

MR-LAS1-AGQ Series

- ☆ Installation aperture $\Phi 16\text{mm}$, $\Phi 19\text{mm}$, $\Phi 22\text{mm}$;
- ☆ The switch is "Snap Action | SPDT / DPDT";
- ☆ This series covers buttons, emergency stop buttons, knobs, and key buttons.
The product range is complete and the configuration options are rich, which can meet the needs of users in various fields. The market is widely used and is one of the company's flagship products;
- ☆ Product waterproof grade IP65/IP67.

Switch Rating

Rated Insulation Voltage U_i			250V			
Thermal Current I_{th}			5A			
Rated voltage			12V	24V	110V	220V
Rated Operation Current	AC 50/60Hz	Resistive load	-	-	1A	0.5A
		Inductive load	-	-	0.7A	0.5A
	DC	Resistive load	1A	1A	0.2A	-
		Inductive load	0.7A	0.7A	0.1A	-
Contact material			Silver Alloy			

Minimum load: 3V AC/DC, 5mA (Reference)

Application scope depends on operating environment and load type.

Performance Characteristic

Operating Temp	-25°C~+55°C (Non freezing)
	Keep the switch air circulating well
Operating Humidity	45~85% RH(Non condensing)
Contact Resistance	$\leq 50\text{m}\Omega$
Insulation Resistance	$\geq 100\text{M}\Omega$ (500VDC)
Max. withstanding voltage	1500VAC, 50Hz, 1min
Vibration resistance	50Hz, The amplitude is about 1.2mm
Solder heat resistance	320°C 3s
Mechanical Life	Button $\geq 1,000,000$ times, knob, key button $\geq 200,000$ times
Electrical Life	50,000 cycles
Key material	Stainless Steel / Aluminum Alloy (Black) / Brass Chrome Plated (Only for LMR-AS1-AGQ16)
Base material	PBT(LAS1-AGQ16 is PA)
Nut torque	About 0.6Nm
Torque	Button: about 1.5N (1NO1NC), about 3N (2NO2NC)
Operation Travel	About 3.1mm
Protection class	Button: IP65(IP67 can be customized), IK09
	Knob, push-lock knob: IP65, IK02 key button: IP40, IK02

Standards and certification

Corresponding standard	Certification mark	Certification authority / certification number
UL508		
EN 60947-5-1:2004		VDE/40050498
GB/T14048.5-2017		
EN 60947-5-1:2004		

LED Specifications

LED life	Current	Allowable voltage fluctuation range	Circuit diagram
≥ 40000 hours	$\leq 24\text{V}$ about 15mA $\geq 110\text{V}$ about 2mA	DC: $\pm 10\%$	The product has built-in protective resistance, and the lamp bead wiring has no distinction between positive and negative poles.

Switch structure description

Type	Diagram	Symbol
C		

Pin Description

Legend	Directions
	Up to two sets of switches can be configured. C1, NO1, NC1 and C2, NO2, NC2 are a group of switches respectively; C pin is a common pin, NO pin is a normally open pin, and NC pin is a normally closed pin; + and - pins are lamp bead pins, conventional lamp beads. There is no distinction between positive and negative poles in the configuration; the lamp bead is relatively independent from the switch, and the state of the lamp bead can be controlled through the switch or peripheral circuit.

PART NUMBERS ON THIS DRAWING

MR-LAS1-AGQ16 MR-LAS1-AGQ16-D MR-LAS1-AGQ16-E MR-LAS1-AGQ16-ET MR-LAS1-AGQ16-TSB
MR-LAS1-AGQ16-TSC MR-LAS1-AGQ16-TSD MR-LAS1-AGQ16-X MR-LAS1-AGQ16-Y MR-LAS1-AGQ16H
MR-LAS1-AGQ16H-D MR-LAS1-AGQ16H-E

16 MM SNAP-ACTION METAL PUSH BUTTON		Micro-Ray		
MR-LAS1-AGQ16 SERIES				
PART NO	MR-LAS1-AGQ16			
DWG NO	MR-LAS1-AGQ16		SHEET 1 OF 5	REV A
UNITS: mm		SCALE: NTS - DO NOT SCALE	SIZE A4	DATE 2026-09-22

MR-LAS1-AGQ series model description

MR-LAS1-AGQ ☆ ★ ◻ ◼ ◇ / ◀ ▶ / ▲ / ○

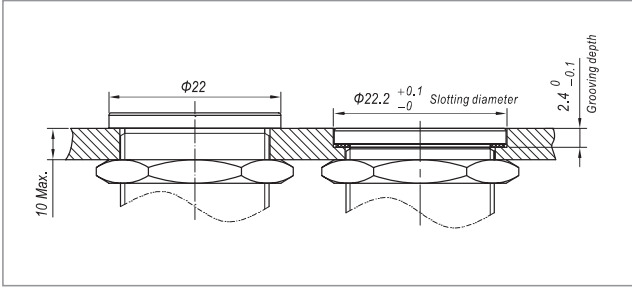
Symbol	Symbol name	Specify
☆	Mounting Aperture	16: Φ16mm / 22: Φ22mm / 30: Φ30mm / No digital means Φ19mm
★	Head shape	H: High round / No letter means flat round
◻	Contact Structure	11: 1NO1NC / 22: 2NO2NC / No digital means indicator
◼	Operation type	Z: Latching / X: Selector button / Y: Key button / TS: Emergency stop button / TSB: Type B emergency stop button / TSC: Type C emergency stop button / TSD: D-type emergency stop button / No letter means momentary
◇	Illuminated Type	D: ● Dot illuminated / E: ○ Ring illuminated / DT: ⊙ Single Power Symbol / ET: ⊕ Ring+power symbol illuminated / No letters mean no lights
◆	Selector and key button operating positions	2: Second position / 3: Third position
●	Selector and key button action types	1: Retention / 3: Fully Self-Double
△	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) / C: Chrome plated brass (optional for MR-LAS1-AGQ16 only)

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

Ultra-flat custom head display

normal head	Ultra flat head

MR-LAS1-AGQ ultra-flat anti-destructive metal button installation method

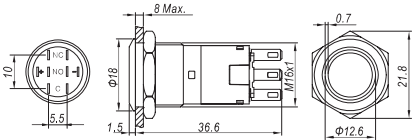


PART NUMBERS ON THIS DRAWING
MR-LAS1-AGQ16 MR-LAS1-AGQ16-D MR-LAS1-AGQ16-E MR-LAS1-AGQ16-ET MR-LAS1-AGQ16-TSB
MR-LAS1-AGQ16-TSC MR-LAS1-AGQ16-TSD MR-LAS1-AGQ16-X MR-LAS1-AGQ16-Y MR-LAS1-AGQ16H
MR-LAS1-AGQ16H-D MR-LAS1-AGQ16H-E

16 MM SNAP-ACTION METAL PUSH BUTTON MR-LAS1-AGQ16 SERIES		Micro-Ray	
PART NO	MR-LAS1-AGQ16		
DWG NO	MR-LAS1-AGQ16	SHEET 2 OF 5	REV A
UNITS: mm	SCALE: NTS - DO NOT SCALE	SIZE A4	DATE 2026-09-22

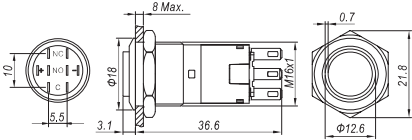
MR-LAS1-AGQ16

Contact Structure ☐ 11: 1NO1NC / 22: 2NO2NC
Operation type ☒ Z: Latching / No letter means momentary
Housing Material ☒ S: Stainless steel /C: Chrome plated brass
Protection class IP40(IP65 can be customized),IK09
Applicable accessories Safety mask M12-16F / Solder socket S04 / PCB socket S05



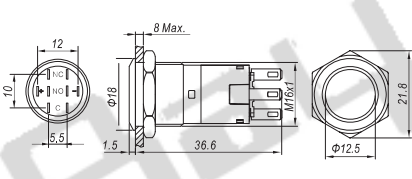
MR-LAS1-AGQ16H

Contact Structure ☐ 11: 1NO1NC / 22: 2NO2NC
Operation type ☒ Z: Latching / No letter means momentary
Housing Material ☒ S: Stainless steel /C: Chrome plated brass
Protection class IP40(IP65 can be customized),IK09
Applicable accessories Safety mask M12-16H / Solder socket S04 / PCB socket S05



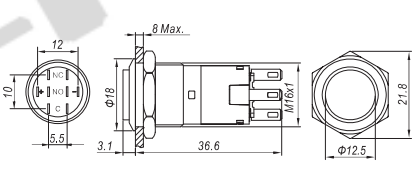
MR-LAS1-AGQ16-E

Contact Structure ☐ 11: 1NO1NC / 22: 2NO2NC
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 /C: Chrome plated brass
Protection class IP40(IP65 can be customized),IK09
Applicable accessories Safety mask M12-16F / Solder socket S04 / PCB socket S05



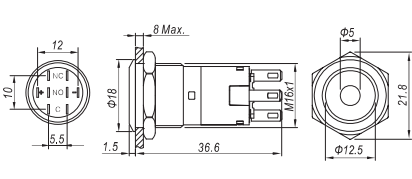
MR-LAS1-AGQ16H-E

Contact Structure ☐ 11: 1NO1NC / 22: 2NO2NC
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 /C: Chrome plated brass
Protection class IP40(IP65 can be customized),IK09
Applicable accessories Safety mask M12-16H / Solder socket S04 / PCB socket S05



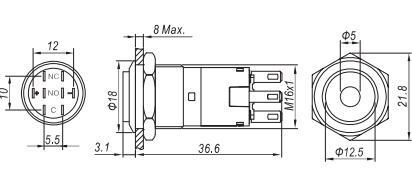
MR-LAS1-AGQ16-D

Contact Structure ☐ 11: 1NO1NC / 22: 2NO2NC
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 /C: Chrome plated brass
Protection class IP40(IP65 can be customized),IK09
Applicable accessories Safety mask M12-16F / Solder socket S04 / PCB socket S05



MR-LAS1-AGQ16H-D

Contact Structure ☐ 11: 1NO1NC / 22: 2NO2NC
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 /C: Chrome plated brass
Protection class IP40(IP65 can be customized),IK09
Applicable accessories Safety mask M12-16H / Solder socket S04 / PCB socket S05



PART NUMBERS ON THIS DRAWING
MR-LAS1-AGQ16 MR-LAS1-AGQ16-D MR-LAS1-AGQ16-E MR-LAS1-AGQ16-ET MR-LAS1-AGQ16-TSB
MR-LAS1-AGQ16-TSC MR-LAS1-AGQ16-TSD MR-LAS1-AGQ16-X MR-LAS1-AGQ16-Y MR-LAS1-AGQ16H
MR-LAS1-AGQ16H-D MR-LAS1-AGQ16H-E

16 MM SNAP-ACTION METAL PUSH BUTTON
MR-LAS1-AGQ16 SERIES

Micro-Ray

PART NO MR-LAS1-AGQ16

DWG NO MR-LAS1-AGQ16

UNITS: mm SCALE: NTS - DO NOT SCALE

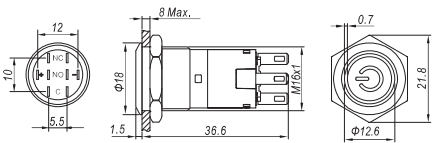
SHEET 3 OF 5

REV A

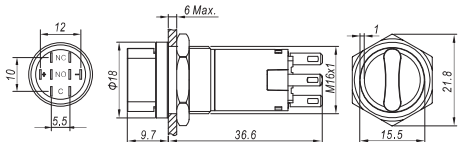
SIZE A4

DATE 2026-09-22

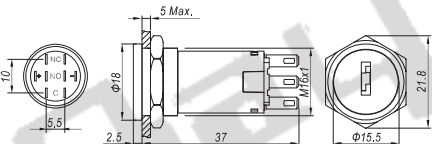
Contact Structure □ 11: 1NO1NC / 22: 2NO2NC
Operation type ■ Z: Latching / No letter means momentary
Color △ R G Y B W
Voltage ▲ 6V/12V/24V/110V/220V
Housing Material Stainless steel
Protection class IP40(IP65 can be customized), IK09
Applicable accessories Safety mask M12-16F / Solder socket S04 / PCB socket S05



Contact Structure □ 11: 1NO1NC / 22: 2NO2NC
Operating position ◆● L R L C R
Color △ R G Y B W
Voltage ▲ 6V/12V/24V/110V/220V
Housing Material Stainless steel
Protection class IP40, IK02
Applicable accessories Solder socket S04 / PCB socket S05



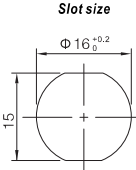
Contact Structure □ 11: 1NO1NC / 22: 2NO2NC
Operating position ◆● L R L C R
Housing Material Stainless steel
Protection class IP40, IK02
Applicable accessories Solder socket S04 / PCB socket S05



Knob, key button working position contact status	Switch type	90° 2 position		45° 3 position	
	Action position	1NO1NC	2NO2NC	2NO2NC	

Precautions

- The key button comes with 2 keys as standard.
- The knob and key button must be rotated in place when using.
- During the use of the knob and key button, the product is likely to rotate. It is recommended that the user refer to the figure on the right to make the groove.



PART NUMBERS ON THIS DRAWING
MR-LAS1-AGQ16 MR-LAS1-AGQ16-D MR-LAS1-AGQ16-E MR-LAS1-AGQ16-ET MR-LAS1-AGQ16-TSB
MR-LAS1-AGQ16-TSC MR-LAS1-AGQ16-TSD MR-LAS1-AGQ16-X MR-LAS1-AGQ16-Y MR-LAS1-AGQ16H
MR-LAS1-AGQ16H-D MR-LAS1-AGQ16H-E

16 MM SNAP-ACTION METAL PUSH BUTTON
MR-LAS1-AGQ16 SERIES

Micro-Ray

PART NO MR-LAS1-AGQ16

DWG NO MR-LAS1-AGQ16

UNITS: mm SCALE: NTS - DO NOT SCALE

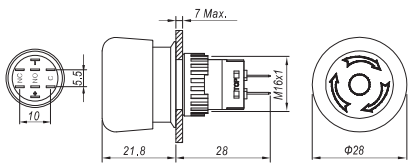
SHEET 4 OF 5

SIZE A4

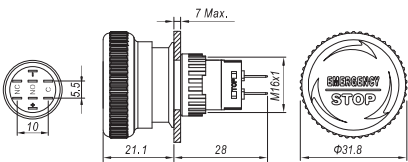
REV A

DATE 2026-09-22

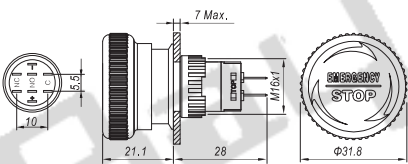
Contact Structure ☐ 11: 1NO1NC / 22: 2NO2NC
Housing Material Aluminum alloy
Protection class IP40(IP65 can be customized),IK02
Applicable accessories Solder socket S04 / PCB socket S05 / safety mask T34-16



Contact Structure ☐ 11: 1NO1NC / 22: 2NO2NC
Housing Material Aluminum alloy
Protection class IP40(IP65 can be customized),IK02
Applicable accessories Solder socket S04 / PCB socket S05 / safety mask T34-16



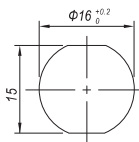
Contact Structure ☐ 11: 1NO1NC / 22: 2NO2NC
Housing Material Aluminum alloy
Protection class IP40(IP65 can be customized),IK02
Applicable accessories Solder socket S04 / PCB socket S05 / safety mask T34-16



Precautions

- When tightening the fixing nut on the installation panel, do not use the red head to fix it, otherwise the head structure of the product will be damaged.
- During the use of the push-lock and release button, the product is likely to rotate. It is recommended that the user refer to the figure on the right to make the groove.
- If necessary, the user can choose whether to reinforce the head of the product, please consult the sales staff for details.

Slot size



PART NUMBERS ON THIS DRAWING

MR-LAS1-AGQ16 MR-LAS1-AGQ16-D MR-LAS1-AGQ16-E MR-LAS1-AGQ16-ET MR-LAS1-AGQ16-TSB
MR-LAS1-AGQ16-TSC MR-LAS1-AGQ16-TSD MR-LAS1-AGQ16-X MR-LAS1-AGQ16-Y MR-LAS1-AGQ16H
MR-LAS1-AGQ16H-D MR-LAS1-AGQ16H-E

16 MM SNAP-ACTION METAL PUSH BUTTON
MR-LAS1-AGQ16 SERIES



PART NO MR-LAS1-AGQ16

DWG NO MR-LAS1-AGQ16

UNITS: mm SCALE: NTS - DO NOT SCALE

SHEET 5 OF 5

REV A

SIZE A4

DATE 2026-09-22