

# ONPOW

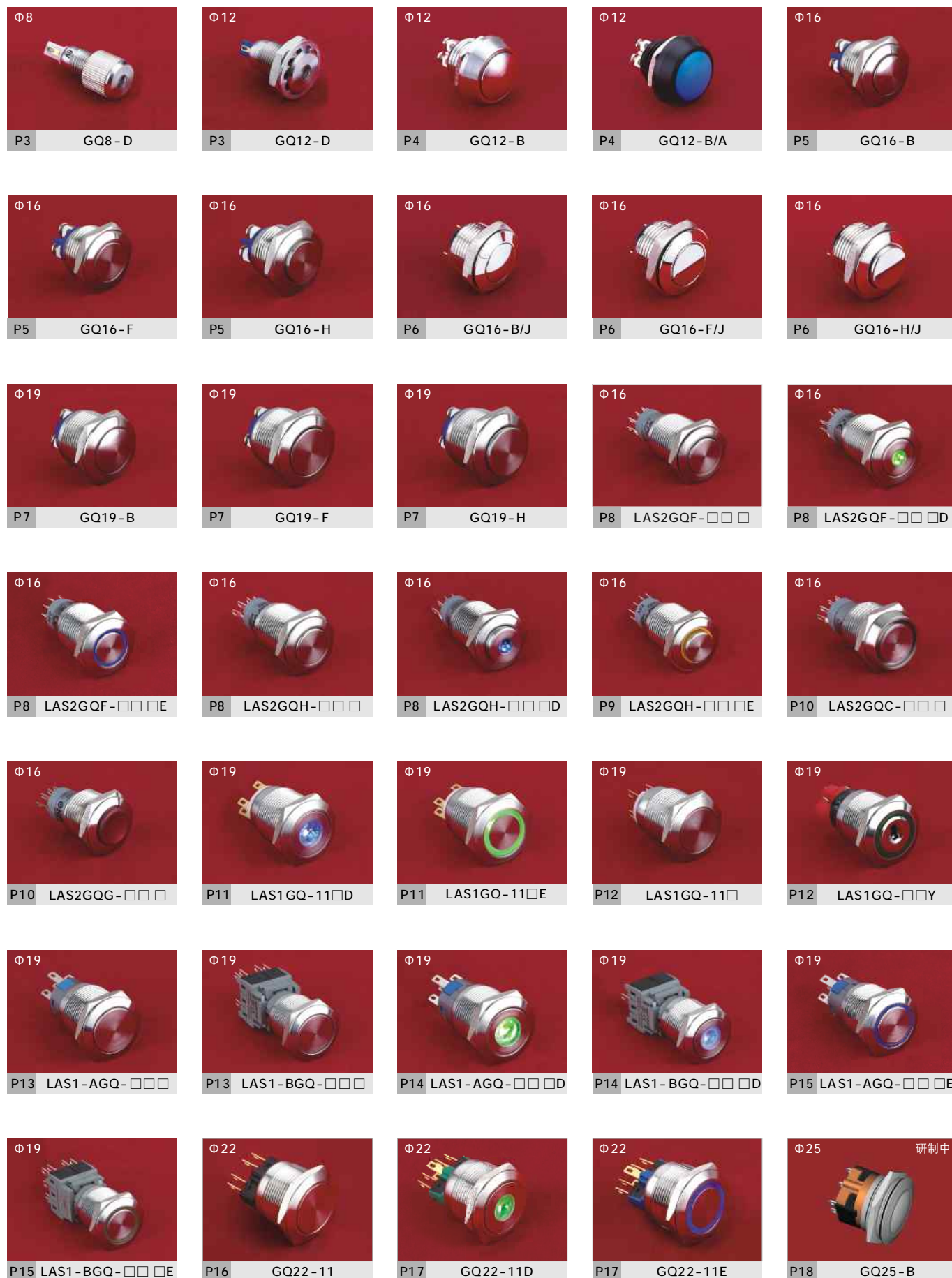
浙江红波按钮

PRODUCTTYPE-CHOSINGMANUAL

ISO9001 CCC CE VDE cRU<sup>®</sup>us



浙江红波按钮制造有限公司  
ZHEJIANG HONGBO PUSH BUTTON MANUFACTURE CO.,LTD.



To assist in locating the correct switch for your application, model, fixing size, contact structure, Max. Rating, and safety&capability are shown. Please refer to the detailed introduction of our products in our catalog as per the page listed in the form.

Fixing Size	Model	Contact Structure	Max. Rating	Safety&Capability	Page
Φ8mm	GQ8	Signal Lamp	15mA 3~48V	Anti-vandal IP65	P3
Φ12mm	GQ12	Signal Lamp	15mA 3~48V	Anti-vandal IP65	P3
		Pushbuttons: 1NO Momentary	Ith:2A Ui:48VDC	Anti-vandal Ip65	P4
		Color Pushbuttons: 1NO Momentary	Ith:2A Ui:48VDC	IP65	P4
Φ16mm	GQ16	Pushbuttons: 1NO Momentary	Ith:2A Ui:48VDC	Anti-vantal IP65	P5~P6
	LAS2GQ	Illuminated Pushbuttons: 1NO1NC Momentary 1NO1NC Alternate 2NO2NC Momentary 2NO2NC Alternate	Ith:3A Ui:250VAC	IP67	P8~P10
Φ19mm	GQ19	Pushbuttons: 1NO Momentary	Ith:2A Ui:48VDC	Anti-vantal IP65	P7
	LAS1GQ	Illuminated Pushbuttons: 1NO1NC Momentary	Ith:5A Ui:250VAC	Anti-vantal IP65	P11~P12
		Key Switches: 1NO1NC Maintain 2NO2NC Maintain		IP40	
	LAS1-AGQ	Illuminated Pushbuttons: 1NO1NC Momentary 1NO1NC Alternate 2NO2NC Momentary 2NO2NC Alternate	Ith:5A Ui:250VAC	IP67	P13~P15
LAS1-BGQ	Illuminated Pushbuttons: 1NO1NC Momentary 1NO1NC Alternate 2NO2NC Momentary 2NO2NC Alternate 3NO3NC Momentary 3NO3NC Alternate	Ith:5A Ui:250VAC	IP67	P13~P15	
Φ22mm	GQ22	Illuminated Pushbuttons: 1NO1NC Momentary	Ith:5A Ui:250VAC	IP65	P16~17
Φ25mm	GQ25	Pushbuttons: 1NO1NC Momentary 2NO2NC Momentary	Ith:5A Ui:250VAC	IP65	P18

Implication of Type

◆The part-number description of indicator

GQ		□□	—	□	/	□	/	□□	/	□
Code of Series	Mounting hole: 8 Φ8mm 12 Φ12mm	Operational type: D signal lamp		Color: R red G green Y yellow O orange B blue W white		Lamp voltage: 6V AC/DC 12V AC/DC 24V AC/DC		The crust material: N Nickel Plated Brass S Stainless Steel		

MARK: ⊙ GQ8 indicator lamp have two crust material: Nickel Plated Brass & Stainless Steel for your choice;  
 ⊙ GQ12 indicator lamp only have Stainless Steel crust.

◆The part-number description of pushbutton switch and illuminated pushbutton switch

GQ		□□	—	□	/	□	/	□	/	□
Code of Series	Mounting hole: 12 Φ12mm 16 Φ16mm 19 Φ19mm	The Front Shape: B Domed F Flat Round H High Round		Connect type: J: Pin Terminal No letter means Screw Terminals		The crust material: N Nickel Plated Brass G Gold Plated Brass S Stainless Steel A Zn-Al alloy		Color: R red G green Y yellow O orange B blue W white		

MARK: ⊙ GQ12's crust material is Zn- Aluminium alloys,six colors are available;  
 ⊙ GQ22,GQ25 series are in development stage.

LAS2GQ		□	—	□□	□	□	/	□	/	□□	/	□
Code of Series	The Front Shape: F Flat Round H High Round C Concave Round G High Concave Round	Contact Structure: 11 1NO1NC 22 2NO2NC		Code name of derivative products: Z alternate type The momentary type is without letter		Lamp type: D dot E ring No letter means without lamp.		Lamp Color: R red G green Y yellow O orange B blue W white		Lamp voltage: 6V AC/DC 12V AC/DC 24V AC/DC 110V AC/DC 220V AC/DC		The crust material: N Nickel Plated Brass G Gold Plated Brass S Stainless Steel

MARK: ⊙ High concave round have six colors for your choice.

LAS1GQ		LAS1-AGQ		LAS1-BGQ				
□□		□		□ / □ / □				
Code of series	Contact structure: 11 1NO1NC 22 2NO2NC 33 3NO3NC	Code name of derivative products: Z alternate type Y key switch The momentary type is without letter		Lamp type: D dot illuminated E ring illuminated No letter means without lamp.		Lamp color: R red G green Y yellow O orange B blue W white		Lamp voltage: 6V AC/DC 12V AC/DC 24V AC/DC 110V AC/DC 220V AC/DC

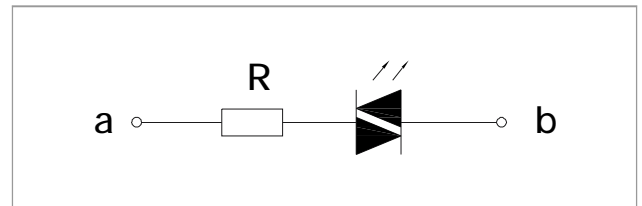
MARK: ⊙ The material of crust use Stainless Steel;  
 ⊙ Front shape:Flat round.

### Lamp Ratings

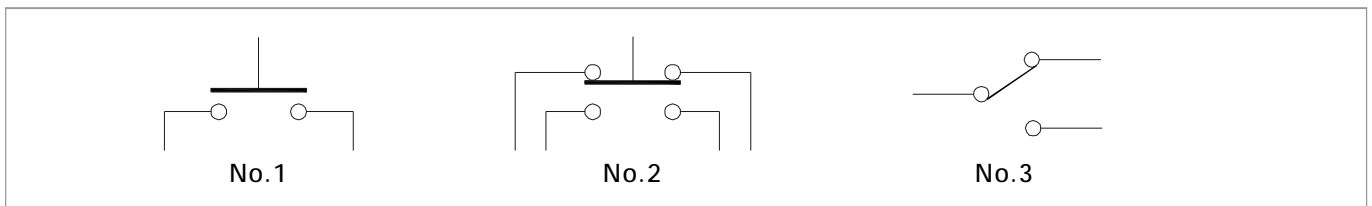
Lamp Type	LED Lamp		
Rated Voltage	AC/DC6V	AC/DC12V	AC/DC24V
	AC/DC110V		AC/DC220V
Cover Color	<span style="background-color: red; color: white; padding: 2px;">R</span>	<span style="background-color: green; color: white; padding: 2px;">G</span>	<span style="background-color: yellow; color: black; padding: 2px;">Y</span> <span style="background-color: orange; color: white; padding: 2px;">O</span> <span style="background-color: cyan; color: white; padding: 2px;">B</span> <span style="background-color: white; color: black; padding: 2px;">W</span>
Life	About 40,000 hours		

Note: The lamp contains a current-limiting resistor.  
Other operating voltage can be customized.

### Lamp circuit diagram

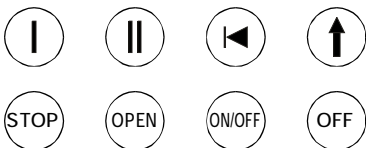


### Switching Operation



### Engraving Options

- Special type can be made to order.
- Examples



### Visual Effect



Nikel Plated Brass  
Satin surface

Stainless Steel  
Spiral surface

Gold-plated brass  
Satin surface

### Soldering information

- Handiwork soldering: Soldering iron 30W or under 30W at 230°C for 3sec max.

### Purchasing Notice

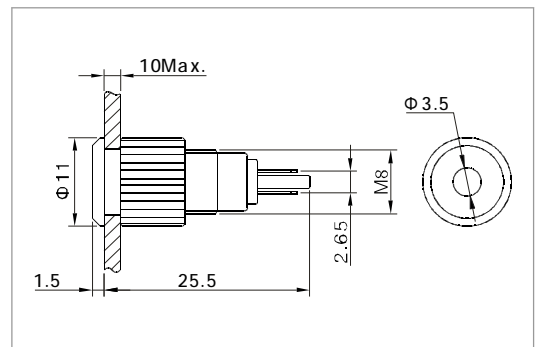
- Please write ONPOW code after check the Implication of Type and the detailed specification in the catalogue.
- Please place an order over 1,000pcs if the products need to be made to order.
- All IP Degree listed in our forms can seal front of panel only.

### PILOT LAMP



GQ8-D

- ⊙  $\Phi$ 8mm diameter
- ⊙ Voltage Range:3~48V
- ⊙ Rated Current:15mA
- ⊙ Lamp Type:LED
- ⊙ Lamp Color: R G Y O B W
- ⊙ The crust material:Stainless Steel/  
Nikel Plated Brass
- ⊙ IP Degree:IP65

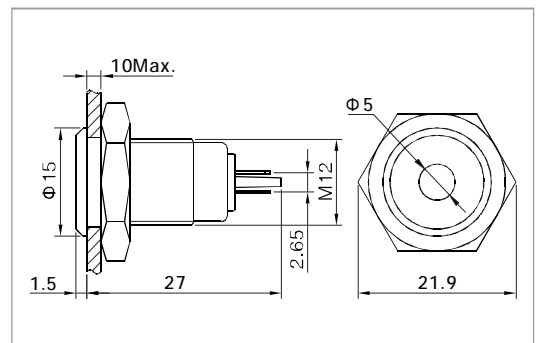


### PILOT LAMP



GQ12-D

- ⊙  $\Phi$ 12mm diameter
- ⊙ Voltage Range:3~48V
- ⊙ Rated Current:15mA
- ⊙ Lamp Type:LED
- ⊙ Lamp Color: R G Y O B W
- ⊙ The crust material:Stainless Steel
- ⊙ IP Degree:IP65

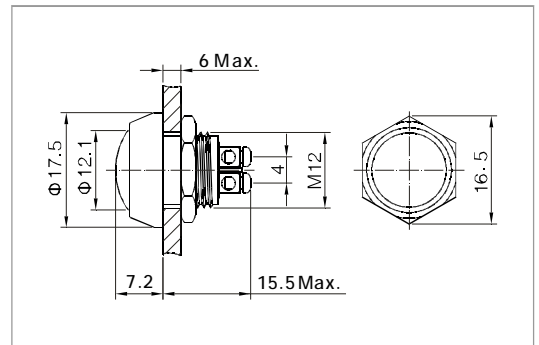


Specification		GQ8-D	GQ12-D
Terminal Type		Pin Terminal(1.8×0.4mm)	Pin Terminal(1.8×0.4mm)
Dielectric Strength		1100VAC	2000VAC
Operating Temp		-20°C ~ +70°C	-20°C ~ +70°C
Panel Thickness		1 ~ 6mm	1 ~ 6mm
Torque		5 ~ 14Nm	5 ~ 14Nm
IP Degree		Ip65	Ip65
Material	Button	PC	PC
	Body	Stainless Steel/Nikel Plated Brass	Stainless Steel
	Base	PBT	PBT
<span style="color:green; font-weight:bold;">RoHS</span>		Made to order	Made to order
LED Spec.	Type	Pilot lamp(LED)	Pilot lamp(LED)
	Rated Voltage	6V/12V/24V	6V/12V/24V
	Color	<span style="color:red">R</span> <span style="color:green">G</span> <span style="color:yellow">Y</span> <span style="color:orange">O</span> <span style="color:blue">B</span> <span style="border:1px solid black; padding:0 2px;">W</span>	<span style="color:red">R</span> <span style="color:green">G</span> <span style="color:yellow">Y</span> <span style="color:orange">O</span> <span style="color:blue">B</span> <span style="border:1px solid black; padding:0 2px;">W</span>
	Life	About 40,000 hours	About 40,000 hours

### PUSH BUTTON SWITCH



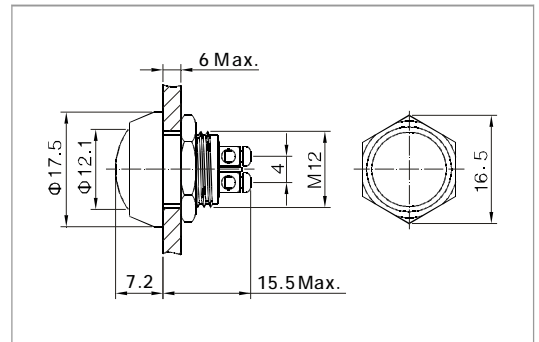
- ⊙  $\Phi$  12mm diameter
- ⊙ 2A/48VDC
- ⊙ 1NO
- ⊙ Domed profile
- ⊙ The crust material: Stainless Steel/  
Nikel Plated Brass
- ⊙ IP Degree: IP65



### COLOR PUSH BUTTON SWITCH



- ⊙  $\Phi$  12mm diameter
- ⊙ 2A/48VDC
- ⊙ 1NO
- ⊙ Domed profile
- ⊙ The crust material: Zn- Al alloy
- ⊙ Material of actuator: PBT
- ⊙ Head Color: R G Y O B W
- ⊙ IP Degree: IP65



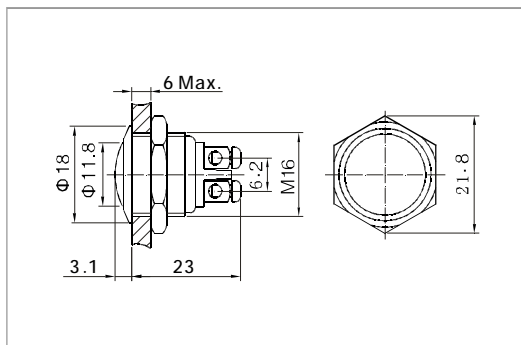
Specification	GQ12-B	GQ12-B/A
Terminal Type	Screw Terminals	Screw Terminals
Switching	No.1	No.1
Max. Switch Rating	2A/48VDC	2A/48VDC
Contact Resistance	$\leq 50m\Omega$	$\leq 50m\Omega$
Insulation Resistance	$\geq 1000M\Omega$	$\geq 1000M\Omega$
Dielectric Strength	2000VAC	2000VAC
Operation Temp.	-20°C ~ +70°C	-20°C ~ +70°C
Mechanical Life	1,000,000cycles	1,000,000cycles
Electrical Life	200,000cycles	200,000cycles
Contact Material	Silver Alloy	Silver Alloy
Panel Thickness	1 ~ 6mm	1 ~ 6mm
Torque	5 ~ 14Nm	5 ~ 14Nm
Operation Pressure	5.5N	5.5N
IP Degree	IP65	IP65
Material	Button	Stainless Steel/Nikel Plated Brass
	Body	Stainless Steel/Nikel Plated Brass
	Base	PBT
Head color	—	<span style="color: red;">R</span> <span style="color: green;">G</span> <span style="color: yellow;">Y</span> <span style="color: orange;">O</span> <span style="color: blue;">B</span> <span style="border: 1px solid black; padding: 0 2px;">W</span>
<span style="background-color: green; color: white; padding: 2px;">RoHS</span>	Made to order	Made to order

## PUSH BUTTON SWITCH



GQ16-B

- ⊙  $\Phi$  16mm diameter
- ⊙ 2A/48VDC
- ⊙ 1NO
- ⊙ The Front Shape:Domed
- ⊙ The crust material:Stainless Steel/  
Brass(Nikel Plated, Gold Plated)
- ⊙ IP Degree:IP65

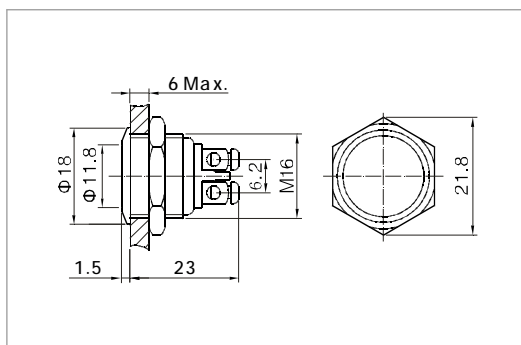


## PUSH BUTTON SWITCH



GQ16-F

- ⊙  $\Phi$  16mm diameter
- ⊙ 2A/48VDC
- ⊙ 1NO
- ⊙ The Front Shape:Flat Round
- ⊙ The crust material:Stainless Steel/  
Brass(Nikel Plated, Gold Plated)
- ⊙ IP Degree:IP65

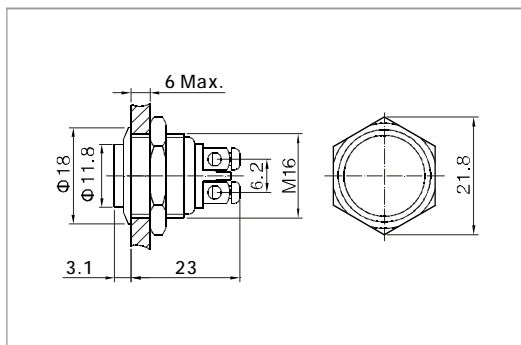


## PUSH BUTTON SWITCH



GQ16-H

- ⊙  $\Phi$  16mm diameter
- ⊙ 2A/48VDC
- ⊙ 1NO
- ⊙ The Front Shape:High Round
- ⊙ The crust material:Stainless Steel/  
Brass(Nikel Plated, Gold Plated)
- ⊙ IP Degree:IP65



Specification	GQ16-B	GQ16-F	GQ16-H
The Front Shape	Domed	Flat Round	High Round
Terminal Type	Screw Terminals	Screw Terminals	Screw Terminals
Switching	No.1	No.1	No.1
Max.Switch Rating	2A/48VDC	2A/48VDC	2A/48VDC
Contact Resistance	$\leq 50m\Omega$	$\leq 50m\Omega$	$\leq 50m\Omega$
Insulation Resistance	$\geq 1000M\Omega$	$\geq 1000M\Omega$	$\geq 1000M\Omega$
Dielectric Strength	2000VAC	2000VAC	2000VAC
Operation Temp.	-20°C ~ +70°C	-20°C ~ +70°C	-20°C ~ +70°C
Mechanical Life	1,000,000cycles	1,000,000cycles	1,000,000cycles
Electrical Life	200,000cycles	200,000cycles	200,000cycles
Contact Material	Silver Alloy	Silver Alloy	Silver Alloy
Panel Thickness	1 ~ 6mm	1 ~ 6mm	1 ~ 6mm
Torque	5 ~ 14Nm	5 ~ 14Nm	5 ~ 14Nm
Operation Pressure	5.5N	5.5N	5.5N
IP Degree	IP65	IP65	IP65
Material	Button	Stainless Steel/Brass(Nikel Plated, Gold Plated)	Stainless Steel/Brass(Nikel Plated, Gold Plated)
	Body	Stainless Steel/Brass(Nikel Plated, Gold Plated)	Stainless Steel/Brass(Nikel Plated, Gold Plated)
	Base	PBT	PBT
RoHS	Made to order	Made to order	Made to order

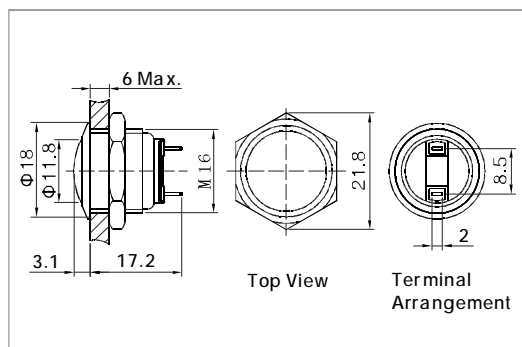


## PUSH BUTTON SWITCH



GQ16-B/J

- ⊙  $\Phi$  16mm diameter
- ⊙ 2A/48VDC
- ⊙ 1NO
- ⊙ Front Shape:Domed
- ⊙ crust material:Stainless Steel/  
Brass(Nikel Plated,Gold Plated)
- ⊙ IP Degree:IP65

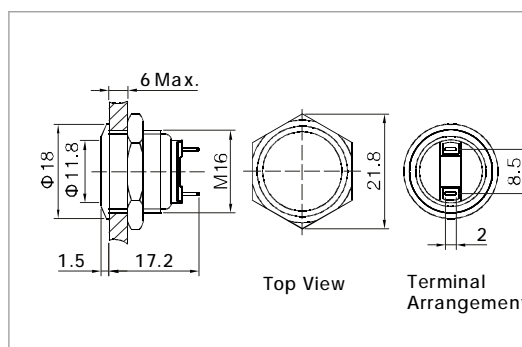


## PUSH BUTTON SWITCH



GQ16-F/J

- ⊙  $\Phi$  16mm diameter
- ⊙ 2A/48VDC
- ⊙ 1NO
- ⊙ Front Shape:Flat Round
- ⊙ Crust material:Stainless Steel/  
Brass(Nikel Plated,Gold Plated)
- ⊙ IP Degree:IP65

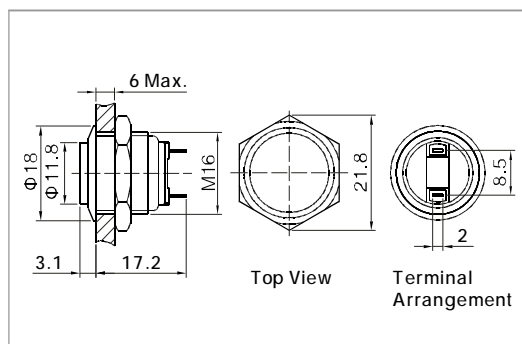


## PUSH BUTTON SWITCH



GQ16-H/J

- ⊙  $\Phi$  16mm diameter
- ⊙ 2A/48VDC
- ⊙ 1NO
- ⊙ Front Shape:High Round
- ⊙ Crust material:Stainless Steel/  
Brass(Nikel Plated,Gold Plated)
- ⊙ IP Degree:IP65



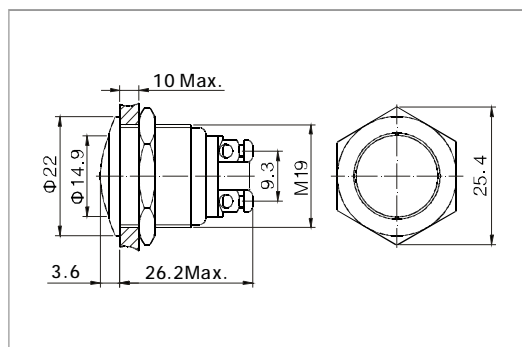
Specification	GQ16-B/J	GQ16-F/J	GQ16-H/J
The Front Shape	Domed	Flat Round	High Round
Terminal Type	Pin Terminal(2×0.5mm)	Pin Terminal(2×0.5mm)	Pin Terminal(2×0.5mm)
Switching	No.1	No.1	No.1
Max.Switch Rating	2A/48VDC	2A/48VDC	2A/48VDC
Contact Resistance	≤ 50mΩ	≤ 50mΩ	≤ 50mΩ
Insulation Resistance	≥ 1000MΩ	≥ 1000MΩ	≥ 1000MΩ
Dielectric Strength	2000VAC	2000VAC	2000VAC
Operation Temp.	-20°C ~ +70°C	-20°C ~ +70°C	-20°C ~ +70°C
Mechanical Life	1,000,000cycles	1,000,000cycles	1,000,000cycles
Electrical Life	200,000cycles	200,000cycles	200,000cycles
Contact Material	Silver Alloy	Silver Alloy	Silver Alloy
Panel Thickness	1 ~ 6mm	1 ~ 6mm	1 ~ 6mm
Torque	5 ~ 14Nm	5 ~ 14Nm	5 ~ 14Nm
Operation Pressure	5.5N	5.5N	5.5N
IP Degree	IP65	IP65	IP65
Material	Button	Stainless Steel/Brass(Nikel Plated,Gold Plated)	Stainless Steel/Brass(Nikel Plated,Gold Plated)
	Body	Stainless Steel/Brass(Nikel Plated,Gold Plated)	Stainless Steel/Brass(Nikel Plated,Gold Plated)
	Base	PBT	PBT
RoHS	Made to order	Made to order	Made to order

## PUSH BUTTON SWITCH



GQ19-B

- ⊙  $\Phi$ 19mm diameter
- ⊙ 2A/48VDC
- ⊙ 1NO
- ⊙ The Front Shape:Domed
- ⊙ The crust material:Stainless Steel/  
Brass(Nikel Plated,Gold Plated)
- ⊙ IP Degree:IP65

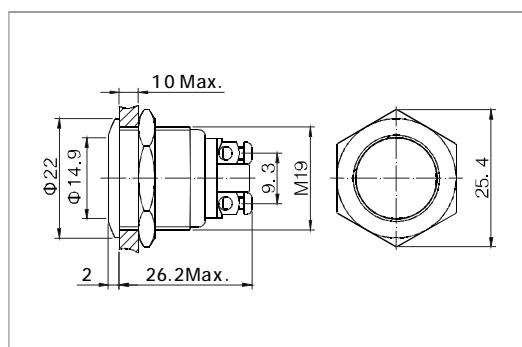


## PUSH BUTTON SWITCH



GQ19-F

- ⊙  $\Phi$ 19mm diameter
- ⊙ 2A/48VDC
- ⊙ 1NO
- ⊙ The Front Shape:Flat Round
- ⊙ The crust material:Stainless Steel/  
Brass(Nikel Plated,Gold Plated)
- ⊙ IP Degree:IP65

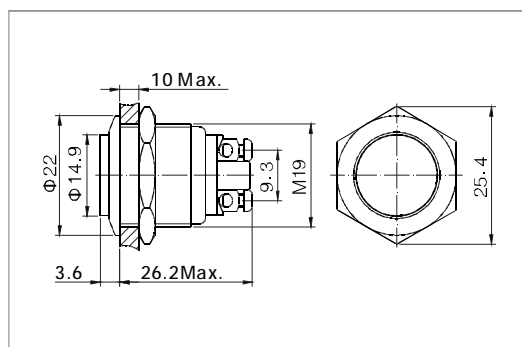


## PUSH BUTTON SWITCH



GQ19-H

- ⊙  $\Phi$ 19mm diameter
- ⊙ 2A/48VDC
- ⊙ 1NO
- ⊙ The Front Shape:High Round
- ⊙ The crust material:Stainless Steel/  
Brass(Nikel Plated, Gold Plated)
- ⊙ IP Degree:IP65

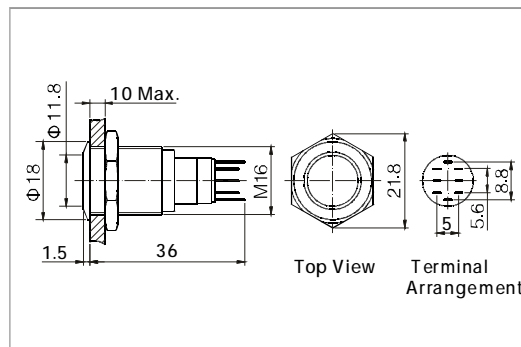


Specification	GQ19-B	GQ19-F	GQ19-H
The Front Shape	Domed	Flat Round	High Round
Terminal Type	Screw Terminals	Screw Terminals	Screw Terminals
Switching	No.1	No.1	No.1
Max.Switch Rating	2A/48VDC	2A/48VDC	2A/48VDC
Contact Resistance	$\leq 50m\Omega$	$\leq 50m\Omega$	$\leq 50m\Omega$
Insulation Resistance	$\geq 1000M\Omega$	$\geq 1000M\Omega$	$\geq 1000M\Omega$
Dielectric Strength	2000VAC	2000VAC	2000VAC
Operation Temp.	-20°C ~ +70°C	-20°C ~ +70°C	- 20°C ~ + 70°C
Mechanical Life	1,000,000cycles	1,000,000cycles	1,000,000cycles
Electrical Life	200,000cycles	200,000cycles	200,000cycles
Contact Material	Silver Alloy	Silver Alloy	Silver Alloy
Panel Thickness	1 ~ 8mm	1 ~ 8mm	1 ~ 8mm
Torque	5 ~ 14Nm	5 ~ 14Nm	5 ~ 14Nm
Operation Pressure	5.5N	5.5N	5.5N
IP Degree	IP65	IP65	IP65
Material	Button	Stainless Steel/Brass(Nikel Plated,Gold Plated)	Stainless Steel/Brass(Nikel Plated,Gold Plated)
	Body	Stainless Steel/Brass(Nikel Plated,Gold Plated)	Stainless Steel/Brass(Nikel Plated,Gold Plated)
	Base	PBT	PBT
RoHS	Made to order	Made to order	Made to order

## PUSH BUTTON SWITCH



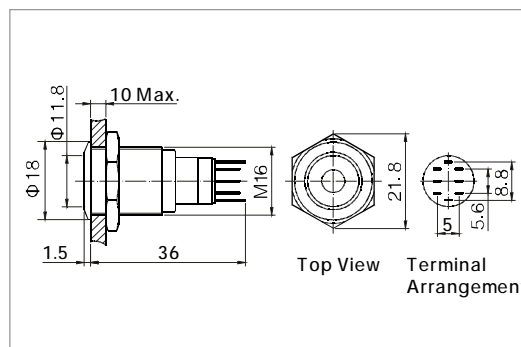
- ⊙  $\Phi$  16mm diameter
- ⊙ 3A/250VAC
- ⊙ 1NO1NC/2NO2NC
- ⊙ Front Shape: Flat Round
- ⊙ Crust material: Stainless Steel/  
Brass (Nikel Plated, Gold Plated)
- ⊙ IP Degree: IP40/IP67



## DOT ILLUMINATED PUSHBUTTON



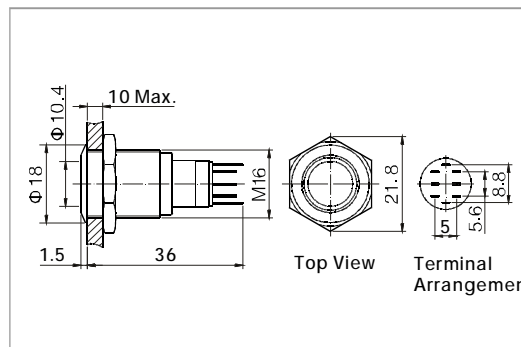
- ⊙  $\Phi$  16mm diameter
- ⊙ 3A/250VAC
- ⊙ 1NO1NC/2NO2NC
- ⊙ Front Shape: Flat Round
- ⊙ Crust material: Stainless Steel/  
Brass (Nikel Plated, Gold Plated)
- ⊙ Dot Illuminated
- ⊙ IP Degree: IP40/IP67



## RING ILLUMINATED PUSHBUTTON



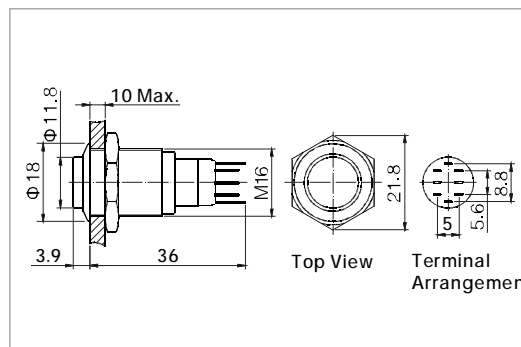
- ⊙  $\Phi$  16mm diameter
- ⊙ 3A/250VAC
- ⊙ 1NO1NC/2NO2NC
- ⊙ Front Shape: Flat Round
- ⊙ Crust material: Stainless Steel/  
Brass (Nikel Plated, Gold Plated)
- ⊙ Ring Illuminated
- ⊙ IP Degree: IP40/IP67



## PUSH BUTTON SWITCH



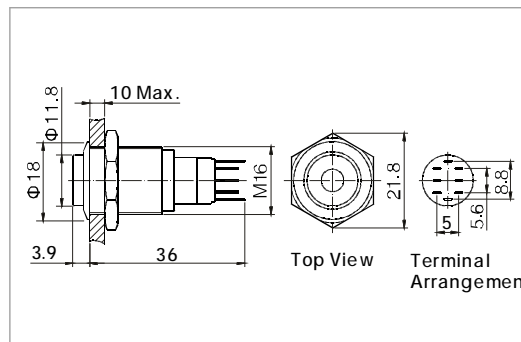
- ⊙  $\Phi$  16mm diameter
- ⊙ 3A/250VAC
- ⊙ 1NO1NC/2NO2NC
- ⊙ Front Shape: High Round
- ⊙ Crust material: Stainless Steel/  
Brass (Nikel Plated, Gold Plated)
- ⊙ IP Degree: IP40/IP67



## DOT ILLUMINATED PUSHBUTTON



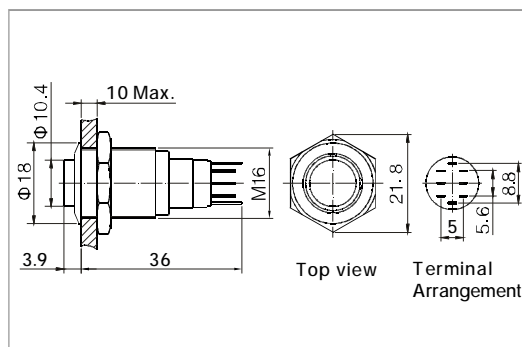
- ⊙  $\Phi$  16mm diameter
- ⊙ 3A/250VAC
- ⊙ 1NO1NC/2NO2NC
- ⊙ Front Shape: High Round
- ⊙ Crust material: Stainless Steel/  
Brass (Nikel Plated, Gold Plated)
- ⊙ Dot Illuminated
- ⊙ IP Degree: IP40/IP67



## RING ILLUMINATED PUSHBUTTON



- ⊙  $\Phi$  16mm diameter
- ⊙ 3A/250VAC
- ⊙ 1NO1NC/2NO2NC
- ⊙ Front Shape: High Round
- ⊙ Crust material: Stainless Steel/  
Brass (Nickel Plated, Gold Plated)
- ⊙ Ring Illuminated
- ⊙ IP Degree: IP40/IP67

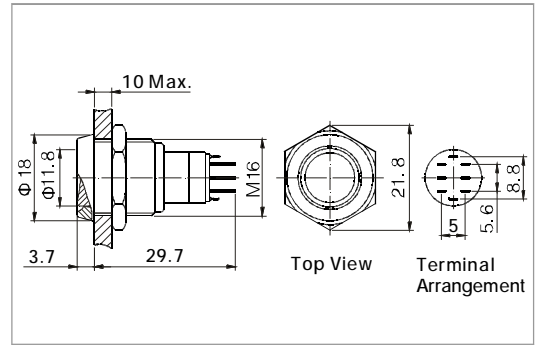


Specification	LAS2GQF-□□□ LAS2GQH-□□□	LAS2GQF-□□□D LAS2GQH-□□□D	LAS2GQF-□□□E LAS2GQH-□□□E
The Front Shape	Flat Round High Round	Flat Round High Round	Flat Round High Round
Terminal Type	Pin Terminal(1.8×0.4mm)	Pin Terminal(1.8×0.4mm)	Pin Terminal(1.8×0.4mm)
Switching	No.3	No.3	No.3
Max. Switch Rating	3A/250VAC	3A/250VAC	3A/250VAC
Contact Resistance	$\leq 50m\Omega$	$\leq 50m\Omega$	$\leq 50m\Omega$
Insulation Resistance	$\geq 1000M\Omega$	$\geq 1000M\Omega$	$\geq 1000M\Omega$
Dielectric Strength	2000VAC	2000VAC	2000VAC
Operation Temp.	-20°C ~ +70°C	-20°C ~ +70°C	-20°C ~ +70°C
Mechanical Life	200,000cycles	200,000cycles	200,000cycles
Electrical Life	50,000 cycles	50,000 cycles	50,000 cycles
Contact Material	Silver Alloy	Silver Alloy	Silver Alloy
Panel Thickness	1 ~ 10mm	1 ~ 10mm	1 ~ 10mm
Torque	5 ~ 14Nm	5 ~ 14Nm	5 ~ 14Nm
Operation Pressure	1 ~ 3N	1 ~ 3N	1 ~ 3N
IP Degree	IP40/IP67	IP40/IP67	IP40/IP67
Material	Button	Stainless Steel/Brass(Nickel Plated, Gold Plated)	Stainless Steel/Brass(Nickel Plated, Gold Plated)
	Body	Stainless Steel/Brass(Nickel Plated, Gold Plated)	Stainless Steel/Brass(Nickel Plated, Gold Plated)
	Base	PBT	PBT
	RoHS	Made to order	Made to order
LED Spec.	Type	Without Lamp	Dot Illuminated(LED)
	Rated Voltage	---	6V / 12V / 24V / 110V / 220V
	Color	---	<span style="color: red;">R</span> <span style="color: green;">G</span> <span style="color: yellow;">Y</span> <span style="color: orange;">O</span> <span style="color: blue;">B</span> <span style="border: 1px solid black; padding: 0 2px;">W</span>
	Life	---	40,000 hours

## PUSH BUTTON SWITCH



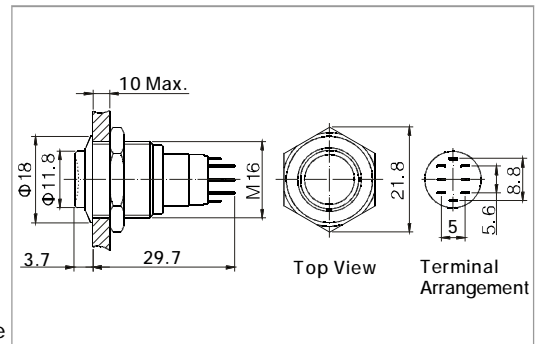
- ⊙  $\Phi$  16mm diameter
- ⊙ 3A/250VAC
- ⊙ 1NO1NC/2NO2NC
- ⊙ The Front Shape:Concave Round
- ⊙ The crust material:Stainless Steel/  
Brass(Nikel Plated,Gold Plated)
- ⊙ IP Degree:IP67



## PUSH BUTTON SWITCH



- ⊙  $\Phi$  16mm diameter
- ⊙ 3A/250VAC
- ⊙ 1NO1NC/2NO2NC
- ⊙ The Front Shape:High Concave Round
- ⊙ The crust material:Stainless Steel/  
Brass(Nikel Plated,Gold Plated)
- ⊙ IP Degree:IP67
- ⊙ Head Color:red/green/yellow/orange  
/blue/white

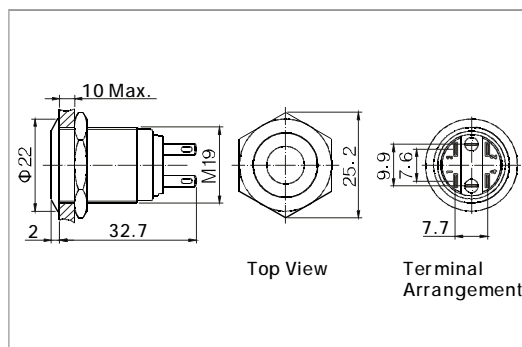


Specification	LAS2GQC-□□□	LAS2GQG-□□□
The Front Shape	Concave Round	High Concave Round
Terminal Type	Pin Terminal	Pin Terminal
Switching	No.3	No.3
Max.Switch Rating	3A/250VAC	3A/250VAC
Contact Resistance	$\leq 50m\Omega$	$\leq 50m\Omega$
Insulation Resistance	$\geq 1000M\Omega$	$\geq 1000M\Omega$
Dielectric Strength	2000VAC	2000VAC
Operation Temp.	-20°C ~ +70°C	-20°C ~ +70°C
Mechanical Life	200,000cycles	200,000cycles
Electrical Life	50,000 cycles	50,000 cycles
Contact Material	Silver Alloy	Silver Alloy
Panel Thickness	1 ~ 10mm	1 ~ 10mm
Torque	5 ~ 14Nm	5 ~ 14Nm
Operation Pressure	1 ~ 3N	1 ~ 3N
IP Degree	IP67	IP67
Head color	---	<span style="color:red">R</span> <span style="color:green">G</span> <span style="color:yellow">Y</span> <span style="color:orange">O</span> <span style="color:blue">B</span> <span style="border:1px solid black; padding:0 2px;">W</span>
	<span style="background-color:green; color:white; padding:2px;">RoHS</span>	
	Made to order	Made to order
Material	Button	Stainless Steel/Brass(Nikel Plated,Gold Plated)
	Body	Stainless Steel/Brass(Nikel Plated,Gold Plated)
	Base	PBT
		Alluminium Alloy
		Stainless Steel/Brass(Nikel Plated,Gold Plated)
		PBT

## DOT ILLUMINATED PUSHBUTTON



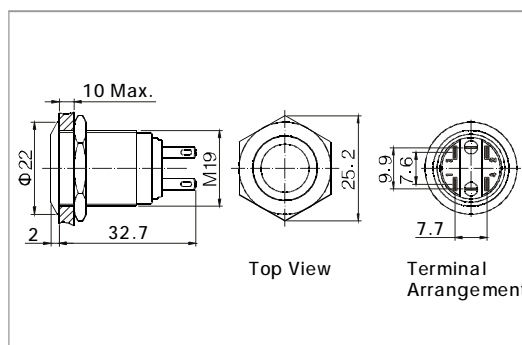
- ⊙  $\Phi$  19mm diameter
- ⊙ 5A/250VAC
- ⊙ 1NO1NC
- ⊙ The crust material:Stainless Steel
- ⊙ Dot Illuminated
- ⊙ IP Degree:IP65



## RING ILLUMINATED PUSHBUTTON



- ⊙  $\Phi$  19mm diameter
- ⊙ 5A/250VAC
- ⊙ 1NO1NC
- ⊙ The crust material:Stainless Steel
- ⊙ Ring Illuminated
- ⊙ IP Degree:IP65

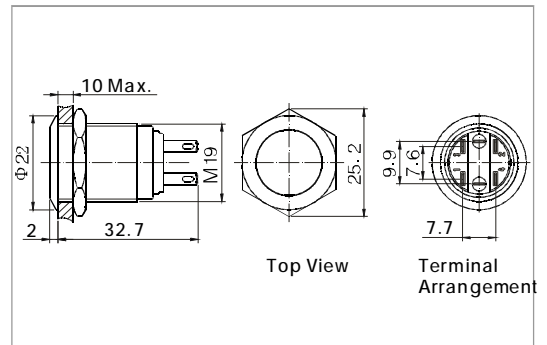


Specification	LAS1GQ-11□D	LAS1GQ-11□E
The Front Shape	Flat Round	Flat Round
Terminal Type	Pin Terminal(2.8×0.5mm)	Pin Terminal(2.8×0.5mm)
Switching	No.2	No.2
Max.Switch Rating	5A/250VAC	5A/250VAC
Contact Resistance	≤ 50mΩ	≤ 50mΩ
Insulation Resistance	≥ 1000MΩ	≥ 1000MΩ
Dielectric Strength	2000VAC	2000VAC
Operation Temp.	-20°C ~ +70°C	-20°C ~ +70°C
Mechanical Life	1,000,000cycles	1,000,000cycles
Electrical Life	50,000 cycles	50,000 cycles
Contact Material	Silver Alloy	Silver Alloy
Panel Thickness	1 ~ 10mm	1 ~ 10mm
Torque	5 ~ 14Nm	5 ~ 14Nm
Operation Pressure	5.5N	5.5N
IP Degree	IP65	IP65
Material	Button	Stainless Steel
	Body	Stainless Steel
	Base	PBT
	RoHS	Made to order
LED Spec.	Type	Dot Illuminated(LED)
	Rated Voltage	6V / 12V / 24V / 110V / 220V
	Color	<span style="color:red">R</span> <span style="color:green">G</span> <span style="color:yellow">Y</span> <span style="color:orange">O</span> <span style="color:blue">B</span> <span style="border:1px solid black; padding:0 2px;">W</span>
	Life	40,000 hours
		Made to order
	Type	Ring Illuminated(LED)
	Rated Voltage	6V / 12V / 24V / 110V / 220V
	Color	<span style="color:red">R</span> <span style="color:green">G</span> <span style="color:yellow">Y</span> <span style="color:orange">O</span> <span style="color:blue">B</span> <span style="border:1px solid black; padding:0 2px;">W</span>
	Life	40,000 hours

### PUSHBUTTONS



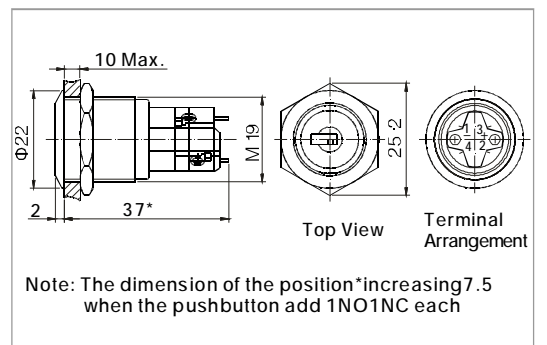
- ⊙ Φ 19mm diameter
- ⊙ 5A/250VAC
- ⊙ 1NO1NC
- ⊙ Front Shape: Flat Round
- ⊙ Crust material: Stainless Steel
- ⊙ IP Degree: IP65



### KEY SWITCHES



- ⊙ Φ 19mm diameter
- ⊙ 5A/250VAC
- ⊙ 1NO1NC/2NO2NC
- ⊙ Two position remain
- ⊙ Crust material: Stainless Steel
- ⊙ IP Degree: IP40

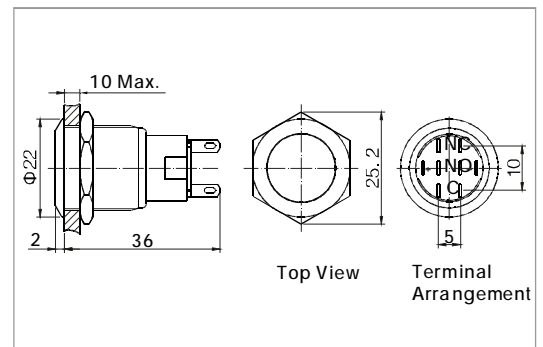


Specification	LAS1GQ-11□	LAS1GQ-□□Y
The Front Shape	Flat Round	Round
Terminal Type	Pin Terminal(2.8×0.5mm)	Pin Terminal
Switching	No.2	No.2
Max. Switch Rating	5A/250VAC	5A/250VAC
Contact Resistance	≤ 50mΩ	≤ 50mΩ
Insulation Resistance	≥ 1000MΩ	≥ 1000MΩ
Dielectric Strength	2000VAC	2000VAC
Operation Temp.	-20°C ~ +70°C	-20°C ~ +70°C
Mechanical Life	1,000,000cycles	1,000,000cycles
Electrical Life	50,000 cycles	50,000 cycles
Contact Material	Silver Alloy	Silver Alloy
Panel Thickness	1 ~ 10mm	1 ~ 10mm
Torque	5 ~ 14Nm	5 ~ 14Nm
Operation Pressure	3 ~ 8N	3 ~ 8N
IP Degree	IP65	IP40
Material	Button	Stainless Steel
	Body	Stainless Steel
	Base	PBT
RoHS	Made to order	Made to order

### PUSHBUTTONS



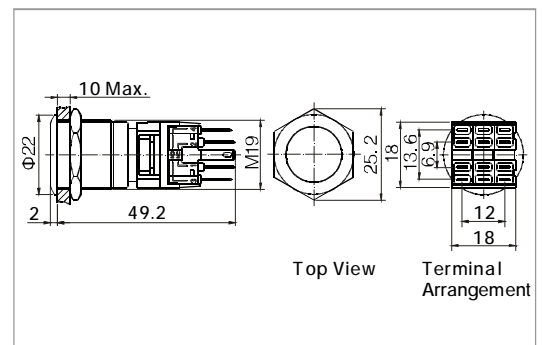
- ⊙  $\Phi$  19mm diameter
- ⊙ 5A/250VAC
- ⊙ 1NO1NC/2NO2NC
- ⊙ The Front Shape: Flat Round
- ⊙ The crust material: Stainless Steel
- ⊙ IP Degree: IP67



### PUSHBUTTONS



- ⊙  $\Phi$  19mm diameter
- ⊙ Combined Structure
- ⊙ 3A/250VAC
- ⊙ 1NO1NC/2NO2NC/3NO3NC
- ⊙ The Front Shape: Flat Round
- ⊙ The crust material: Stainless Steel
- ⊙ IP Degree: IP67



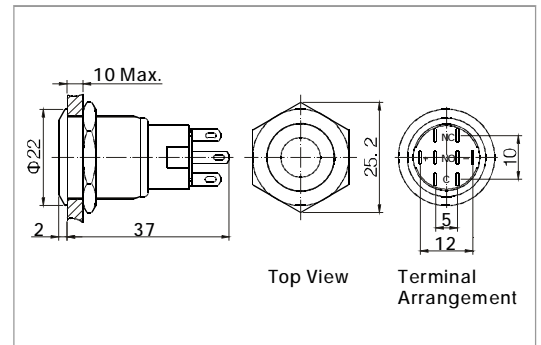
Specification	LAS1-AGQ-□□□	LAS1-BGQ-□□□
The Front Shape	Flat Round	Flat Round
Terminal Type	Pin Terminal(2.8×0.5mm)	Pin Terminal(2.8×0.5mm)
Switching	No.3	No.2
Max.Switch Rating	5A/250VAC	5A/250VAC
Contact Resistance	≤50mΩ	≤50mΩ
Insulation Resistance	≥1000MΩ	≥1000MΩ
Dielectric Strength	2000VAC	2000VAC
Operation Temp.	-20℃ ~ +70℃	-20℃ ~ +70℃
Mechanical Life	1,000,000cycles	1,000,000cycles
Electrical Life	50,000 cycles	50,000 cycles
Contact Material	Silver Alloy	Silver Alloy
Panel Thickness	1 ~ 10mm	1 ~ 10mm
Torque	5 ~ 14Nm	5 ~ 14Nm
Operation Pressure	3 ~ 8N	3 ~ 8N
IP Degree	IP67	IP67
Material	Button	Stainless Steel
	Body	Stainless Steel
	Base	PBT
RoHS	Made to order	Made to order



### DOT ILLUMINATED PUSHBUTTON



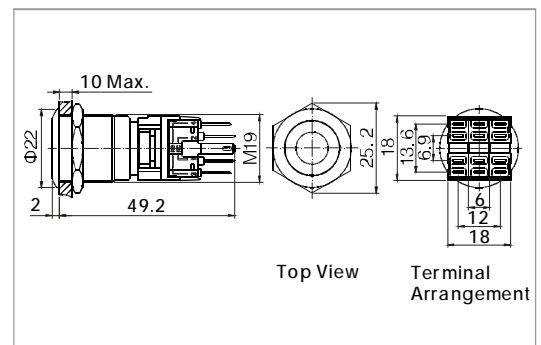
- ⊙ Φ19mm diameter
- ⊙ 5A/250VAC
- ⊙ 1NO1NC/2NO2NC
- ⊙ The Front Shape: Flat Round
- ⊙ The crust material: Stainless Steel
- ⊙ Dot Illuminated
- ⊙ IP Degree: IP67



### DOT ILLUMINATED PUSHBUTTON



- ⊙ Φ19mm diameter
- ⊙ Combined Structure
- ⊙ 5A/250VAC
- ⊙ 1NO1NC/2NO2NC/3NO3NC
- ⊙ The Front Shape: Flat Round
- ⊙ The crust material: Stainless Steel
- ⊙ Dot Illuminated
- ⊙ IP Degree: IP67

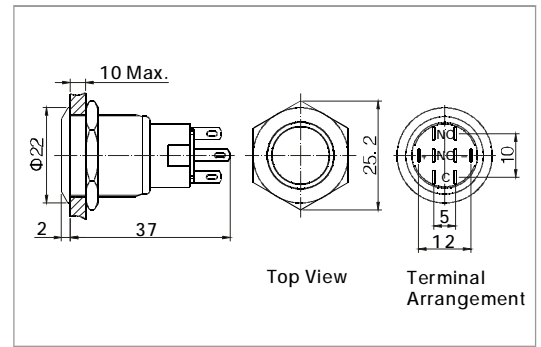


Specification		LAS1-AGQ-□□□D	LAS1-BGQ-□□□D
The Front Shape		Flat Round	Flat Round
Terminal Type		Pin Terminal(2.8×0.5mm)	Pin Terminal(2.8×0.5mm)
Switching		No.3	No.2
Max.Switch Rating		5A/250VAC	5A/250VAC
Contact Resistance		≤50mΩ	≤50mΩ
Insulation Resistance		≥1000MΩ	≥1000MΩ
Dielectric Strength		2000VAC	2000VAC
Operation Temp.		-20°C ~ +70°C	-20°C ~ +70°C
Mechanical Life		1,000,000cycles	1,000,000cycles
Electrical Life		50,000 cycles	50,000 cycles
Contact Material		Silver Alloy	Silver Alloy
Panel Thickness		1 ~ 10mm	1 ~ 10mm
Torque		5 ~ 14Nm	5 ~ 14Nm
Operation Pressure		3~8N	3~8N
IP Degree		IP67	IP67
Material	Button	Stainless Steel	Stainless Steel
	Body	Stainless Steel	Stainless Steel
	Base	PBT	PA
RoHS		Made to order	Made to order
LED Spec.	Type	Dot Illuminated(LED)	Dot Illuminated(LED)
	Rated Voltage	6V / 12V / 24V / 110V / 220V	6V / 12V / 24V / 110V / 220V
	Color	R G Y O B W	R G Y O B W
	Life	40,000 hours	40,000 hours

### RING ILLUMINATED PUSH BUTTON



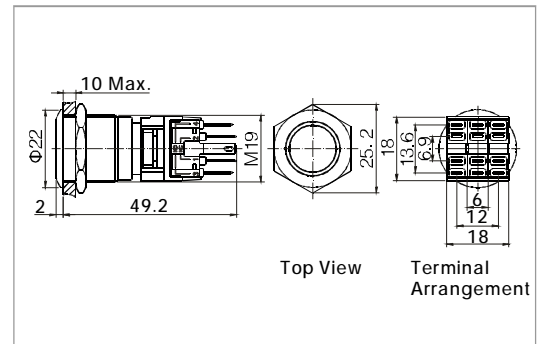
- ⊙ Φ19mm diameter
- ⊙ 5A/250VAC
- ⊙ 1NO1NC/2NO2NC
- ⊙ The Front Shape: Flat Round
- ⊙ The crust material: Stainless Steel
- ⊙ Ring Illuminated
- ⊙ IP Degree: IP67



### RING ILLUMINATED PUSH BUTTON



- ⊙ Φ19mm diameter
- ⊙ Combined Structure
- ⊙ 5A/250VAC
- ⊙ 1NO1NC/2NO2NC/
- ⊙ The Front Shape: Flat Round
- ⊙ The crust material: Stainless Steel
- ⊙ Ring Illuminated
- ⊙ IP Degree: IP67



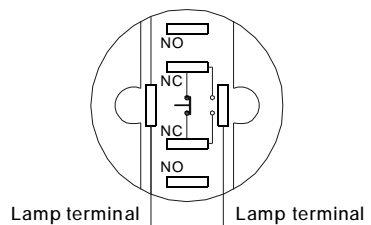
Specification		LAS1-AGQ-□□□E	LAS1-BGQ-□□□E
The Front Shape		Flat Round	Flat Round
Terminal Type		Pin Terminal(2.8×0.5mm)	Pin Terminal(2.8×0.5mm)
Switching		No.3	No.2
Max.Switch Rating		5A/250VAC	5A/250VAC
Contact Resistance		≤50mΩ	≤50mΩ
Insulation Resistance		≥1000MΩ	≥1000MΩ
Dielectric Strength		2000VAC	2000VAC
Operation Temp.		-20°C ~ +70°C	-20°C ~ +70°C
Mechanical Life		1,000,000cycles	1,000,000cycles
Electrical Life		50,000 cycles	50,000 cycles
Contact Material		Silver Alloy	Silver Alloy
Panel Thickness		1 ~ 10mm	1 ~ 10mm
Torque		5 ~ 14Nm	5 ~ 14Nm
Operation Pressure		3~8N	3~8N
IP Degree		IP67	IP67
Material	Button	Stainless Steel	Stainless Steel
	Body	Stainless Steel	Stainless Steel
	Base	PBT	PA
RoHS		Made to order	Made to order
LED Spec.	Type	Ring Illuminated(LED)	Ring Illuminated(LED)
	Rated Voltage	6V / 12V / 24V / 110V / 220V	6V / 12V / 24V / 110V / 220V
	Color	R G Y O B W	R G Y O B W
	Life	40,000 hours	40,000 hours

## GQ22 ANTI-VANDAL PUSHBUTTONS

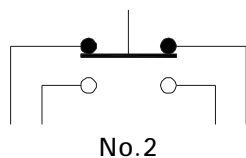
### Implication of Type

GQ	□□	-	□□	□	/	□	/	□
Code of Series	Mounting hole: 22 Φ22mm	Contact Structure: 11 1NO1NC	Lamp type: D dot illuminated E ring illuminated No letter means without lamp.	Lamp Color: R red G green Y yellow O orange B blue W white	Lamp voltage: 6V AC/DC 12V AC/DC 24V AC/DC 110V AC/DC 220V AC/DC			

### Terminal Arrangement



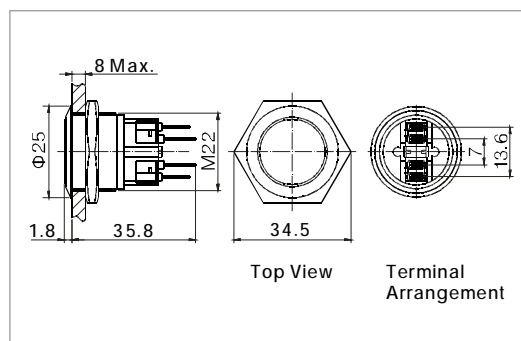
### Switching Operation



### PUSH BUTTON SWITCH



- ⊙ Φ22mm diameter
- ⊙ 5A/250VAC
- ⊙ 1NO1NC
- ⊙ Switching:No.2
- ⊙ The Front Shape:Flat Round
- ⊙ The crust material:Stainless Steel
- ⊙ IP Degree:IP65

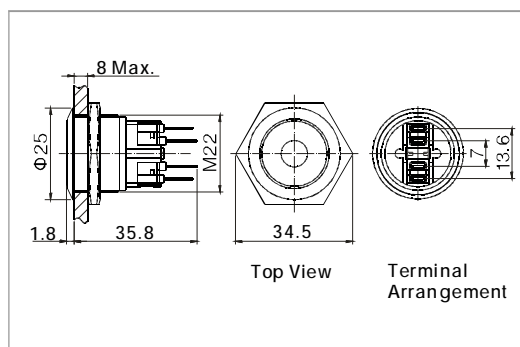


### DOT ILLUMINATED PUSH BUTTON SWITCH



GQ22-11D

- ⊙  $\Phi$ 22mm diameter
- ⊙ 5A/250VAC
- ⊙ 1NO1NC
- ⊙ Switching:No.2
- ⊙ Dot illuminated
- ⊙ The crust material:Stainless Steel
- ⊙ IP Degree:IP65

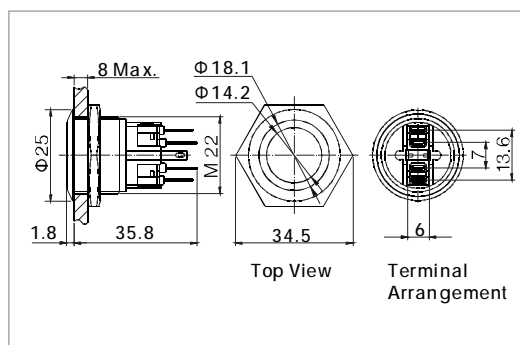


### RING ILLUMINATED PUSH BUTTON SWITCH



GQ22-11E

- ⊙  $\Phi$ 22mm diameter
- ⊙ 5A/250VAC
- ⊙ 1NO1NC
- ⊙ Switching:No.2
- ⊙ Ring illuminated
- ⊙ The crust material:Stainless Steel
- ⊙ IP Degree:IP65



Specification	GQ22-11	GQ22-11D	GQ22-11E
The Front Shape	Flat Round	Flat Round	Flat Round
Terminal Type	Pin Terminal(2.8×0.5mm)	Pin Terminal(2.8×0.5mm)	Pin Terminal(2.8×0.5mm)
Switching	No.2	No.2	No.2
Max.Switch Rating	5A/250VAC	5A/250VAC	5A/250VAC
Contact Resistance	≤ 50mΩ	≤ 50mΩ	≤ 50mΩ
Insulation Resistance	≥ 1000MΩ	≥ 1000MΩ	≥ 1000MΩ
Dielectric Strength	2000VAC	2000VAC	2000VAC
Operation Temp.	-20°C ~ +70°C	-20°C ~ +70°C	-20°C ~ +70°C
Mechanical Life	1,000,000cycles	1,000,000cycles	1,000,000cycles
Electrical Life	50,000 cycles	50,000 cycles	50,000 cycles
Contact Material	Silver Alloy	Silver Alloy	Silver Alloy
Panel Thickness	1 ~ 8mm	1 ~ 8mm	1 ~ 8mm
Torque	5 ~ 14Nm	5 ~ 14Nm	5 ~ 14Nm
Operation Pressure	3 ~ 8N	3 ~ 8N	3 ~ 8N
IP Degree	IP65	IP65	IP65
Material	Button	Stainless Steel	Stainless Steel
	Body	Stainless Steel	Stainless Steel
	Base	PA	PA
	RoHS	Made to order	Made to order
LED Spec.	Type	-	Dot Illuminated(LED)
	Rated Voltage	-	6V / 12V / 24V / 110V / 220V
	Color	-	R G Y O B W
	Life	-	40,000 hours
			Ring Illuminated(LED)
			6V / 12V / 24V / 110V / 220V
			R G Y O B W
			40,000 hours