2/P/Q



Φ19

HJ □ 19A2- □ D2/T/Q



Φ19

HJ □ 19A2- □ D3/P/Q



Φ22

HJ □ 22A2- □ /P/Q



Φ22

HJ □ 22A2- □ D2/P/Q

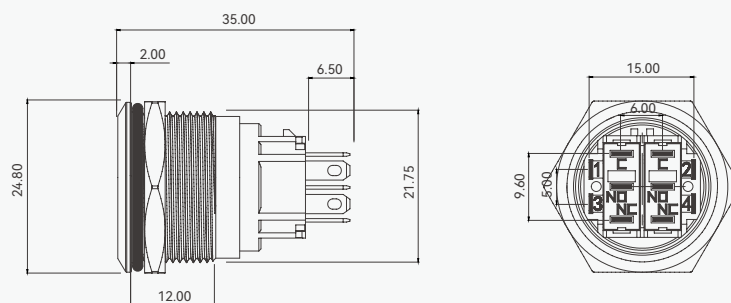


Φ22

HJ □ 22A2- □ D3/P/Q

More Product Information Please contact us for details!

## Outline size



Note: Optional button opening diameter Φ16、19、22mm



# 56A SERIES

## 56A series push button switch

The larger key surface can meet the requirements of various vending machines and number machines.

The button surface can be customized with various patterns to distinguish the switch function.

The metal casing gives the appearance of the device more texture. Waterproof IP65/IP67, can be used directly in outdoor scenes.



shock-resistant



Waterproof and dustproof










Safe and practical



Quality assurance



## Model description

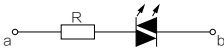
			-			/		/		/		/		/			
Business code	Housing material	Mounting hole size		Serial number	Contact structure		Operation mode		With LED		Head shape		Wiring type	LED color	LED voltage		
H	JG	56	Φ56mm	A	11	1NO 1NC	D	Signal indicator	D	Entire surface	P	Flat head	Q	Welding pins	R	Red	AC/DC 3V
	Stainless steel				22	2NO 2NC									G	Green	AC/DC 6V
															Y	Yellow	AC/DC 12V
																	AC/DC 24V
																	AC/DC 36V
																	AC/DC 48V
																	AC/DC 110V
															WT	White	AC/DC 220V

Note: Please read the specific description of the product carefully, and select the corresponding code in the table according to different symbols.

Customize special patterns, please communicate with sales staff to confirm.

Housing material: Chrome plated brass, brass nickel plated, stainless steel, aluminum oxidation (color), please indicate the shell material when placing an order, HJ □ 16A defaults to Chrome plated brass shell, and the rest defaults to stainless steel Housing.

## Summary

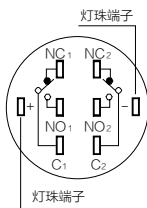
Mounting hole size	Φ56mm
Switch rating	ith 3A/250V
Switch combinations	1NO 1NC / 2NO 2NC
Operation mode	Momentary/Latching
Head shape	Flat head
Housing material	Stainless steel
With LED	Entire surface
Protection level	IP65 IK09
LED type	Two way LED beads (AC and DC universal)
Ie Rated current Ie	5~48V 约 90mA; 110~250V 约 15mA 5~48V about 90mA; 110~250V about 15mA
Voltage reduction method	Built-in resistance
Beads equivalent	Using AC and DC universal LED lamp beads, the terminal has no positive and negative poles to distinguish the built-in protection resistance of the lamp beads, and does not need to be connected.
	



## Switch structure description

Type	Schematic diagram	Symbol
C		

## Pin description



Up to two sets of switches can be configured.

C , NO , NC and C , NO , NC are a set of switches; C foot is common foot, NO foot is normally open foot, NC foot is normally closed foot; + , - pins are lamp bead pins, and conventional lamp bead configuration has no positive and negative polar distinction. The lamp beads are relatively independent of the switch, and the lamp bead status can be controlled by the switch or peripheral circuit. Lamp bead terminals

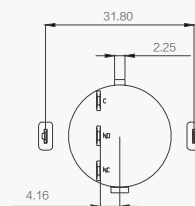
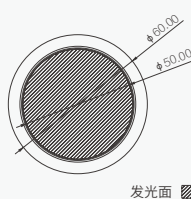
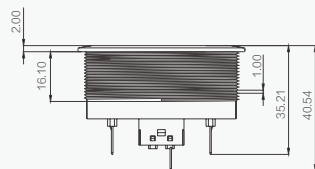
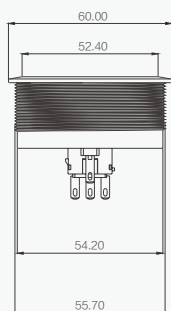
## Performance characteristics

Product specifications		HJ □ □ A- □ ■ / □ / Q	Mechanical life	More than 200,000 times	
Dielectric strength		1500VAC	Electrical life	More than 100,000 times	
Insulation resistance		≥ 1000MΩ	Panel thickness	1~10mm	
Contact resistance		≤ 50mΩ	Nut torque	5~14Nm	
Switch specifications		ith 3A/250V	Operating pressure	3N~5N	
Bottom configuration		(2.8×9mm) Wiring pins (2.8×9mm)	Operation travel	Approx 3.1mm	
Head shape		Flat head	Protection level	IP65 IK09	
Ambient temperature		- 20℃ ~+55℃			
Material	Contact	Sterling contact	LED parameter	LED type	Two way LED beads (AC and DC universal)
	Button	PC		Rated voltage Ue	3V / 6V / 12V / 24V /36V / 48V /110V / 220V
	Housing	Stainless steel		LED color	<div><div>R</div><div>Y</div><div>G</div><div>B</div><div>W</div></div>
	Pedestal	PBT		LED life	40,000 hours
RoHS		Customizable			

## Metal push button switch



## Outline size



Note: Optional button opening diameter Φ56mm



## B SERIES

### B series push button switch

Metal shell to prevent switch failure caused by various impacts during use. The button surface can be customized with various patterns to distinguish the switch function. The shorter volume allows for a smaller installation space.



shock-resistant



Waterproof and dustproof








Safe and practical



Quality assurance





## Model description

				-			 /	 /	 /			
Business code	Housing material		Mounting hole size		Serial number	Contact structure	Operation mode	Head shape		Wiring type		
H	JU	Nickel-plated brass	16	Φ16mm	B	10	No letters represent Momentary	Q	Spherical	Q	Welding pins	
			19	Φ19mm								
	JA	Aluminum oxide	22	Φ22mm					P	Flat head	M	Terminal
	JG	Stainless steel							T	High flat head		


Customize special patterns, please communicate with sales staff to confirm.

Shell material: Chrome plated brass, brass nickel plated, stainless steel, aluminum oxidation (color), please indicate the shell material when placing an order, the default is Chrome plated brass shell.

## Summary

Mounting hole size	Φ16mm、19mm、22mm
Switch rating	ith 2A/36V
Switch combinations	1NO
Operation mode	Momentary
Head shape	Spherical/Flat head/ High flat head
Housing material	Stainless steel / Brass (chrome or gold plated) / Aluminum (oxidized)
Protection level	HJ □ 16B(IP65) 、 HJ □ 19B、HJ □ 22B(IP65/IP67) IK09
housing color	
button color	

## Performance characteristics

Product specifications		HJ □ 16B- △ / △ / △	Ambient temperature	- 20℃ ~+55℃
Head shape		Spherical/flat round/high flat round	Mechanical life	More than 1,000,000 times
Bottom configuration		Binding posts/welding pins	Electrical life	More than 200,000 times
Switch specifications		ith 2A/36VDC	Panel thickness	1~6mm
Contact resistance		≤ 50mΩ	Nut torque	5~14Nm
Insulation resistance		≥ 1000MΩ	Operating pressure	About 4N
Dielectric strength		1500VAC	Operation travel	About 1.5mm
		Customizable		
Pedestal		PBT		
Material	Contact	Silver alloy		
	Button	Stainless steel / Aluminum (oxidized)		
	Housing	Stainless steel / Nickel-plated brass / Aluminum (oxidized)		



## Metal push button switch



Φ16

HJ □ 16B/Q/M



Φ16

HJ □ 16B/P/M



Φ16

HJ □ 16B/T/M



Φ16

HJ □ 16B/Q/S



Φ16

HJ □ 16B/P/S



Φ16

HJ □ 16B/T/S



Φ19

HJ □ 19B/Q/M



Φ19

HJ □ 19B/P/M

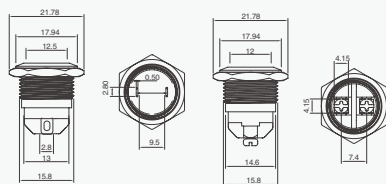


Φ19

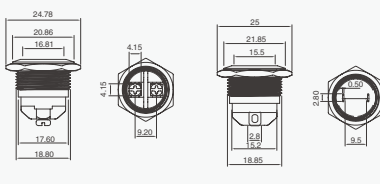
HJ □ 19B/T/M

## 外形尺寸 / Outline size

\*HJ □ 16B



\*HJ □ 19B



Note: \* Optional button opening diameter Φ16、19mm

## Metal push button switch



Φ19

HJ □ 19B/Q/S



Φ19

HJ □ 19B/P/S



Φ19

HJ □ 19B/T/S



Φ22

HJ □ 22B/Q/M



Φ22

HJ □ 22B/P/M



Φ22

HJ □ 22B/T/M



Φ22

HJ □ 22B/Q/S



Φ22

HJ □ 22B/P/S

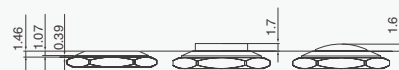
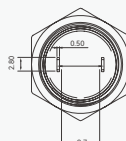
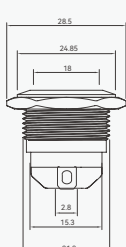
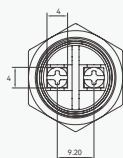
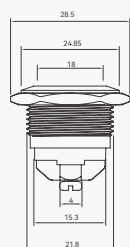


Φ22

HJ □ 22B/T/S

## Outline size

HJ □ 22B



Note: \* Optional button opening diameter Φ22, mm

## Metal button



Φ16

HJ □ 19B/Q/M



Φ19

HJ □ 19B/P/M



Φ22

HJ □ 19B/T/M

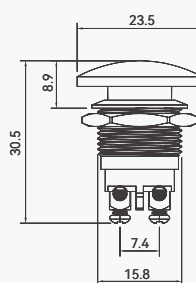
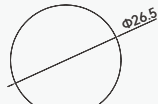
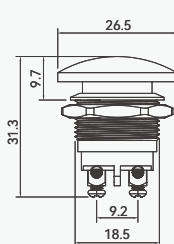
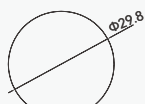
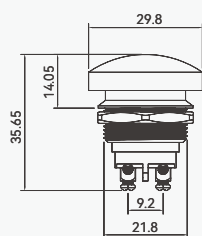


Φ22

HJ □ 22B/Q/M

For more product information, please contact our company!

## Outline size



Note: \* Optional button opening diameter Φ16、19、22mm



# 12C SERIES

## 12C series push button switch

Waterproof IP65/IP67, can be used directly in outdoor scenes.

The button surface can be customized with various patterns to distinguish the switch function.

The short volume can meet the narrower installation space.



shock-resistant



Waterproof and dustproof











Safe and practical



Quality assurance

## Model description

			-			/		/		/		/		/		/				
Business code	Housing material	Mounting hole size		Serial number	Contact structure		Operation mode		With LED		Head shape		button color		Wiring type		LED color		LED voltage	
H	JU	12	Φ12mm	C	10	1NO	Z	Latching	D	Dot	Q	Spherical	R	Red	S	Welding pins	R	Red	AC/DC 3V	
							None	Momentary	T	High Head	G	Green	G	Green			G	Green	AC/DC 6V	
	JA	Aluminum oxide											Y	Yellow			Y	Yellow	AC/DC 12V	
																			AC/DC 24V	
	JG	Stainless steel											B	Blue			B	Blue	AC/DC 36V	
																			AC/DC 48V	
	L	Plastics											WT	White			WT	White	AC/DC 110V	
																			AC/DC 220V	
													BK	Black						
													O	Orange						


Other colors can be customized

Note: Please read the specific description of the product carefully, and select the corresponding code in the table according to different symbols.

Customize special patterns, please communicate with sales staff to confirm.



Shell material: Chrome plated brass, brass nickel plated, stainless steel, aluminum oxidation (color), please indicate the shell material when placing an order, the default is Chrome plated brass shell.

## Summary

Mounting hole size	Φ12mm
Switch rating	16A/250V
Switch combinations	1NO
Operation mode	Momentary / Latching
With LED	LED / Single point
Protection level	IP65 / IP67 IK08
Head color	
Housing material	stainless steel / Aluminum (oxidized) / Chrome plated brass
Head material	PC / Stainless steel / Chrome plated brass
Operating ambient temperature	-25° C~+55° C (no freezing) must be air circulation around the lighting switch body
Working environment humidity	5~85%RH (non-condensing)
Contact resistance	≤ 50mΩ
Insulation resistance	≥ 1000MΩ
Maximum withstand voltage	1s, 50 Hz AC, 5 seconds
Vibration resistance	more than 10g
Impact resistance	1000Hz, amplitude about 1.2mm
Soldering temperature	320° C (or 30 watts of soldering iron) no more than 2 seconds



## Switch structure description

Type	Schematic diagram	Symbol
C		

Description: Double break slow moving contact switch with two terminals.

## Performance characteristics

Product specifications	HJ □ 12C- △ / △ / △	Mechanical life	More than 1,000,000 times
Head shape	Spherical/high head	Electrical life	More than 200,000 times
Bottom configuration	Wiring pins (3.7×2.8mm)	Panel thickness	1~5mm
Switch specifications	ith 2A/36V	Nut torque	5~14Nm
Contact resistance	≤ 50mΩ	Operating pressure	About 4N
Insulation resistance	≥ 1000MΩ	Operation travel	About 1.5mm
Dielectric strength	1500VAC	Material	Pedestal PA
Ambient temperature	-20℃ ~+55℃		Housing Stainless steel / brass (chrome plated)
Protection level	IP65/IP67 IK08		Button PC / Stainless steel / Chrome plated brass
	Customizable	Contact point	Gold-plated contact / Silver alloy contact
LED specification	Built-in lamp beads		
	LED color		
	Ie Rated current Ie	3~48V about 15mA 110~220V about 2mA	
	Ue Rated voltage Ue	3V/6V/12V/24V/36V/ 48V/110V/220V	
	LED life	40,000 hours	

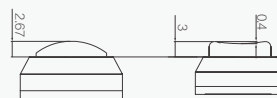
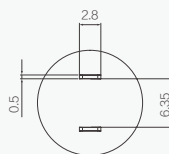
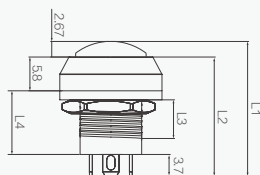
Note: If unidirectional DC LED lamp beads are required, they can be customized; Other voltage specifications can be customized as required.



## Metal push button switch



## Outline size



L1 value: The Momentary is 23.07

L2 value: The Momentary is 20.40

L3 value: The Momentary is 6.62

L4 value: The Momentary is 10.90

The latching type is 26.27

The latching type is 23.60

The latching type is 8.38

The latching type is 14.10

Note: Optional button opening diameter Φ12mm



# 16/19/22C SERIES

16C/19C/22C series push button switch

Waterproof IP65/IP67, can be used directly in outdoor scenes.

The button surface can be customized with various patterns to distinguish the switch function.

The small volume can meet the more narrow installation space.



shock-resistant



Waterproof and dustproof










Safe and practical



Quality assurance



## Model description

			-			/		/		/		/		/						
Business code	Housing material		Mounting hole size		Serial number	Contact structure		Operation mode		With LED		Head shape		Wiring type		LED color		LED voltage		
H	JU	Nickel-plated brass	16	Φ16mm	C	10	1NO	Z	Latching	D	Large-area lamp	Q	Spherical	S	Welding pins	R	Red	AC/DC 3V		
			19	Φ19mm		None	Momentary	D1	Dot							P	Flat head	G	Green	AC/DC 6V
			22	Φ22mm														Y	Yellow	AC/DC 12V
	JA	Aluminum oxide					D2	Ring	T	High flat head	B	Blue	AC/DC 24V							
	JG	Stainless steel					D3	Power icon			WT	White	AC/DC 36V							
L	Plastics					D4	Power icon with ring									AC/DC 48V				
																	AC/DC 110V			
																	AC/DC 220V			



Customize special patterns,  
please communicate with  
sales staff to confirm.

Note: Please read the specific description of the product carefully, and select the corresponding code in the table according to different symbols.  
Customize special patterns, please communicate with sales staff to confirm.  
Shell material: Chrome plated brass, brass nickel plating, stainless steel, aluminum oxidation (color), please indicate the shell material when placing an order,  
The 16C defaults to a Chrome plated brass housing and the 19C/22C defaults to a stainless steel case.

## Summary



Mounting hole size	Φ16mm 19mm 22mm
Switch rating	ith 2A/36V
Switch combinations	1NO
Operation mode	Momentary/latching
With LED	LED <span>R</span> <span>Y</span> <span>G</span> <span>B</span> <span>W</span>
Protection level	IP65/IP67 IK10
Head color	<span>R</span> <span>Y</span> <span>G</span> <span>B</span> <span>W</span> <span>BL</span>
Housing material	brass chrome plating, stainless steel, aluminum oxidation (color),
Head material	PC
Operating ambient temperature	-25° C~+55° C (no freezing) must be air circulation around the lighting switch body
Working environment humidity	45~85%RH (non-condensing)
Contact resistance	≤ 50mΩ
Insulation resistance	≥ 1000MΩ
Maximum withstand voltage	1500 volts, 50 Hz AC, 5 seconds
Vibration resistance	More than 10g
Impact resistance	50 Hz, amplitude about 1.2mm
Soldering heat	At 320° C (or 30 watts of soldering iron) no more than 2 seconds

## Switch structure description

Type	Schematic diagram	Symbol
C		

Description: Double break slow moving contact switch with two terminals.

## Performance characteristics

Product specifications	HJ □ - □ / △ / ● / ☆	Mechanical life	More than 1,000,000 times
Head shape	Spherical/High flat head	Electrical life	More than 200,000 times
Bottom configuration	Wiring pins (2×6mm)	Panel thickness	1~5mm
Switch specifications	ith 2A/36V	Nut torque	5~14Nm
Contact resistance	≤ 50mΩ	Operating pressure	About 4N
Insulation resistance	≥ 1000MΩ	Operation travel	About 1.5mm
Dielectric strength	1500VAC	Material	Pedestal PA
Ambient temperature	-20℃ ~+55℃		Housing Stainless steel/Brass (chrome plated) / PC
Protection level	IP65/IP67 IK08		Button PC / Stainless steel (chrome plated) / Stainless steel
	Customizable	Contact point	Gold-plated contact
LED specification	Built-in lamp beads		
	LED color		
	Ie Rated current Ie	3~48V about 15mA 110~220V about 2mA	
	Ue Rated voltage Ue	3V/6V/12V/24V/36V/48V/110V/220V	
	LED life	40,000 hours	

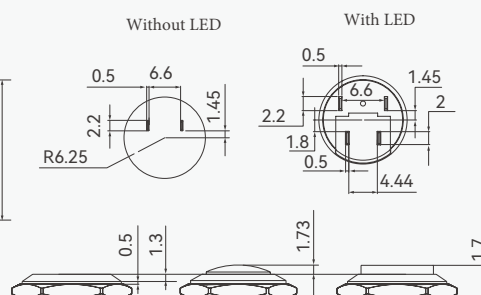
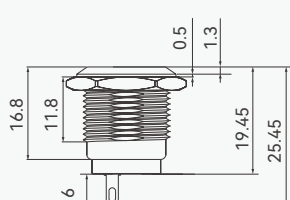
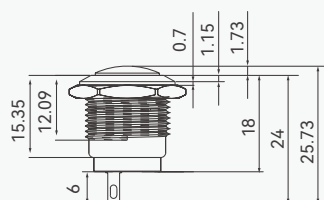
Note: If unidirectional DC LED lamp beads are required, they can be customized; Other voltage specifications can be customized as required.



## Metal push button switch



## Outline size



Note: Optional button opening diameter Φ16、19、22mm

## Metal push button switch



Φ16

HL16C □ /D/P/S



Φ16

HL16C □ /D/T/S



Φ19

HJ □ 19C □ /Q/S



Φ19

HJ □ 19C □ /P/S



Φ19

HJ □ 19C □ /T/S



Φ19

HJ □ 19C □ /D2/P/S



Φ19

HJ □ 19C □ /D2/T/S



Φ19

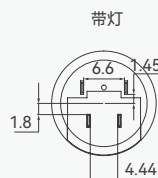
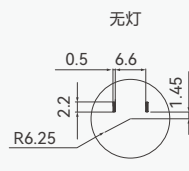
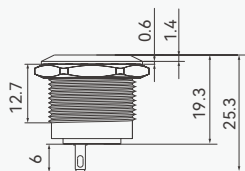
HJ □ 19C □ /D3/P/S



Φ19

HJ □ 19C □ /D4/P/S

## Outline size



Note: Optional button opening diameter Φ16、19、22mm

## Metal push button switch



Φ22

HJ □ 22C □ /Q/S



Φ22

HJ □ 22C □ /P/S



Φ22

HJ □ 22C □ /T/S



Φ22

HJ □ 22C □ /D2/P/S



Φ22

HJ □ 22C □ /D2/T/S



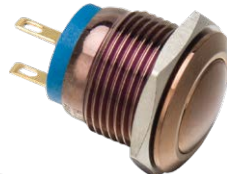
Φ22

HJ □ 22C □ /D3/P/S



Φ22

HJ □ 22C □ /D4/P/S



Φ16

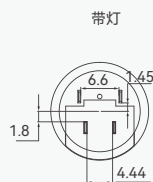
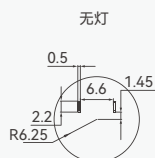
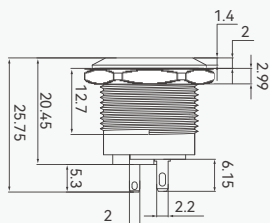
HJ □ 16C □ /Q/S 咖色  
HJ □ 16C □ /Q/S Coffee color



Φ16

HJ □ 16C □ /Q/S 蓝冰  
HJ □ 16C □ /Q/S Blue ice

## Outline size



Note: Optional button opening diameter Φ16、19、22mm



## 8/10E SERIES

### 8/10E series push button switch

Metal shell to prevent switch failure caused by various impacts during use.  
The ultra-small volume can meet the smaller installation space.



shock-resistant



Waterproof and dustproof



Safe and practical





Quality assurance



## Summary

Mounting hole size	Φ8、Φ10mm
Switch rating	ith 2A/36V
Switch combinations	1NO
Operation mode	Momentary
Protection level	IP65, IK08
Housing material	Stainless steel/brass nickel plated
Operating ambient temperature	-25° C~+55° C (no freezing) must be air circulation around the lighting switch body
Working environment humidity	45~85%RH (non-condensing)
Contact resistance	≤ 50mΩ
Insulation resistance	≥ 1000MΩ
Maximum withstand voltage	1500 volts, 50 Hz AC, 5 seconds
Vibration resistance	50 Hz, amplitude about 1.2mm
Impact resistance	More than 10g
Soldering heat	At 320° C (or 30 watts of soldering iron) no more than 2 seconds

## Switch structure description

Type	Schematic diagram	Symbol
C		

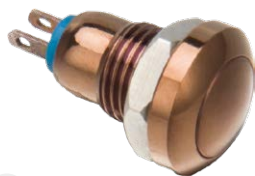
Description: Double break slow moving contact switch with two terminals.

## Performance characteristics

Product specifications	HJ □ 8E	Mechanical life	100 万次以上 More than 1,000,000 times
Head shape	Spherical	Electrical life	20 万次以上 More than 200,000 times
Bottom configuration	Wiring pins (1.5×5mm)	anel thickness	1~5mm
Switch specifications	ith 2A/36V	Nut torque	5~14mm
Contact resistance	≤ 50mΩ	Operating pressure	约 4N About 4N
Insulation resistance	≥ 1000MΩ	Operation travel	约 1.5mm About 1.5mm
Dielectric strength	1500VAC	Material	Pedestal PA
Ambient temperature	-20°C ~+55°C		housing Stainless steel/brass (nickel plated)
rotection level	IP65 IK08		Button Stainless steel
RoHS	Customizable	Contact	Silver-plated contact



## Metal push button switch



Φ8

HJ □ 8E



Φ8

HJ □ 8E



Φ8

HJ □ 8E

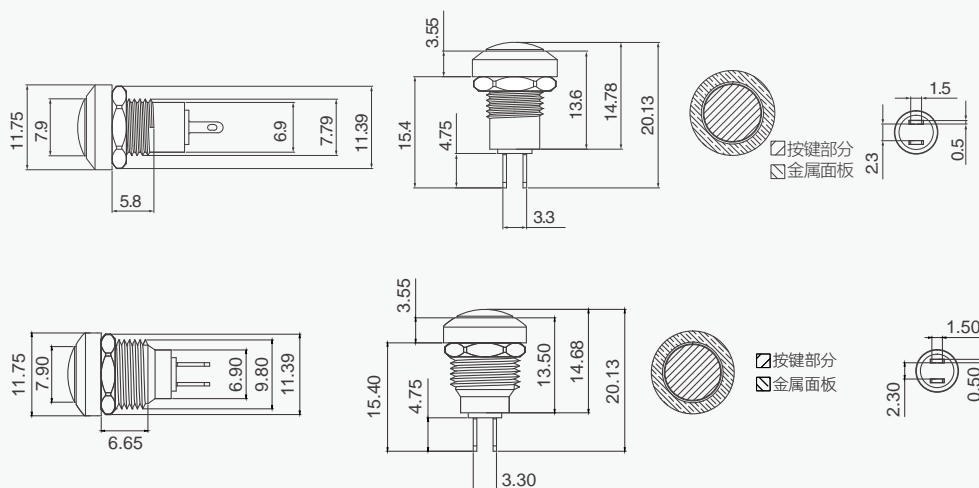


Φ8

HJ □ 10E

For more product information, please contact our company!

## Outline size



Note: Optional button opening diameter Φ8、10mm



# 12E SERIES

## 12E series push button switch

Waterproof IP65/IP67, can be used directly in outdoor scenes.

The button surface can be customized with various patterns to distinguish the switch function.

The small volume can meet the more narrow installation space.



shock-resistant



Waterproof and dustproof











Safe and practical



Quality assurance

## Model description


			-			/		/		/		/		/		/				
Business code	Housing material	Mounting hole size		Serial number	Contact structure		Operation mode		With LED		Head shape		button color		Wiring type		LED color		LED voltage	
H	JU Nickel-plated brass	12	Φ12mm	E	10	1NO	Z	Latching	D2	Ring	P	Flat head	R	Red	S	Welding pins	R	Red	AC/DC 3V	
							None	Momentary			T	High head	G	Green			G	Green	AC/DC 6V	
														Y			Yellow	Y	Yellow	AC/DC 12V
																				AC/DC 24V
																				AC/DC 36V
	JA Aluminum oxide								D3	ring with power indicator			Y	Yellow			Y	Yellow	AC/DC 48V	
	JG Stainless steel												B	Blue			B	Blue	AC/DC 110V	
	L Plastics												WT	White			WT	White	AC/DC 220V	
																			Customize special patterns, please communicate with sales staff to confirm.	

Note: Please read the specific description of the product carefully, and select the corresponding code in the table according to different symbols.

Customize special patterns, please communicate with sales staff to confirm.



Shell material: brass chrome plating, brass nickel plating, stainless steel, aluminum oxidation (color), please indicate the shell material when placing an order, The default is a brass chrome housing.

## Summary

Mounting hole size	Φ12mm
Mounting hole size	ith 2A/36V
Mounting hole size	1NO
Operation mode	Momentary/Latching
With LED	Ring /ring with power indicator light/Power indicator light
Protection level	IP65/IP67 IK08
Head color	
Housing material	Brass chrome plating, stainless steel, aluminum oxidation
Housing material	PC
Operating ambient temperature	-25° C~+55° C (no freezing) must be air circulation around the Dot switch body
Working environment humidity	45~85%RH (non-condensing)
Contact resistance	≤ 50mΩ
Insulation resistance	≥ 1000MΩ
Maximum withstand voltage	1500 volts, 50 Hz AC, 5 seconds
Vibration resistance	50 Hz, amplitude about 1.2mm
Impact resistance	More than 10g
Soldering heat	At 320° C (or 30 watts of soldering iron) no more than 2 seconds



## Switch structure description

Type	Schematic diagram	Symbol
C		

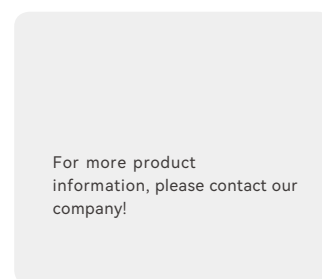
Description: Double break slow moving contact switch with two terminals.

## Performance characteristics

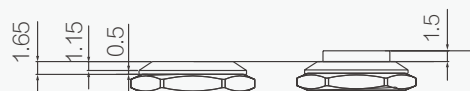
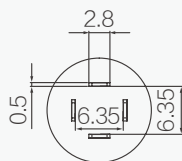
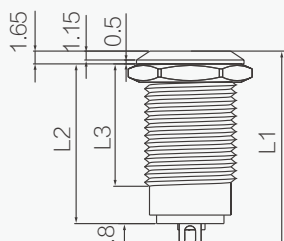
Product specifications	HJ □ 12E- △ / ● / ☆ / ◇	Mechanical life	More than 1,000,000 times
Head shape	Flat round/high Flat round	Electrical life	More than 200,000 times
Bottom configuration	Wiring pins (2.8×3.8mm)	Panel thickness	1~5mm
Switch specifications	ith 2A/36V	Nut torque	5~14Nm
Contact resistance	≤ 50mΩ	Operating pressure	About 4N
Insulation resistance	≥ 1000MΩ	Operation travel	About 1.5mm
Dielectric strength	1500VAC	Material	Pedestal PA
Ambient temperature	-25℃ ~+55℃		Housing Stainless steel / brass (chrome plated) / aluminum (oxidized)
Protection level	IP65/IP67 IK08		Button PC/Stainless steel
RoHS	Customizable	Contact point	Gold-plated contact / Silver alloy
LED specification	Built-in lamp beads		
	LED color		
	Ie Rated current Ie	3~48V about 15mA 110~220V about 2mA	
	Ue Rated voltage Ue	3V/6V/12V/24V/36V/48V/110V/220V	
	LED life	40,000 hours	

Note: If unidirectional DC LED lamp beads are required, they can be customized; Other voltage specifications can be customized as required.

## Metal push button switch



## Outline size



L1 value: The Momentary is 23.07

L2 value: The Momentary is 20.40

L3 value: The Momentary is 6.62

L4 value: The Momentary is 10.90

The latching type is 26.27

The latching type is 23.60

The latching type is 8.38

The latching type is 14.10

Note: Optional button opening diameter Φ12mm





# 16E SERIES

## 16E series push button switch

Waterproof IP65/IP67, can be used directly in outdoor scenes.

The button surface can be customized with various patterns to distinguish the switch function.

The small volume can meet the more narrow installation space.

Metal shell to prevent switch failure caused by various impacts during use.



shock-resistant



Waterproof and dustproof



Safe and practical



Quality assurance

## Model description

Business code	Housing material	Mounting hole size	Serial number	Contact structure	Operation mode	With LED	Head shape	Wiring type	LED color	LED voltage
H	JU Nickel-plated brass	16 Φ16mm	E	10 1NO	None Momentary	D2 Ring	None Flat head	S Welding pins	R Red	AC/DC 3V
	JA Aluminum oxide					D4 Power icon with ring	T High Head		G Green	AC/DC 6V
	JG Stainless steel								Y Yellow	AC/DC 12V
	L Plastics								B Blue	AC/DC 24V
									WT White	AC/DC 36V
										AC/DC 48V
										AC/DC 110V
										AC/DC 220V

Note: Please read the specific description of the product carefully, and select the corresponding code in the table according to different symbols.

Customize special patterns, please communicate with sales staff to confirm.

Shell material: brass chrome plating, brass nickel plating, stainless steel, aluminum oxidation (color), please indicate the shell material when placing an order, The default is a brass chrome housing.

## Summary

Mounting hole size	Φ16mm	With LED	Ring /Ring power supply Pattern light
Mounting hole size	ith 2A/36V	Protection level	Stainless steel / brass (chrome plated) / aluminum (oxidized)
Mounting hole size	1NO		
Operation mode	Momentary	Housing material	IP65/IP67 Customizable IP65/IP67

## Switch structure description

Type	Schematic diagram	Symbol
X		

Description: Double break slow moving contact switch with two terminals.

## Performance characteristics

Product specifications	HJ □ 16- △ / △ / △	Mechanical life	More than 1,000,000 times
Head shape	Flat round/high Flat round	Electrical life	More than 200,000 times
Bottom configuration	Wiring pins (2×5mm)	Panel thickness	1~5mm
Switch specifications	ith 2A/36V	Nut torque	5~14Nm
Contact resistance	≤ 50mΩ	Operating pressure	About 4N
Insulation resistance	≥ 1000MΩ	Operation travel	About 1.5mm
Dielectric strength	1500VAC	Material	Pedestal PA
Ambient temperature	-20℃ ~+55℃		Housing Stainless steel / brass (chrome plated) / aluminum (oxidized)/ Nickel-plated brass
Protection level	IP65/IP67 IK08		Button Stainless steel/Stainless Steel Chrome/Aluminum (oxidized)
RoHS	Customizable	Contact point	Gold-plated contact
LED specification	Built-in lamp beads		
	LED color	Three or two colors can be customized	
	e Rated current Ie	3~48V 约 15mA 110~220V 约 2mA	
	Ue Rated voltage Ue	3V/6V/12V/24V/36V/48V/110V/220V	
	ED life	40,000 hours	

Note: If unidirectional DC LED lamp beads are required, they can be customized; Other voltage specifications can be customized as required.

## Metal push button switch



Φ16

HJ □ 16E/D2/P/S



Φ16

HJ □ 16E/D2/P/S



Φ16

HJ □ 16E/D2/P/S



Φ16

HJ □ 16E/D2/P/S



Φ16

HJ □ 16E/D2/T/S



Φ16

HJ □ 16E/D4/P/S

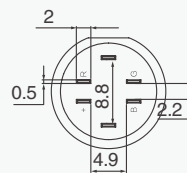
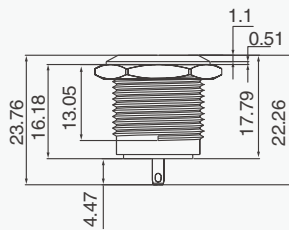


Φ16

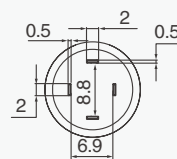
HJ □ 16E/D4/P/S

For more product information, please contact our company!

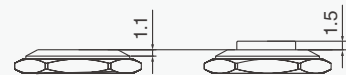
## Outline size



Three-color light  
foot diagram



Monochrome light  
foot diagram



Note: Optional button opening diameter Φ16mm

# FA new Metal push button switch



## F Series

## FA Series

Product model

Waterproof class

Volume

Electrical performance

Overall dimension

Waterproof class  $\leq$ IP65

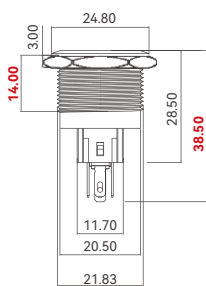
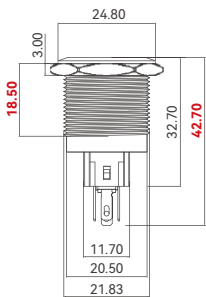
Waterproof rating **IP65/IP67**, suitable for more environments

Longer than new

housing length **20mm**, more space utilization

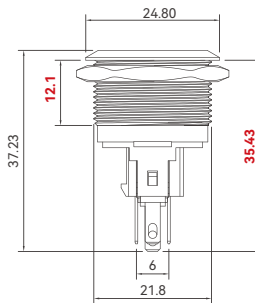
long:latching,short:momentary

the length of momentary/latching model **is the same**



long:latching

short:momentary



**latching/momentary**



# F SERIES

## F series push button switch

Waterproof IP65/IP67, can be used directly in outdoor scenes.

The button surface can be customized with various patterns to distinguish the switch function.

The small volume can meet the more narrow installation space.



shock-resistant



Waterproof and dustproof



Safe and practical



Quality assurance

## Model description

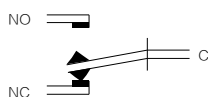
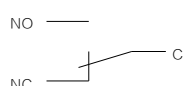
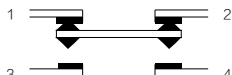
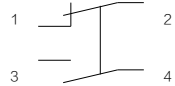
Business code		Housing material	Mounting hole size		Serial number	Contact structure		Operation mode		With LED		Head shape		Wiring type		Ribbon color		LED voltage		
H	JU	Nickel-plated brass	22	Φ22mm	F	11	1NO 1NC	D	Signal indicator	D	Entire surface	P	Flat head	Q	Pins	R	Red	AC/DC 3V		
			25	Φ25mm		22	2NO 2NC			D1	Dot	T	High head			G	Green	AC/DC 6V		
			30	Φ30mm												Y	Yellow	AC/DC 12V		
	JA	Aluminum oxide						Z	Latching	D2	Ring					B	Blue	AC/DC 24V		
																		AC/DC 36V		
																		AC/DC 48V		
	JG	Stainless steel						None	Momentary	D3	Power icon					WT	White	AC/DC 110V		
																		AC/DC 220V		
										D4	Power icon with ring									

Customize special patterns, please communicate with sales staff to confirm.

## Summary

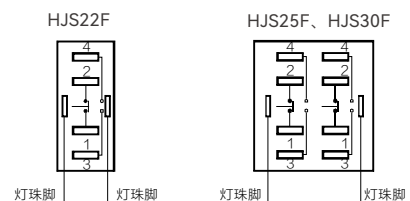
Mounting hole size	Φ22mm/Φ25mm/Φ30mm
Mounting hole size	Ith: 5A / 36VDC
Mounting hole size	1NO 1NC/2NO 2NC
Operation mode	Momentary/Latching
Head shape	Flat head
Housing material	Stainless steel / brass (chrome plated) / aluminum (oxidized)
With LED	Dot/Ring /Power icon
Protection level	IP65 IK10

## Switch structure description

Type	Schematic diagram	Symbol
C		
Za		



## Pin description



1, 2, 3, 4 is a set of switches;

1, 2 are normally closed contact NC, 3 and 4 are normally open contact NO.

The lamp bead legs of the conventional configuration do not distinguish between positive and negative poles.

The lamp beads are relatively independent of the switch, and the lamp bead status can be controlled by the switch or peripheral circuit.

## Performance characteristics

Product specifications		HJ □ □ F- ▲ △ / ●	Mechanical life	More than 1,000,000 times	
Head shape		Flat round	Electrical life	More than 200,000 times	
Bottom configuration		Wiring pins (2.8×10mm)	Panel thickness	1~10mm	
Switch specifications		Ith: 5A Ui: 250VAC	Nut torque	5~14Nm	
Contact resistance		≤ 50mΩ	Operating pressure	About 5N	
Insulation resistance		≥ 1000MΩ	Operation travel	About 2.5mm	
Dielectric strength		1500VAC	Protection level	IP65 IK10	
Ambient temperature		- 20℃ ~+55℃			
Materials	Contact point	Silver alloy gilding	LED parameter	LED type	Two way LED beads (AC and DC universal)
	Button	Stainless steel		Ue Rated voltage Ue	6V / 12V / 24V /110V / 220V
	Housing	Stainless steel		LED color	<div><div>R</div><div>Y</div><div>G</div><div>B</div><div>W</div></div>
	Pedestal	PBT		LED life	40,000 hours
<div>RoHS</div>		Customizable			

Note: If unidirectional DC LED lamp beads are required, they can be customized; Other voltage specifications can be customized as required.

## Metal push button switch



Φ22

HJ □ 22F-11/ □ /P/Q



Φ22

HJ □ 22F-11/ □ /D2/P/Q



Φ22

HJ □ 22F-11/ □ /D3/P/Q



Φ22

HJ □ 22F-11/ □ /D4/P/Q



Φ25

HJ □ 25F- □ / □ /P/Q



Φ25

HJ □ 25F- □ / □ /D2/P/Q



Φ25

HJ □ 25F- □ / □ /D3/P/Q



Φ25

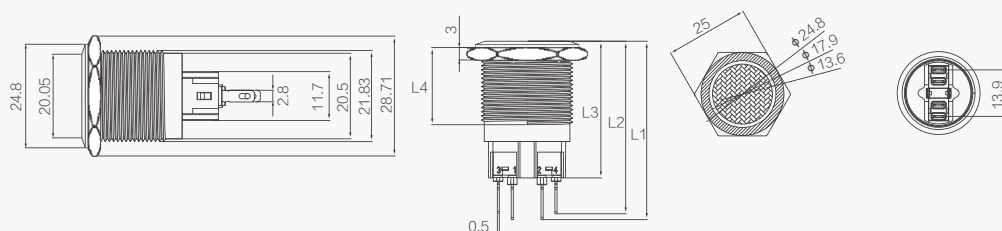
HJ □ 25F- □ / □ /D4/P/Q



Φ30

HJ □ 30F- □ / □ /P/Q

## Outline size



L1 value: The Momentary is 38.50

L2 value: The Momentary is 37.10

L3 value: The Momentary is 28.50

L4 value: The Momentary is 14.30

The latching type is 42.70

The latching type is 41.30

The latching type is 32.70

The latching type is 18.50

Note: Optional button opening diameter Φ12、25、30mm

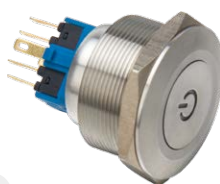


## Metal push button switch



Φ30

HJ □ 30F- □ / □ /D2/P/Q



Φ30

HJ □ 30F- □ / □ /D3/P/Q



Φ30

HJ □ 30F- □ / □ /D4/P/Q



Φ22

HJ □ 22F-11/ □ /D2/T/Q

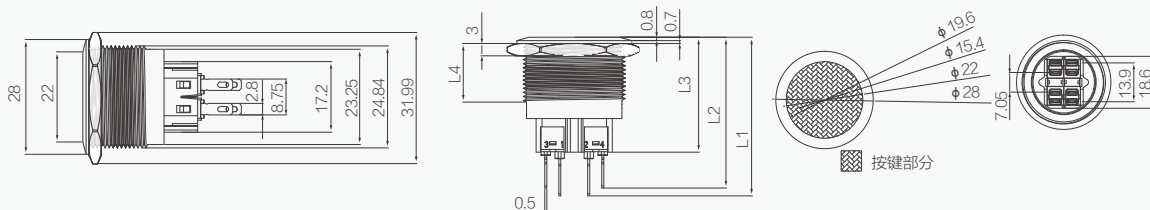


Φ22

特殊图案定制  
Special pattern customization

For more product information,  
please contact our company!

## Outline size



L1 value: The Momentary is 23.07

L2 value: The Momentary is 20.40

L3 value: The Momentary is 6.62

L4 value: The Momentary is 10.90

The self-locking type is 26.27

The latching type is 23.60

The latching type is 8.38

The latching type is 14.10

Note: Optional button opening diameter Φ12、25、30mm





# QC SERIES

QC series push button switch

Metal shell to prevent switch failure caused by various impacts during use.

Waterproof IP65/IP67, can be used directly in outdoor scenes.

The ultra-short volume can meet the smaller installation space.

The button surface can be customized with various patterns to distinguish the switch function.



shock-resistant



Waterproof and dustproof










Safe and practical



Quality assurance



## Model description

																					
Business code	Housing material		Mounting hole size		Serial number	Contact structure		With LED		Head shape		Wiring type		LED color		LED voltage					
H	JU	Nickel-plated brass	12	Φ12mm	QC	10	1NO	D2	Ring	P	Flat head	S	Welding pins	R	Red	AC/DC 3V					
			16	Φ16mm										T	High Head	L	Wire harness extension	G	Green	AC/DC 6V	
			19	Φ19mm														Y	Yellow	AC/DC 12V	
	JA	Aluminum oxide	22	Φ22mm	B	Blue	AC/DC 24V														
			JG	Stainless steel			WT	White	AC/DC 36V												
									AC/DC 48V												
													AC/DC 110V								
					AC/DC 220V																

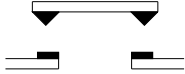

Note: Please read the specific description of the product carefully, and select the corresponding code in the table according to different symbols.

Customize special patterns, please communicate with sales staff to confirm.

## Summary

Mounting hole size	Φ12mm/Φ16mm/Φ19mm/Φ22mm
Mounting hole size	lth: 0.1A/36VDC
Mounting hole size	1NO
Operation mode	Momentary
Head shape	Flat head/High flat head
Housing material	Stainless steel//brass nickel-plated/aluminum oxidation
With LED	Ring
Protection level	IP65/IP67 IK10

## Switch structure description

Type	Schematic diagram	Symbol
C		

## Performance characteristics

Product specifications		HJ □ □ QC- ▲ △ / ●	Mechanical life		More than 200,000 times
Dielectric strength		1000Vac/50Hz	Electrical life		More than 50,000 times
Insulation resistance		≥ 500mΩ	Panel thickness		1~5mm
Contact resistance		≤ 50mΩ	Nut torque		5~14Nm
Switch specifications		lth: 0.1A/36VDC	Operating pressure		About 15-300G
Bottom configuration		Wiring pins (2×0.5mm)	Operation travel		About 1mm
Head shape		Flat round/high Flat round	Protection level		IP65/IP67 IK10
Ambient temperature		-20℃ ~+55℃			
Materials	Contact point	-	LED parameter	LED type	Two way LED beads (AC and DC universal)
	Button	Stainless steel/aluminum oxidation		Ue Rated voltage Ue	6V / 12V / 24V / 110V / 220V
	Housing	Stainless steel/brass nickel-plated/aluminum oxidation		LED color	<div><div>R</div><div>Y</div><div>G</div><div>B</div><div>W</div></div> Three or two colors can be customized
	Pedestal	PA		LED life	40000 小时 40,000 hours
RoHS		Customizable			

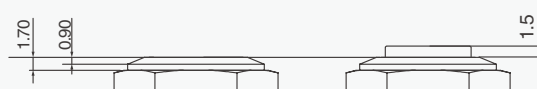
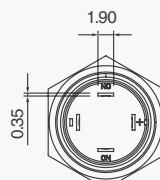
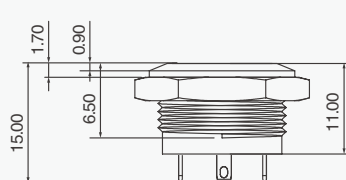
Note: If unidirectional DC LED lamp beads are required, they can be customized; Other voltage specifications can be customized as required.

## Metal push button switch



For more product information, please contact our company!

## Outline size



Note: Optional button opening diameter Φ12、16、19、22、25mm





# M SERIES

## M series push button switch

Metal shell to prevent switch failure caused by various impacts during use.

Waterproof IP65/IP67, can be used directly in outdoor scenes.

The ultra-short volume can meet the smaller installation space.

20A current meets more load requirements.

The button surface can be customized with various patterns to distinguish the switch function.



shock-resistant



Waterproof and dustproof



Safe and practical



Quality assurance

## Model description

<div><div><div><div></div></div></div><div>-</div><div><div><div></div></div></div><div>/</div><div><div><div></div></div></div><div>/</div><div><div><div></div></div></div><div>/</div><div><div><div></div></div></div><div>/</div><div><div><div></div></div></div><div>/</div><div><div><div></div></div></div><div>/</div><div><div><div></div></div></div><div>/</div><div><div><div></div></div></div></div>																						
Business code		Housing material		Mounting hole size		Serial number	Contact structure		Operation mode		With LED		Head shape		Wiring type		LED color		LED voltage			
H		JG stainless steel		16	Φ16mm	M		10	1NO	Z	Latching	D	Entire urface		Q	Spherical		S	Welding pins	R	Red	AC/DC 3V
				19	Φ19mm			11	1NO 1NC											G	Green	AC/DC 6V
				JU brass nickel-plated				22	Φ22mm	01	1NC	NO	Momentary	D1	Dot	P	Flat head		Q	Pins		Y
		02	2NC			B	Blue	AC/DC 24V														
		20	2NO			AC/DC 36V																
				AC/DC 48V																		
		JA aluminum oxidation						D3	Power icon		T			High Head						WT	White	AC/DC 110V
																				AC/DC 220V		
																				RGB	RGB	
																				RGY	RGY	
								D4	Power icon with ring													

Note: Please read the product description carefully and select the corresponding code in the table according to different symbols.

Customize special patterns, please contact the sales staff to confirm.

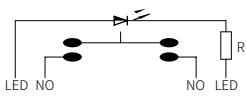

Shell material: brass nickel plating, stainless steel, aluminum oxidation, order please indicate the shell material.

Switch pin, silver plated brass by default, gold plated brass optional.

## Summary

Mounting hole size	Φ16mm、Φ19mm、Φ22mm
Mounting hole size	20A
Mounting hole size	1NO 1NC / 2NO 2NC
Operation mode	Momentary/Latching
With LED	Ring /Power icon with ring
Housing material	Stainless steel/Copper nickel plated/Aluminum
Protection level	Customizable IP65/IP67



## Switch structure description

Type	Schematic diagram	Symbol
M		

Description: Double break slow action contact switch with two terminals

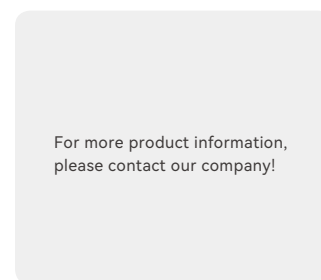


## Performance characteristics

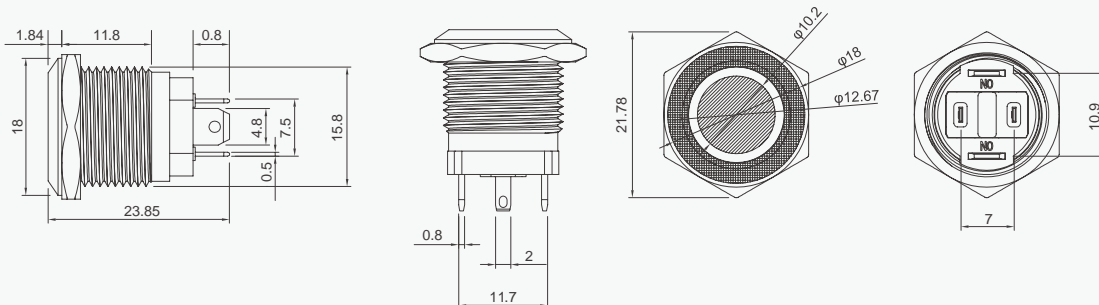
Product specifications	HJ □ - □ / △ / ● / ☆	Mechanical life	More than 1,000,000 times
Head shape	Spherical/flat round/high flat round	Electrical life	More than 40,000 times (20A); Over 60,000 times (15A); More than 200,000 times (10A)
Bottom configuration	Wiring pins (4.8×4.8×0.8mm )	Panel thickness	1~5mm
Switch specifications	20A	Nut torque	5~14Nm
Contact resistance	≤ 50mΩ	Operating pressure	About 4N
Insulation resistance	≥ 1000MΩ	Operation travel	About 1.5mm
Dielectric strength	2500VAC	Materials	Pedestal PA
Ambient temperature	-20℃ ~+80℃		Housing Stainless steel/Brass (nickel plated)/Aluminum (oxidized) /PC
Protection level	IP65/IP67 IK08		Button PC/ Stainless steel
	Customizable	Contact point	Silver alloy contact
LED specification	Built-in lamp beads		
	LED color	 Three or two colors can be customized	
	Ue Rated voltage Ue	3V/6V/12V/24V/36V/48V/110V/220V	
	Ie Rated current Ie	3 to 48V About 15mA 110 to 220V about 2mA	
	LED life	4000 hours	

Note: If unidirectional DC LED lamp beads are required, they can be customized; Other voltage specifications can be customized as required.

## Metal push button switch



## Outline size



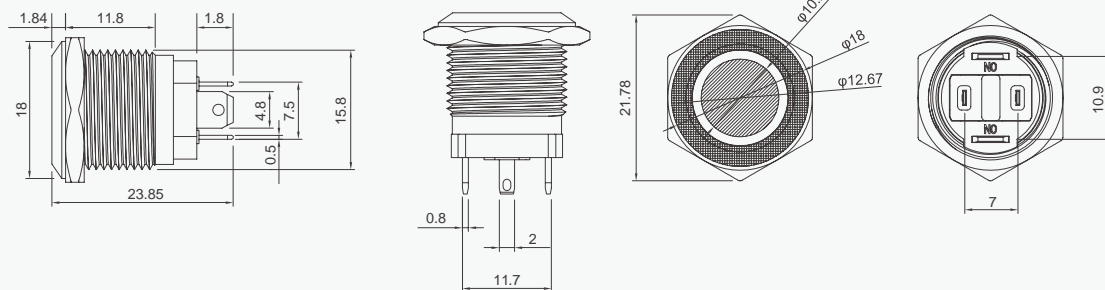
Note: Optional button opening diameter Φ16、19、22、mm

## Metal push button switch



For more product information, please contact our company!

## Outline size



Note: Optional button opening diameter  $\phi 16$ 、 $19$ 、 $22$ 、mm



# U SERIES

## U series plastic button switch

The button surface can be customized with various patterns to distinguish the switch function.

The design of split installation can better meet the installation requirements of customers.

The switch housing adopts the painting process of automobile parts, so that the product has more colors for customers to choose.



shock-resistant



Waterproof and dustproof



Safe and practical



Quality assurance





## Summary

Specifications: indicator, button, button with light,

Performance: The product has the characteristics of stable performance, small contact resistance, strong insulation, vibration resistance, impact resistance, etc. Comply with IEC60947-5-1, GB14048.5 and other standards.

Structure: The switching element adopts the "fast moving" structure, each switching element contains a normal open and a normal close, and each button can be configured with a maximum of 2 switching components.

Features: Veneer mounting mode, the front frame of the product is only 2mm higher than the panel. Button covers can be customized in various patterns.

Protection level: IP40

## Model description

Business code		Housing material		Housing color		Mounting hole size		Serial number		Contact structure		Operation mode		With LED		Wiring type		LED color		LED voltage			
H	L	Plastics	BK	Black	16	Φ16mm	U	11	1NO 1NC	Z	Latching	D	Entire urface	Q	Pins	R	Red	AC/DC 3V					
					22	Φ22mm		22	2NO 2NC							G	Green	AC/DC 6V					
			WT	Silver														Y	Yellow	AC/DC 12V			
			Other colors customizable																B	Blue	AC/DC 24V		
												D1	Dot							AC/DC 36V			
												D2	Ring							AC/DC 48V			
												D3	Power icon							AC/DC 110V			
												D4	Power icon with ring					WT	White	AC/DC 220V			

Note: Please read the specific description of the product carefully, and select the corresponding code in the table according to different symbols.


Customize special patterns, please communicate with sales staff to confirm.

## Switch Rating

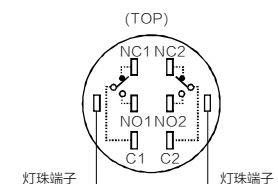
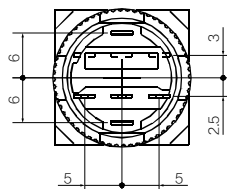
Ui UiRated insulation voltage UI			250V			
Ith Heating current Ith			The ith 5A temperature does not exceed the allowable current of the maximum			
Rated operating voltage			12V	24V	110V	220V
rated operating current	50/60Hz AC	resistive load	-	-	1A	0.5A
		inductive load	-	-	0.7A	0.5A
	DC	resistive load	1A	1A	0.2A	-
		inductive load	0.7A	0.7A	0.1A	-
Contact material			terling silver gilded			

Minimum adapted load: 3V AC/DC 5mA (reference value) (range of use depends on usage environment and load type)

## LED specifications

LED type	Two way LED beads (conventional configuration)		
Ue Rated voltage Ue	AC/DC6V	AC/DC12V	AC/DC24V
	AC/DC110V	AC/DC220V	
LED color			
Longevity life	About 40,000 hours		

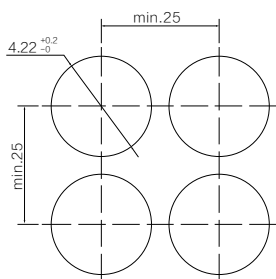
Note: The lamp bead has built-in protection resistor, no external connection is required. If DC unidirectional LED lamp beads are required, they can be customized;  
Other voltage specifications can be customized as required; Red and green color change can be customized.



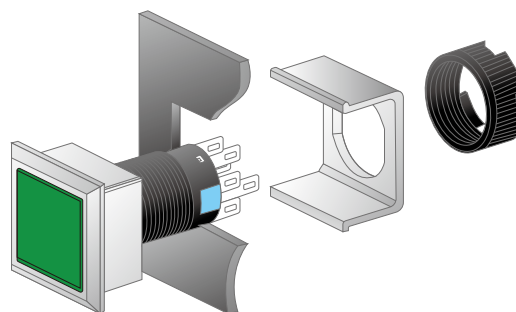
## Performance characteristics

Working environment			-25° C~+55° C (no freezing) must be air circulation around the lighting switch body
Working environment			45~85%RH (non-condensing)
Contact resistance			≤ 50mΩ
Insulation resistance			≥ 1000MΩ
Maximum withstand voltage	Between the contact and the lamp bead pin		2000 volts, 50 Hz AC,1 min
	Between the same extremes		1000 volts, 50 Hz AC,1 min
	Between different electrode terminals		2000 volts, 50 Hz AC,1 min
Vibration resistance			50 Hz, amplitude about 1.2mm
Impact resistance			More than 10g
Longevity life	Machine weapons	Momentary button	200,000 times
		Latching button, selection	200,000 times
		key push button, emergency stop	100,000 times
	Electricity		More than 50,000 times
Wires			2×0.8mm Welding wire diameter: 2×0.8mm
			0.75mm <sup>2</sup> Maximum copper wire area: 0.75mm <sup>2</sup>
			2.8×0.5mm wiring pins: 2.8 x 0.5mm
Soldering heat			At 320° C (or 30 watts of soldering iron) no more than 2 seconds
Operation travel			(Button) Approx. 3mm
Operation force			(on the LED shade) depending on the number of switching elements, 1~4 Newton (100gf~400gf)

## Mounting hole size



## Installation diagram



超薄可定制图案带灯按钮，面板以上仅 2mm 厚

Ultra-thin customizable pattern with illuminated button, only 2mm thick above the panel

## Metal button



Φ22

HLWT22U- □ /D3/Q



Φ22

HLWT22U- □ D/Q



Φ22

HLWT22U- □ D/Q



Φ22

HLBK22U- □ D/Q

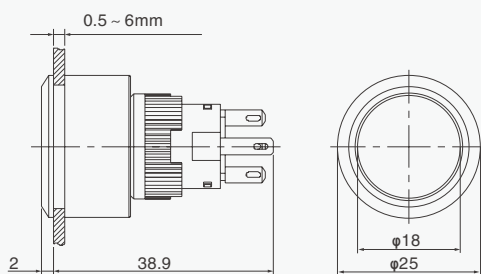


Φ22

HLBK22U- □ D3/Q

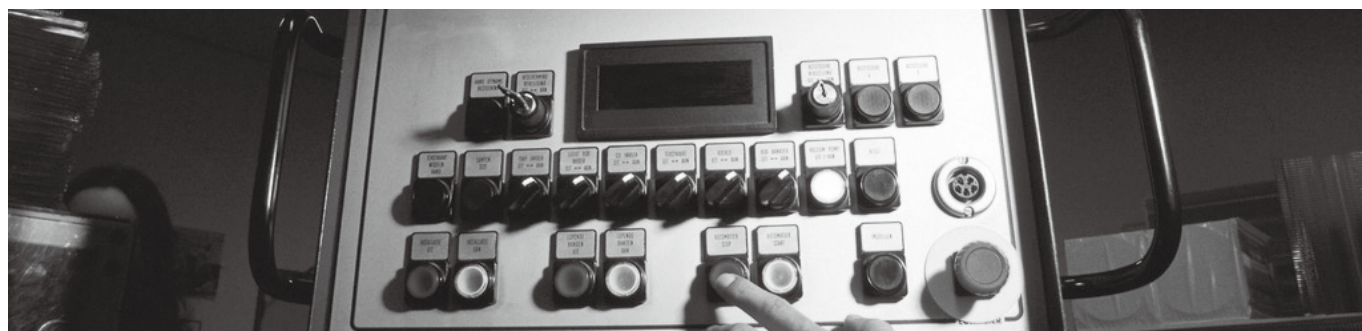
For more product information,  
please contact our company!

## Outline size



Round button

Note: Optional button opening diameter Φ22mm





# L16A SERIES

L16 Series plastic push button switch

Sterling silver gold-plated contact.

Different shapes of buttons are available for choice, and the operation feels more comfortable to meet different needs.

Instantaneous contact, pressing instant switch.



shock-resistant



Waterproof and dustproof



Safe and practical



Quality assurance



## Summary

**Specifications:** The shape of the front frame of the product has three specifications: round (Φ18mm), square (18×18mm), rectangular (18×24mm), including letter indicator, button with light, knob, key button emergency stop button, buzzer, Its conventional mounting hole diameter is Φ16mm, and some products can be equipped with reducer rings to install the product in the mounting hole of Φ22mm. **Performance:** The product has the characteristics of stable performance, small contact resistance, strong insulation, vibration resistance and shock resistance; It meets the standards of IEC60947-5-1, GB14048.5 and so on.

**Structure:** The switching element adopts the "quick action" structure, each switching element contains one normally open and one normally closed, and each button can be configured with up to 2 switching elements.

**Protection level:** its own protection level is IP40, IP65, and some products can be equipped with sealing covers to achieve IP65/IP67.

## Model description

Business code	Housing material	Mounting hole size	Serial number	Head shape	Operation mode	Knobs and key push button Location of operation	Wiring type	Contact structure	LED color	LED voltage
H	L Plastic	10 Φ10mm 12 Φ12mm 16 Φ16mm	A	C round S square R rectangle CC Mushroom head SS Large square SR Large rectangle	A Latching M Momentary I Signal indicator Y Knob K key push button V Emergency stop button U Buzzer	2 Two position 3 Three positions	Q Pins	1P 1NO 1NC 2P 2NO 2NC	R Red G Green Y Yellow B Blue WT White	AC/DC 3V AC/DC 6V AC/DC 12V AC/DC 24V AC/DC 36V AC/DC 48V AC/DC 110V AC/DC 220V

Note: Please read the specific description of the product carefully, and select the corresponding code in the table according to different symbols.

Customize special patterns, please communicate with sales staff to confirm.

## Switch Rating

Ui UiRated insulation voltage UI	250V					
Ith Heating current Ith	The 5A temperature does not exceed the allowable current of the maximum					
Rated operating voltage	12V		24V		110V	220V
rated operating current	50/60Hz AC	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	Sterling silver gilded					

Minimum adapted load: 3V AC/DC 5mA (reference value) (range of use depends on usage environment and load type)

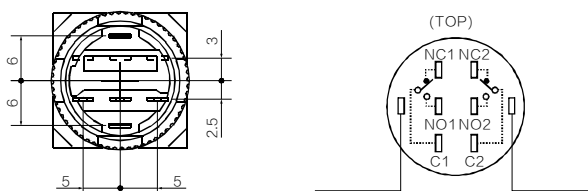
## LED specifications

LED type	Two way LED beads (conventional configuration)				
Ue	AC/DC6V	AC/DC12V			AC/DC24V
Rated voltage Ue	AC/DC110V	AC/DC220V			
LED color	<div><div>R</div><div>G</div><div>Y</div><div>O</div><div>B</div><div>W</div></div>				
Longevity life	About 40,000 hours				

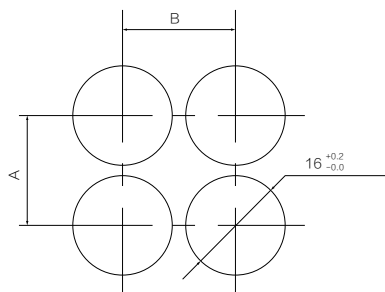
Note: The lamp bead has built-in protection resistor, no external connection is required. If DC unidirectional LED lamp beads are equired, they can be customized; Other voltage specifications can be customized as required; Red and green color change can be customized.

## Performance characteristics

Working environment			-25° C~+55° C (no freezing) must be air circulation around the lighting switch body
Working environment			45~85%RH (non-condensing)
Contact resistance			≤ 50mΩ
Insulation resistance			≥ 1000MΩ
Maximum withstand voltage	Between the contact and the lamp bead pin		2000 volts, 50 Hz AC,1 min
	Between the same extremes		1000 volts, 50 Hz AC,1 min
	Between different electrode terminals		2000 volts, 50 Hz AC,1 min
Vibration resistance			50 Hz, amplitude about 1.2mm
Impact resistance			More than 10g
Longevity life	Machine weapons	Momentary button	200,000 times
		Latching button, selection	200,000 times
		Key button, emergency stop	100,000 times
	Electricity		More than 50,000 times
wiring			2×0.8mm Welding wire diameter: 2×0.8mm
			0.75mm <sup>2</sup> Maximum copper wire area: 0.75mm <sup>2</sup>
			2.8×0.5mm wiring pins: 2.8 x 0.5mm
Soldering heat			At 320° C (or 30 watts of soldering iron) no more than 2 seconds
Operation travel			(Button) Approx. 3mm
Operation force			(on the LED shade) depending on the number of switching elements, 1~4 Newton (100gf~400gf)



## Mounting hole size



Type	A	B
round	≥ 18mm	≥ 18mm
square	≥ 18mm	≥ 18mm
rectangle	≥ 18mm	≥ 24mm
Mushroom head	≥ 24mm	≥ 24mm
Large square	≥ 24mm	≥ 24mm
Large rectangle	≥ 18mm	≥ 24mm



## Metal button



Φ16

L16A-C round



Φ16

L16A-S square



Φ16

L16A-R rectangle



Φ16

L16A-CC Mushroom head



Φ16

L16A-SS Large square



Φ16

L16A-SR Large rectangle



Φ16

L16A-C knob



Φ16

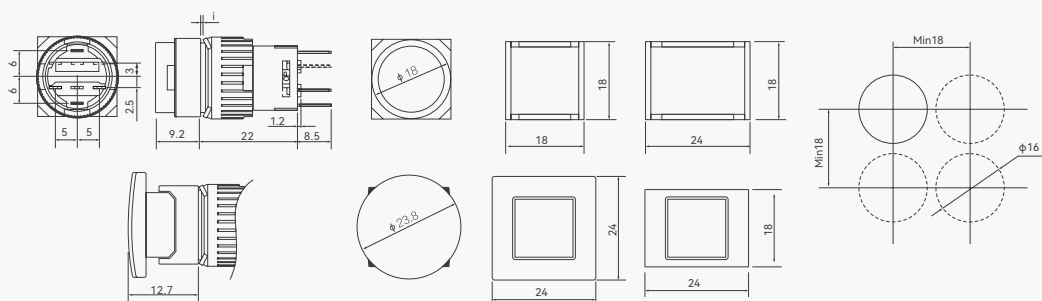
L16A-S knob



Φ16

L16A-R knob

## Outline size

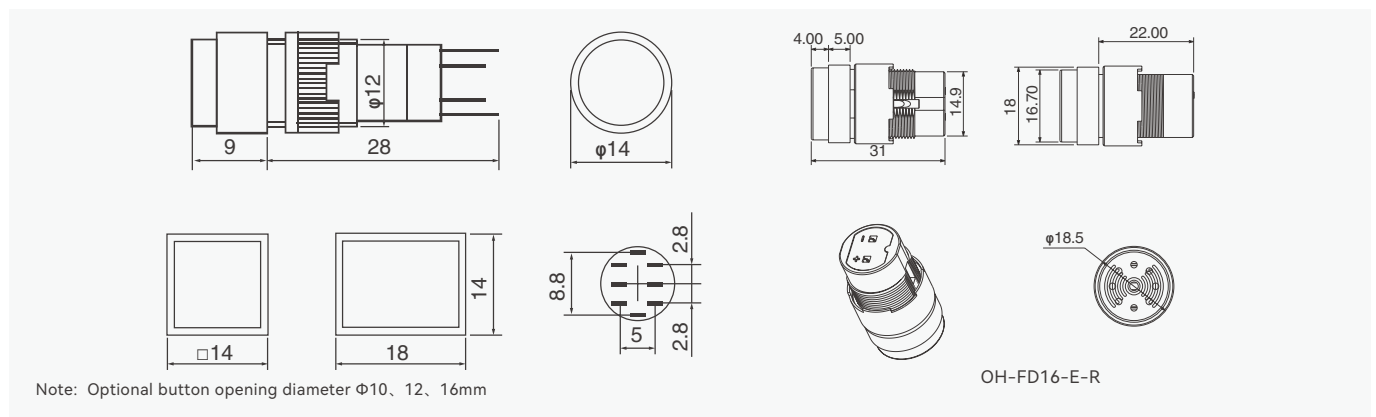


Note: Optional button opening diameter Φ10、12、16mm

## Metal button



## Outline size





# ZT SERIES

ZT series emergency stop button

Silver alloy contact

Small size for more compact installation space,

Maximum waterproof IP65



shock-resistant



Waterproof and dustproof







Safe and practical



Quality assurance








## Model description

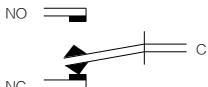
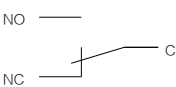
			-		/		/		
Business code	Serial number	Mounting hole size		Head shape		Contact structure		Wiring type	
H	ZT	16	Φ16mm	T1	27mm mushroom head	01	1NC	S	Welding pins
				T2	32mm mushroom head	02	2NC		
						11	1NO 1NC	L	Pins

Note: Please read the product description carefully and select the corresponding code in the table according to different symbols.

## Performance characteristics

Product specification	HZT-  -  /  / 	Mechanical life	More than 100,000 times
Dielectric strength	2000VAC	Electrical life	More than 50,000 times
Insulation resistance	≥ 1000MΩ	Panel thickness	1~10mm
Contact resistance	≤ 50mΩ	Nut torque	5~14Nm
Switch specifications	ith 2A/250V	Operating pressure	3N~5N
Bottom configuration	Wiring pins (2.8×9mm)	Operation travel	About 1.3mm
Head shape	High flat head	Protection level	IP40/IP65
Ambient temperature	-20℃ ~+55℃		
Materials	Contact point	Silver contact/Silver alloy contact	
	Button	PC	
	Housing	PC	
	Pedestal	PBT	
		Customizable	

## witch structure description

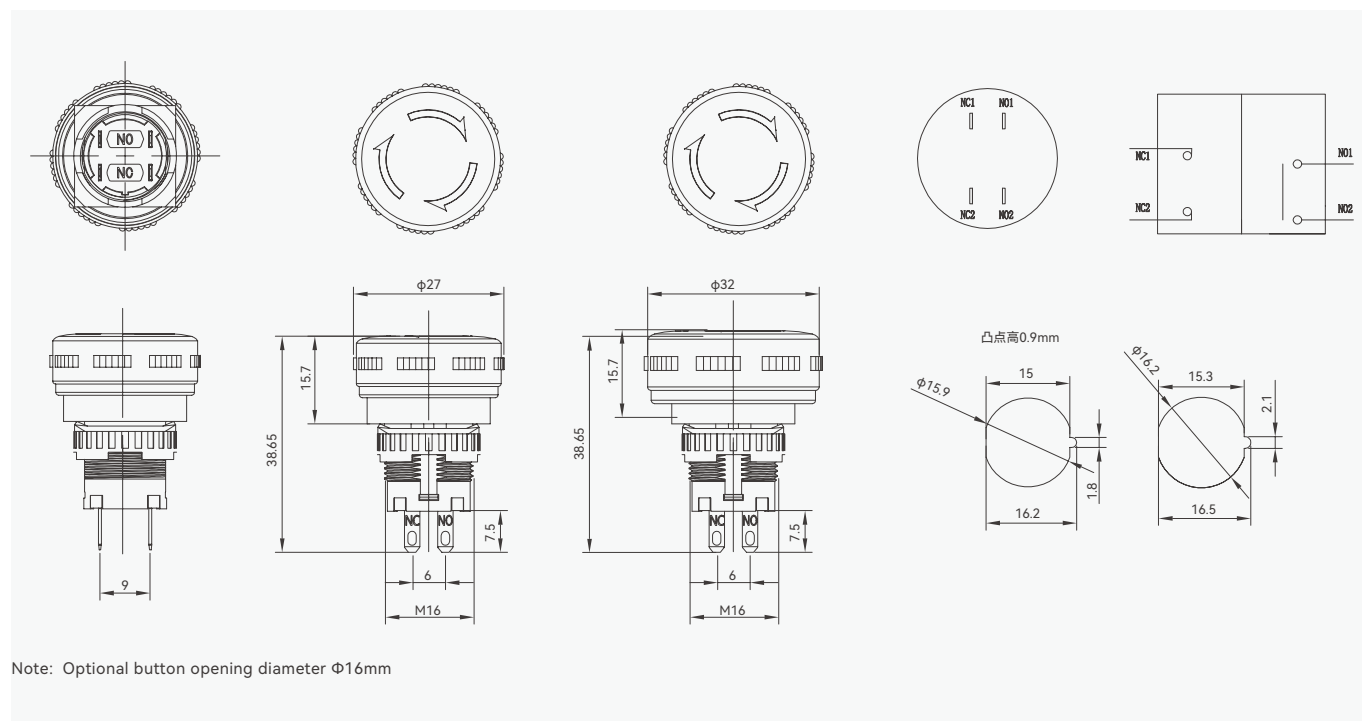
Type	Schematic diagram	Symbol
C		

## Metal button



For more product information  
please contact our company!

## Outline size





# WARNING LIGHT SERIES

## Three-color warning light series

The silent warning light is waterproof up to IP67 and can be used in outdoor scenes.

Metal shell, compared with the traditional plastic warning light texture, visual effect is better.

Metal shell material, shape plasticity is more convenient, can be customized according to customer patterns any shape.

Three-color integrated LED lights make the product more flat.

The flexible white light guide makes the light more soft.



shock-resistant



Waterproof and dustproof



Safe and practical



Quality assurance





## Model description

Serial number	Light guide diameter	Shell material	Case color	Housing height	Lighting mode	Sound mode	Electric voltage	Wiring method
J-13	1 50mm	A Aluminium alloy	W Silver	1 135mm	L Constant light	L long sound	12V	E Direct outlet
			BK Black	2 162mm		S short sound	24V	W Waterproof connector
		S Stainless steel	R Red	3 Hemispherical	V Flicker	N no sound		C 12MM Aviation Male
			G Green					
			B Blue					
			Y Golden					
			C Coffee color					

Note: Please read the specific description of the product carefully, and select the corresponding code in the table according to different symbols.

Customize special patterns, please communicate with sales staff to confirm.

Shell material: Aluminum alloy, stainless steel, please specify the shell material, the default is aluminum alloy shell.

## Summary

Housing material	Aluminum alloy, stainless steel
Light guide column material	Acrylic, PC
Product light source	Multi-color LED light
Product light effect	RGY
Sound source effect	long sound、short sound
Sound source decibels	≈ 85db
Product life	5000 hours
Product power	3W
Operating voltage	12V、24V
Product exit method	Direct outlet, waterproof joint, aviation male
Operating temperature	-20° C to 70° C
Case color	



## Column three color warning light



J131ABK1 □ 24E



J131AW1 □ 24E



J131AY1 □ 24E



J131AB1S24E



J131AG1S24E



J131AR1S24E



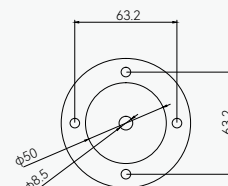
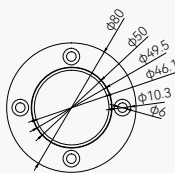
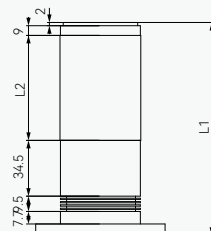
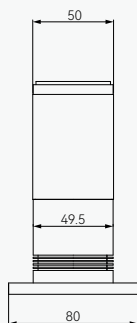
J131AC1S24E



J131AP1S24E

For more product information,  
please contact our company!

## Outline size



Short height 135mm L1=135mm L2=65.3mm Long height 162mm L1=162mm L2=92.3mm



## Three color warning light



Waterproof wiring



Aviation male (straight plug)



Aviation male (bent insert)



I-Type I Stand (Black)



L-bracket (black)



GX12 straight 5-core aircraft carrier harness



I-Type I Stand (Silver)

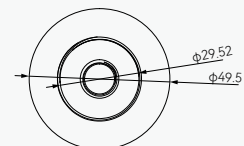
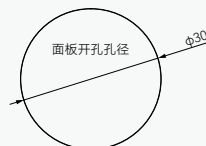
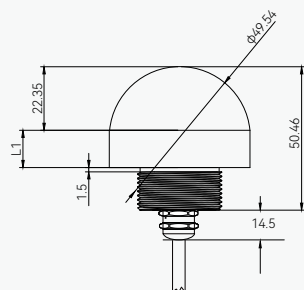
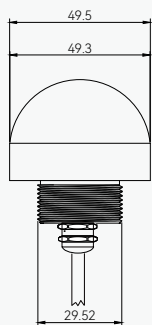


L-stand (Silver)




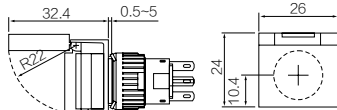

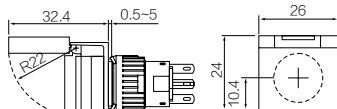

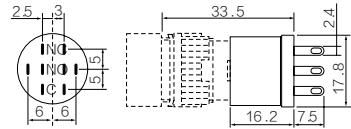

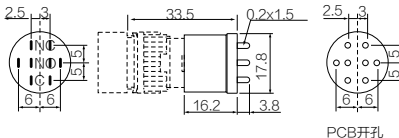

GX12 elbow 5-core aircraft carrier harness

## Outline size


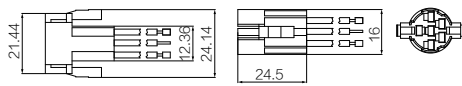

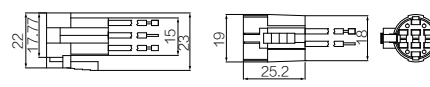

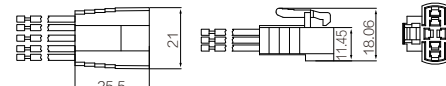

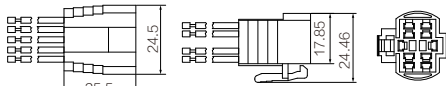


Silent warning light L1=13.1mm Audible warning light L1=20.8mm


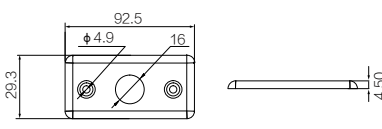

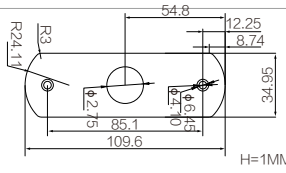

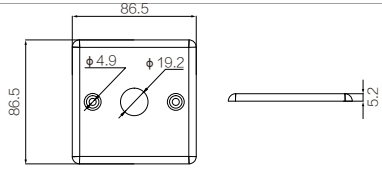
## Product legend

Name	Form	Scope of Application	Model		Use
Protective cover		Round and square button applies	HL16A- 200S		Prevent misoperation the sameL16 series
		Rectangle button applies	HL16A- 200R		
receptacle		Soldered sockets	HL16A- 100		It is set on the back of the button to facilitate the installation and maintenance of the button
		PCB socket	HL16A- 101		
Reducer ring		Reducer ring	HL16A- 22HJQ	Φ16mm series of round buttons are universally set on the mounting hole, A 16mm round button and signal indicator can be installed	


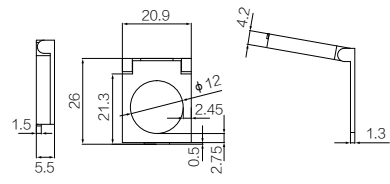

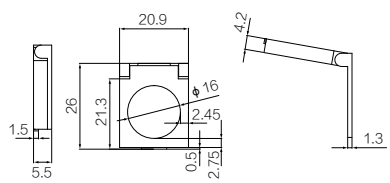

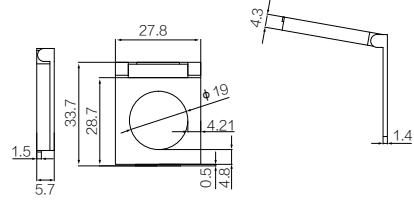

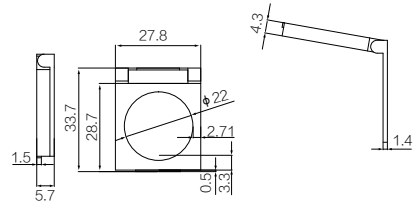
## Product legend

Name	Form	Scope of Application	Model		Use
Connector		HJ □ 16A Hutton fit	HJ □ 16A - 300		
		HJ □ 19AF HJ □ 19D HJ □ 22A HJ □ 25A Hutton fit	HJ □ 19AF - 300		
		HJ □ 22F Hutton fit	HJ □ 22F - 300		
		HJ □ 22F HJ □ 30F Hutton fit	HJ □ 25F - 300		





## Product legend

Name	Form	Scope of Application	Model		Use
Install the panel		16mm 16mm Button fit	HMH16-25X86		
		19mm 19mm Button fit	HMH19-3511		
		19mm 19mm Button fit	HMH19-86X86		


## Product legend



Name	Form	application	Model		Use
Protective cover		HJ □ 12E HJ □ 12E Hutton fit	HJ □ 12E- 200S High cover model		
		HJ □ 16A HJ □ 16H HJ □ 16C HJ □ 16E  HJ □ 16A HJ □ 16H HJ □ 16C HJ □ 16E Hutton fit	HJ □ 16A- 200S		
		HJ □ 19A HJ □ 19AF HJ □ 19H HJ □ 19C HJ □ 19D  HJ □ 19A HJ □ 19AF HJ □ 19H HJ □ 19C HJ □ 19D Hutton fit	HJ □ 19AF- 200S		Prevent misoperation
		HJ □ 22A HJ □ 22H HJ □ 22F HJ □ 22G  HJ □ 22A HJ □ 22H HJ □ 22F HJ □ 22G Hutton fit	HJ □ 22A-200S		

## Product legend

Name	Form	Scope of Application	Model
Metal button box		Suitable for $\Phi 19$ 22 25 pushbutton switch	HFSH-45×45
		Suitable for $\Phi 12$ 16 19 pushbutton switch	HFSH-45×45R
		Suitable for $\Phi 12$ 16 19 pushbutton switch	HFSH-65×65
		Suitable for $\Phi 19$ 22 25 pushbutton switch	HFSH-65×65R

Note: The button is only for effect display.




Name	Form	Scope of Application	Model	Use
Metal plugs		Suitable for a full range of buttons	HDT-S-8 HDT-S-12 HDT-S-16 HDT-S-19 HDT-S-22 HDT-S-25 HDT-S-30	Compared with traditional plastic plugs, metal plugs are more aesthetically pleasing.

Name	Form	Scope of Application	Model	Installation example	Use
Oil and waterproof cover		Suitable for $\Phi 12$ 16 19 22 25 pushbutton switch	HJ □ 12FZ- 300S HJ □ 16FZ- 300S HJ □ 19FZ- 300S HJ □ 22FZ- 300S HJ □ 25FZ- 300S		watertight Oil repellent dustproof





## Product legend

Name	Form	Scope of Application	Model	Use
Metal Protective cover		Installation aperture $\Phi 22-30\text{mm}$	JTF-22-01 Small	Prevent misoperation
		Installation aperture $\Phi 22-30\text{mm}$	JTF-22-20 with text	
		Installation aperture $\Phi 22-30\text{mm}$	JTF-22-20 No text	
		Installation aperture $\Phi 22-30\text{mm}$	JTF-22-01 Big	
		Installation aperture $\Phi 16\text{mm}$	JTF-16-07	
		Installation aperture $\Phi 16-30\text{mm}$	L38-22BHG-WT	
		Installation aperture $\Phi 16-30\text{mm}$	L38-22BHG-B	



# LA38 SERIES

## LA38 Button switch

In this series, the button head and the middle are connected with in-line fixed installation method. It is resistant to shock, drop and vibration, and is suitable for use in harsh environments.

In this series, a guide rod installed in the movable leaf spring makes contacting more stable and consistent, which greatly improves electrical performance stability and life; The wiring pattern plate is embedded for easy installation and hard to lose; The performance parameters of laser printing ensure long-term use without affecting recognition.

Composed of button head, middle and contact, adopting advanced non-fastener latching connection, safe and reliable, easy to assemble and disassemble, installed on the  $\Phi 22\text{mm}$  panel by using wrench without any accessories makes the installation more robust and reliable.

Using high-quality engineering flame-retardant materials, excellent insulation performance and reliable contact.

Products comply with standards such as IEC60947-5-1, GB/T14048.5.

The contact elements are flat pressing and quick-acting, the contact bases (up to 4) can be combined as required and each contact base can be installed with 2 groups of contact elements, which can meet the requirements of making specific control circuits.

Installation aperture:  $\Phi 22\text{mm}$

Function: Momentary pushbutton switch, latching pushbutton switch, illuminated pushbutton switch, Knob Switch, key push button, E-Stop pushbutton switch, mushroom pushbutton switch, stainless steel pushbutton switch, twin pushbutton switch.

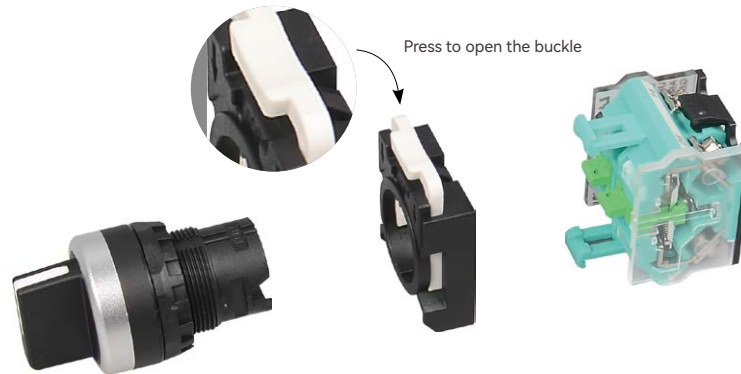
Switch contact combination: 01/10/02/20/11/22/03/30/04/40/12/21/13/31

Protection level: IP40, IP65 for some customized products.



## Installation Notes

The three-position knobs need to be installed directionally(look for 'TOP'), others don't.



## Switch Ratings

Ui Rated insulation voltage Ui			600V				
Ith Rated thermal current Ith			10A				
Ue Rated operational voltage Ue			24V	48V	110V	220V	380V
Ie Rated operational current Ie	AC 50/60Hz	Resistive load	10A	-	10A	6A	-
		Inductive load	10A	-	6A	3A	2A
	DC	Resistive load	8A	4A	2.2A	1.1A	-
		Inductive load	4A	2A	1.2A	0.6A	-
Contact material			Silver alloy				
Minimum applicable load: 3V AC/DC 5mA(Reference value) (The applicable range depends on the use environment and load type)							

## Specifications

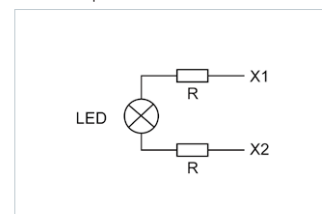
Ambient temperature	-25°C ~+75°C (With no icing)
Humidity	45~85%RH
Contact resistance	≤ 50mΩ
Insulation resistance	≥ 100MΩ
Power frequency withstand voltage	1890VAC/50Hz/60s
Vibration resistance	Amplitude: about 1.0mm/50Hz
Impact resistance	> 10g
Protection level	IP40
Electrical life	≥ 10 万次
Wiring capacity	Maximum: 2×1.5mm <sup>2</sup> or Minimum: 2×0.75mm <sup>2</sup> insert: 6.3×0.8mm

## LED Specifications

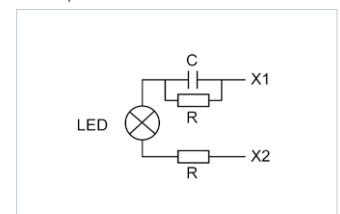
LED type	Two way LED beads		
	AC/DC 6V	AC/DC 12V	AC/DC 24V
	AC/DC 36V	AC/DC 48V	AC/DC 110V
	AC/DC 220V	AC/DC 380V	
Ue Rated voltage Ue	AC 110V	AC 220V	AC 380V
LED color	RD	GN	YE BU WH
LED life	≥ 40000h		

## Lamp Holder Circuit Schematic

AC/DC lamp holder



AC lamp holder



## Contact Form Description

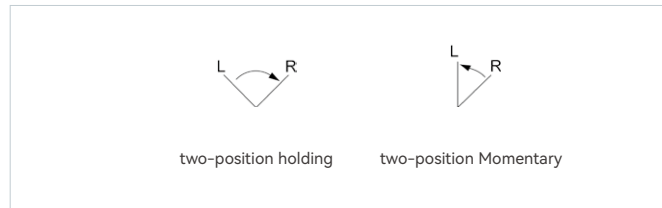
he two digits in the model number represent the contact form

- The first digit "1" indicates the first pair of contacts on the first section of the element, "2" means the second pair.
- The second digit "1、2" represents the 2 terminals of NC contact, and "3、4" represents the 2 terminals of NO contact.

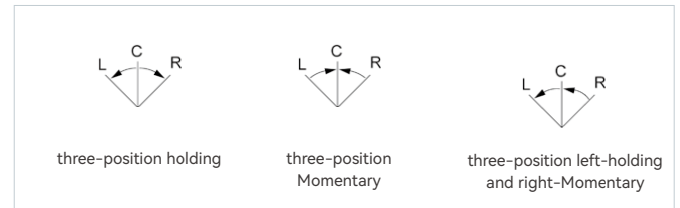
Contact code	11	20	02	10	01
Contact name	(1NO1NC)	(2NO)	(2NC)	(1NO)	(1NC)
State diagram					

## Working Position And Contact State

○ Two-position and contact ON AND OFF state diagram



○ Three-position and contact ON AND OFF state diagram









Type		
LA38-11 ■ -2		
LA38-20 ■ -2		
LA38-02 ■ -2		
LA38-22 ■ -2		
LA38-31 ■ -2		
LA38-13 ■ -2		
LA38-40 ■ -2		
LA38-04 ■ -2		

Type			
LA38-11 ■ -3			
LA38-20 ■ -3			
LA38-02 ■ -3			
LA38-22 ■ -3			
LA38-31 ■ -3			
LA38-13 ■ -3			
LA38A-40 ■ -3			
LA38A-04 ■ -3			



## Model Number Structure

The following table is the type explanation. Some combinations have no actual products. For details, please refer to product selection or consulting manufacturers.

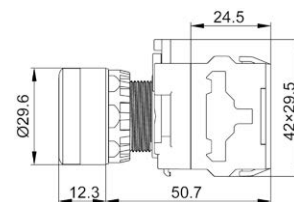
LA38		-			-							
Serial number	Operation mode		Color		Select switch position	Function		Voltage code	Contact code			
PN	Momentary flat button	R	Red	21	Two-position holding type	Q2	Painted plastci head	T	AC/DC 6V	01	1NC	
PNZS	Latching flat button	G	Green	22	Two-position Momentary type	C2	Plastic head	J	AC/DC 12V	10	1NO	
PND	Illuminated self-rest flat button	Y	Yellow	31	Three-position holding type	T2	Transparent head	B	AC/DC 24V	02	2NC	
PNDZS	Illuminated latching flat button	B	Blue	32	Three-position left-holding and right-Momentary type	S2	Stainless steel head	C	AC/DC 36V	20	2NO	
GN	Momentary high button	W	White	33	Three-position Momentary type	FH1	" ↓ " custom code	E	AC/DC 48V	11	1NO 1NC	
GNZS	Latching high button	BK	Black	For the optional colors of some types,please refer to product selection (illuminated product without black)		FH2	" ○ " custom code	FD	AC/DC 110V	22	11+11	
GND	Illuminated Momentary high button						FH3	" - " custom code	ND	AC/DC 220V	03	02+01
GNDZS	Illuminated latching high button						FH4	" = " custom code	QD	AC/DC380V	30	20+10
S	Stainless steel Momentary flat button						FH5	"START" custom code	F	AC 110V	04	02+02
SZS	Stainless steel latching flat button						FH6	"STOP" custom code	M	AC 220V	40	20+20
SD	Illuminated stainless steel Momentary flat button			IP65	Custom IP65 button		Q	AC 380V	12	11+01		
SDZS	Illuminated stainless steel latching flat button	K	Anti-interference							21	11+10	
M40/60	Mushroom Momentary button					D	Special load (consult the manufacturer for details)					
MZS 40/60	Mushroom latching button											
MD 40/60	Illuminated mushroom Momentary button											
MDZS 40/60	Illuminated mushroom latching button											
ZS40/60	E-Stop button											
ZSD 40/60	Illuminated E-stop button											
X	Knob											
XC	Long knob											
XD	Illuminated knob											
Y	key push button											
PNSW	Twin flat pushbutton											
PNDZW	Illuminated flat button											
GNSW	Twin high pushbutton											
GNDZW	Illuminated twin high pushbutton											



Color:



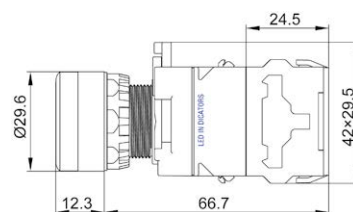
Function type	Location symbol	Product reference
Momentary flat pushbutton switch	-	LA38-PN- ○ -Q2-11
Latching flat pushbutton switch		LA38-11PNZS-Q2- ○



Color:



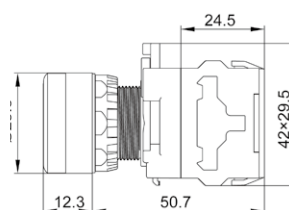
Function type	Location symbol	Product reference
Illuminated Momentary flat pushbutton switch	-	LA38-11PND-Q2- ○ △
Illuminated latching flat pushbutton switch		LA38-11PNDZS-Q2- ○ △



Color:



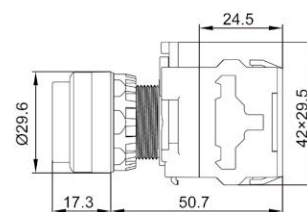
Function type	Location symbol	Product reference
Momentary flat-button pushbutton switch with custom symbol	↓ ○	LA38-11PN-Q2/FH*- ○
Latching flat-button pushbutton switch with custom symbol	 启动 STOP	



Color:



Function type	Location symbol	Product reference
Momentary high pushbutton switch	-	LA38-11GN-Q2- ○
Latching high pushbutton switch		LA38-11GNZS-Q2- ○



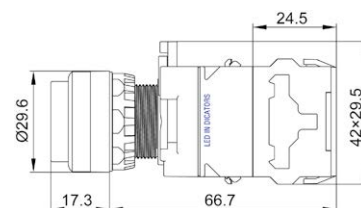




Color:



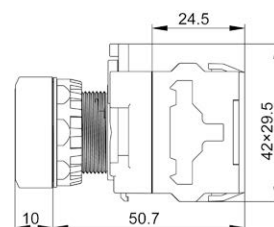
Function type	Location symbol	Product reference
Illuminated Momentary high pushbutton switch	-	LA38-11GND-Q2- ○ △
Illuminated latching high pushbutton switch		LA38-11GNDZS-Q2- ○ △



Color:



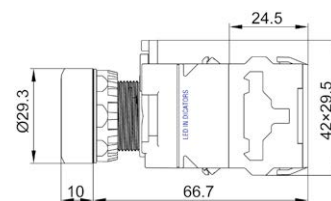
Function type	Location symbol	Product reference
Stainless steel Momentary flat pushbutton switch	-	LA38-11S-S2
Stainless steel latching flat pushbutton switch		LA38-11SZS-S2



Color:



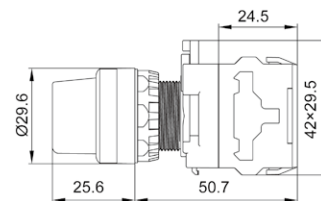
Function type	Location symbol	Product reference
Illuminated stainless steel Momentary pushbutton switch	-	LA38-11SD-S2- ○ △
Illuminated stainless steel latching pushbutton switch		LA38-11SDZS-S2- ○ △



Color:



Function type	Location symbol	Product reference
Two-position holding knob switch	L R	LA38-11X21-Q2-BK
Two-position Momentary knob switch	L R	LA38-11X22-Q2-BK
Three-position holding knob switch		LA38-20X31-Q2-BK
Three-position Momentary knob switch		LA38-20X33-Q2-BK
Three-position left-holding & right-Momentary knob switch		LA38-20X32-Q2-BK

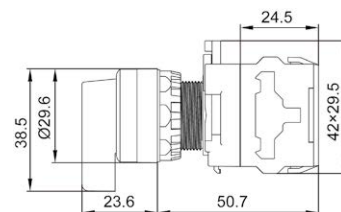




Color:

BK

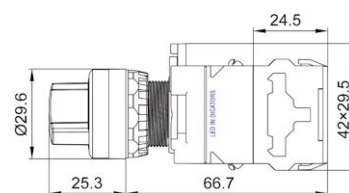
Function type	Location symbol	Product reference
Two-position holding long-knob switch		LA38-11XC21-Q2-BK
Two-position Momentary long-knob switch		LA38-11XC22-Q2-BK
Three-position holding long-knob switch		LA38-20XC31-Q2-BK
Three-position Momentary long-knob switch		LA38-20XC33-Q2-BK
Three-position left-holding & right-Momentary long-knob switch		LA38-20XC32-Q2-BK



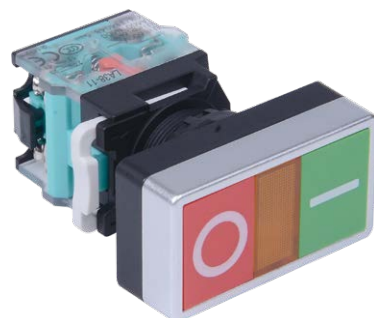
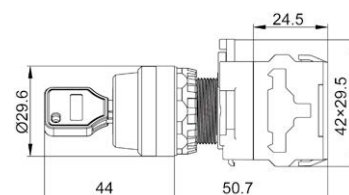
颜色 Color:

RD

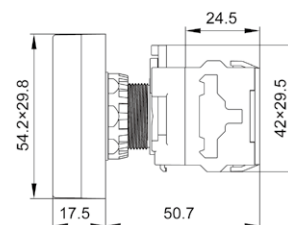
Function type	Location symbol	Product reference
Illuminated two-position holding knob switch		LA38-11XD21-Q2-ØΔ
Illuminated two-position Momentary knob switch		LA38-11XD22-Q2-ØΔ
Illuminated three-position holding knob switch		LA38-20XD31-Q2-ØΔ
Illuminated three-position Momentary knob switch		LA38-20XD33-Q2-ØΔ
Illuminated three-position left-holding & right-Momentary knob switch		LA38-20XD32-Q2-ØΔ

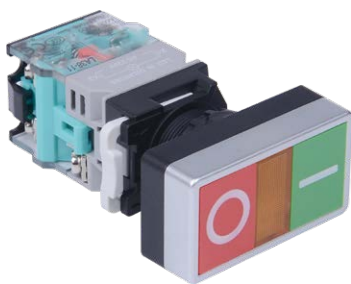


Function type	Location symbol	Product reference
Two-position holding key push button switch		LA38-11Y21-L2
Two-position Momentary key pushbutton switch		LA38-11Y22-L2
Three-position holding key push button switch		LA38-20Y31-L2
Three-position Momentary key-push button switch		LA38-20Y33-L2
Three-position left-holding & right Momentary key push button switch		LA38-20Y32-L2




Function type	Location symbol	Product reference
Twin pushbutton switch		LA38-11PNSW-Q2

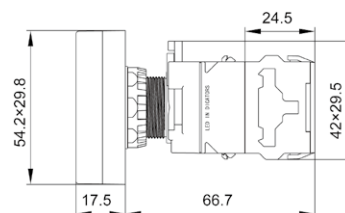





Color: Default Yellow

Optional:  

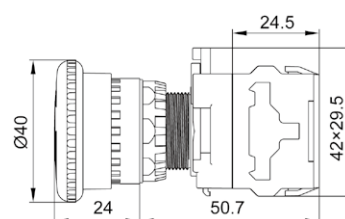
Function type	Location symbol	Product reference
Illuminated twin pushbutton switch		LA38-11PNDSW-Q2-YE △




Color: Default red

Optional: 

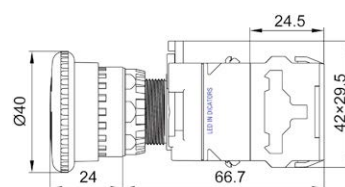
Function type	Location symbol	Product reference
40 E-Stop pushbutton switch	-	LA38-11ZS40-C2-RD




Color: Default red

Optional: 

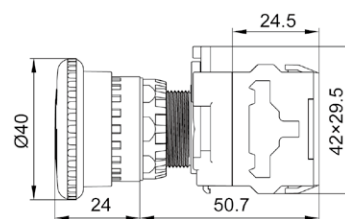
Function type	Location symbol	Product reference
Illuminated 40 E-Stop pushbutton switch	-	LA38-11ZSD40-C2-RD △



Color: Default red


Optional: 

Function type	Location symbol	Product reference
40 E-Stop pushbutton switch with "STOP" symbol	STOP	LA38-11ZS40-C2/FH6-RD

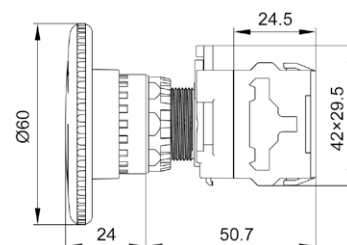





Color: Default red

Optional: 

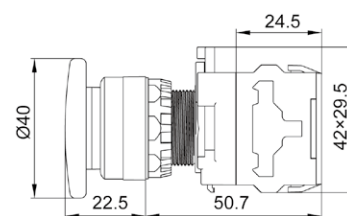
Function type	Location symbol	Product reference
60 E-Stop pushbutton switch	-	LA38-11ZS60-C2-RD




Color: Default red

Optional:  

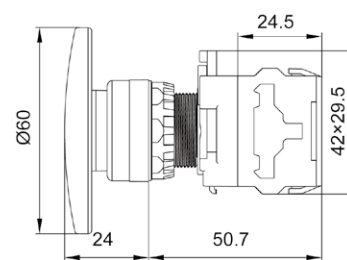
Function type	Location symbol	Product reference
40 Mushroom Momentary pushbutton switch	-	LA38-11M40-Q2- ○
40 Mushroom latching pushbutton switch		LA38-11MZS40-Q2- ○



Color: Default red

Optional: 

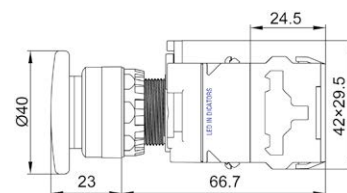
Function type	Location symbol	Product reference
60 Mushroom Momentary pushbutton switch	-	LA38-11M60-Q2- ○
60 Mushroom latching pushbutton switch		LA38-11MZS60-Q2- ○



Color:

Function type	Location symbol	Product reference
Illuminated 40 mushroom Momentary pushbutton switch	-	LA38-11MD40-Q2- ○ △
Illuminated 40 mushroom latching pushbutton switch		LA38-11MDZS40-Q2- ○ △





# LD16 SERIES

## LD16 Signal indicator

LD16 series of signal indicators all use high-brightness, pure-color LED light-emitting chips , it has long life, low energy consumption,small size and light weight. The LED shade is made of high-strength carbonate and has good impact resistance. Built-in screw-type wiring makes it safer and more convenient.

The LD16 series signal indicator light is suitable for signal indication、advance signal、accident signal and more in the route of electric power、telecommunications、machine tools、ships、textiles、printing,mining machinery and other equipment.

The product complies with standards such as IEC6097-5-1、GB/T14048.5 .



## Specifications

Ambient temperature	-25℃~+75℃ (with no icing)
Humidity	45~85%RH
Continuous operational life	≥ 40000h
Allow instantaneous voltage fluctuation	±20% (above 110V)
Power frequency withstand voltage	2.5kV(AC effective value), 1min
Usage frequency(AC)	50~60Hz
Rated operational current	AC/DC6V ≤ 40mA, the rest ≤ 25mA
luminance	≥ 100cd/m <sup>2</sup>
Comparative tracking index	≥ 100, flame retardant
Insulation resistance	5MΩ while Ui ≤ 60V, 50MΩ while 60V < Ui ≤ 660V
LED color	RD GN YE BU WH

## Model Number Structure

The following table is the type explanation. Some combinations have no actual products. For details, please refer to product selection or consulting manufacturers.

LD16

/

-

Serial number	Installation aperture	Operation mode		Auxiliary code		Color		Lamp voltage	Interference voltage
	22 Φ22mm	DS	Indicator light	无 Nil:	Conventional	R	Red	AC/DC 6V	24V
		M	Buzzer	F	F: discharge lamp	G	Green	AC/DC 12V	40V
		ML	Continuous buzzer	K	K: Anti-interference voltage	Y	Yellow	AC/DC 24V	60V
		SM	flash buzzer			B	Blue	AC/DC 36V	90V
		SML	constant bright continuous buzzer			W	White	AC/DC 48V	110V
						BK	Black	AC/DC 110V	
								AC/DC 220V	
								AC/DC 380V	
								AC 110V	
								AC 220V	
								AC 380V	
									For other special voltages ,please consult the manufacturer
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