

GQ★ series

- ☆ Have installation aperture Φ 22mm, Φ 25mm, Φ 28mm, Φ 30mm, Φ 40mm;
- ☆ The switch is "fast action | SPDT/DPDT";
- ☆ The appearance of the product is elegant and fashionable, the configuration is rich and diverse, and the performance is stable and reliable.
The self-locking device of this series is of "gear bite" structure, and the self-locking performance is very reliable;
- ☆ The waterproof grade of the product is IP65/IP67.

GQ★ series model description

GQ★-□■◇/△/▲/◎

Symbol	Symbol name	Specify
★	Mounting hole diameter	22: Φ 22mm / 25: Φ 25mm / 28: Φ 28mm / 30: Φ 30mm / 40: Φ 40mm
□	Contact Structure	11: 1NO1NC / 22: 2NO2NC / No digital means indicator
■	Operation type	Z: Latching / M: Mushroom button / No letter means momentary
◇	Illuminated Type	D: ● Dot illuminated / E: ○ Ring illuminated / ET: ⊕ Ring+power symbol illuminated / No letters mean no lights
△	Color	R: Red / G: Green / Y: Yellow / B: Blue / W: White
▲	Voltage	6V / 12V / 24V / 110V / 220V other voltage levels can be customized.
◎	Housing Material	S: Stainless steel / A: Aluminium alloy (Black)

Note: Please read the catalog carefully, and choose the right part-number according to the sign.

Switch Rating

Rated Insulation Voltage Ui			250V			
Thermal Current Ith			5A			
Rated voltage			12V	24V	110V	220V
Rated Operation Current	AC 50/60Hz	Resistive load	—	—	5A	3A
		Inductive load	—	—	3A	2A
	DC	Resistive load	5A	5A	1A	0.5A
		Inductive load	2A	2A	0.2A	0.1A
Contact material			Silver Alloy			

Minimum load: 3V AC/DC, 5mA (Reference)
Application scope depends on operating environment and load type.

Performance Characteristic

Operating Temp	-25℃~+55℃ (Non freezing)
Operating Humidity	45~85% RH(Non condensing)
Contact Resistance	≤ 50mΩ
Insulation Resistance	≥ 100MΩ (500VDC)
Max. withstanding voltage	1500VAC, 50Hz, 1min
Vibration resistance	50Hz, The amplitude is about 1.2mm
Solder heat resistance	320℃ 3s
Switch rating	2A/220VAC
Mechanical Life	1,000,000 cycles
Electrical Life	50,000 cycles
Base material	PA
Nut torque	About 0.6Nm
Torque	About 4N(1NO1NC)
	About 7.5N(2NO2NC)
Operation Travel	About 2.5mm
Protection class	IP65(momentary IP67 can be customized), IK10

Standards and certification

Corresponding standard	Certification mark	Certification authority / certification number
GB/T 14048.5-2017	CCC	
GB/T 14048.5-2017	CCC	
EN61058-1:2018	CE	

Switch structure description

Type	Diagram	Symbol
Za		

LED Specifications

LED life	Current	Allowable voltage fluctuation range	Circuit diagram
≥ 40000 hours	≤ 24V about 15mA ≥ 110V about 2mA	DC: ± 10% AC: ± 20%	

Pin Description

GQ22	GQ25,GQ28,GQ30
LED pin	LED pin
LED pin	LED pin

1, 2, 3 and 4 are a group of switches; 1, 2 is normally closed contact NC, 3 and 4 are normally open contact NO.
There is no difference between positive and negative poles for the lamp beads in the conventional configuration. The lamp bead is relatively independent of the switch, and the lamp bead status can be controlled by the switch or peripheral circuit.

PART NUMBERS ON THIS DRAWING

MR-GQ22-11 MR-GQ22-11-M MR-GQ22-11D MR-GQ22-11E MR-GQ22-11E-PC MR-GQ22-11ET

22 MM MUSHROOM HEAD PUSH BUTTON

MR-GQ22 SERIES

Micro-Ray

PART NO

MR-GQ22

DWG NO

MR-GQ22

SHEET

1 OF 2

REV

A

UNITS: mm

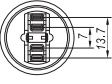
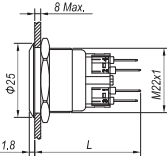
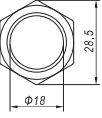
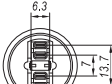
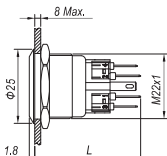
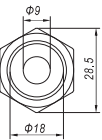
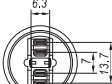
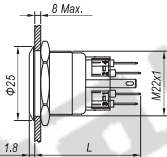
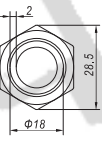
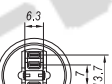
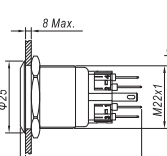
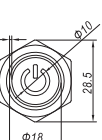
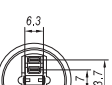
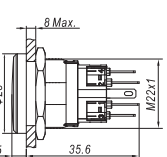
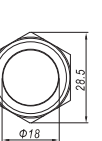
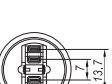
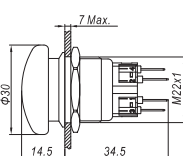
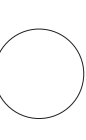
SCALE: NTS - DO NOT SCALE

SIZE

A4

DATE

2026-09-22

Contact Structure	11: 1NO1NC			
Operation type	Z: Latching / No letter means momentary			
Housing Material	S: Stainless steel			
Protection class	IP65(momentary IP67can be customized),IK10			
Applicable accessories	Sealing cover M12-22F / Protection cover T21-22 / Solder socket M11 / PCB socket M11-A / Quick connect socket M22			
			L: momentary is 35.8 Latching is 40.5	
Contact Structure	11: 1NO1NC			
Operation type	Z: Latching / No letter means momentary			
Color	R G Y B W			
Voltage	6V/12V/24V/110V/220V			
Housing Material	S: Stainless steel			
Protection class	IP65(momentary IP67can be customized),IK10			
Applicable accessories	Sealing cover M12-22F / Protection cover T21-22 / Solder socket M11 / PCB socket M11-A / Quick connect socket M22			
			L: momentary is 35.8 Latching is 40.5	
Contact Structure	11: 1NO1NC			
Operation type	Z: Latching / No letter means momentary			
Color	R G Y B W			
Voltage	6V/12V/24V/110V/220V			
Housing Material	S: Stainless steel / A: Aluminium alloy (Black)			
Protection class	IP65(momentary IP67can be customized),IK10			
Applicable accessories	Sealing cover M12-22F / Protection cover T21-22 / Solder socket M11 / PCB socket M11-A / Quick connect socket M22			
			L: momentary is 35.8 Latching is 40.5	
Contact Structure	11: 1NO1NC			
Operation type	Z: Latching / No letter means momentary			
Color	R G Y B W			
Voltage	6V/12V/24V/110V/220V			
Housing Material	S: Stainless steel			
Protection class	IP65(momentary IP67can be customized),IK10			
Applicable accessories	Sealing cover M12-22F / Protection cover T21-22 / Solder socket M11 / PCB socket M11-A / Quick connect socket M22			
			L: momentary is 35.8 Latching is 40.5	
Contact Structure	11: 1NO1NC			
Operation type	Z: Latching / No letter means momentary			
Color	R G Y B W			
Voltage	6V/12V/24V/110V/220V			
Housing Material	PC: engineering plastic			
Protection class	IP65(momentary IP67can be customized),IK10			
Applicable accessories	Sealing cover M12-22F / Protection cover T21-22 / Solder socket M11 / PCB socket M11-A / Quick connect socket M22			
			L: momentary is 35.8 Latching is 40.5	
Contact Structure	11: 1NO1NC			
Operation type	Z: Latching / No letter means momentary			
Housing Material	aluminium alloy			
Protection class	IP65(momentary IP67can be customized),IK10			
Applicable accessories	Sealing cover M12-22F / Solder socket M11 / PCB socket M11-A / Quick connect socket M22			

PART NUMBERS ON THIS DRAWING
MR-GQ22-11 MR-GQ22-11-M MR-GQ22-11D MR-GQ22-11E MR-GQ22-11E-PC MR-GQ22-11ET

22 MM MUSHROOM HEAD PUSH BUTTON		Micro-Ray	
MR-GQ22 SERIES			
PART NO	MR-GQ22		
DWG NO	MR-GQ22	SHEET 2 OF 2	REV A
UNITS: mm	SCALE: NTS - DO NOT SCALE	SIZE A4	DATE 2026-09-22