

产品概述 Overview

LAS1-A系列产品种类齐全，市场应用广泛，部分产品头部拥有圆形、方形、矩形三种形状（详见内容页），其开关结构用于本公司多系列产品中，深受用户好评。其中P（W）型按钮及信号灯产品为贴面安装，前框仅高出面板2mm，时尚且美观。

注：如您在机床面板等多油环境使用本产品，请告知我们，以便我们为您提供符合耐油特性的开关产品。

The LAS1-A series has a complete range of products and is widely used in the market. Some products come in three shapes: circular, square, and rectangular (see content page for details). Its switch structure is used in our company's multiple series of products and has received high praise from users. The P (W) button and signal light products are installed with a veneer, and the front frame is only 2mm higher than the panel, which is fashionable and beautiful.

Note: If you use this product in oily environments such as machine tool panels, please let us know so that we can provide you with switch products that meet oil resistance characteristics.

规格 Specifications

产品包含按钮、信号指示灯、急停钮、钥匙钮、旋钮、蘑菇钮；拥有安装孔Φ16mm，Φ22mm，21X21mm（方形），21X27mm（矩形）。

The product includes buttons, signal indicator lights, emergency stop buttons, key buttons, knobs, and mushroom buttons; Equipped with installation holes of 16mm, 22mm, 21X21mm (square), and 21X27mm (rectangular).

性能 Performance

产品具有性能稳定、接触电阻小、绝缘性强、耐振动等特点；符合IEC60947-5-1、GB/T14048.5等标准。

The product has the characteristics of stable performance, low contact resistance, strong insulation, and vibration resistance; Compliant with standards such as IEC60947-5-1 and GB/T14048.5.

结构 Structure

开关元件采用“快动”结构，每个开关元件包含一常开一常闭，每只按钮最多可配置2个开关元件。

The switch elements adopt a "quick action" structure, with each switch element containing one normally open and one normally closed, and each button can be configured with up to 2 switch elements.

防护等级 Protection grade

常规配置为IP40，部分产品可定制IP65

The standard configuration is IP40, and some products can be customized to IP65

产品认证 Certification



开关CCC认证参数 CCC certification parameters for switches

额定绝缘电压 Ui	250V
约定自由空气发热电流 Ith	5A
额定冲击耐受电压 Uimp	1.5kV
额定电流/电压 Ie/Ue	AC-15: 0.5A/220V DC-13: 0.1A/220V
触点材料 Contact material	银合金 Silver alloy

灯珠规格 Lamp specifications

LED寿命 LED Life	电流 Current	允许电压波动范围 Voltage fluctuation range	电路图 Circuit diagram
≥40000h	<20mA	DC: ±10% AC: ±20%	

注：产品内置保护电阻且灯珠接线无正负极区分。

Note: The product has a built-in protective resistor, and the LED is a non-polar LED.

开关结构说明 Switch structure description

型式 Type	示意图 Diagrammatic	符号 Symbol
C		



性能特征 Performance characteristics

工作环境温度 Ambient Temperature		-25℃~+55℃(无冰冻)，开关本体周围必须空气流通 -25℃~+55℃(No freezing), air circulation must be maintained around the switch body
工作环境湿度 Environment Humidity		45~85% RH(无结露) 45~85% RH(No condensation)
初始接触电阻 Initial contact resistance		≤50mΩ
绝缘电阻 Insulation resistance		≥100MΩ(500VDC)
耐振动性 Vibration resistance		5~50赫兹，振幅约1.2mm 5~50Hz, amplitude about 1.2mm
耐压 Withstanding Voltage		1500VAC, 50Hz, 1 min
机械寿命 Mechanical Life	自复钮 Momentary	100万次 1,000,000 times
	自锁钮、选择钮 Latching, Selector	50万次 500,000 times
	钥匙钮、急停钮 Key button, Emergency stop button	20万次 200,000 times
电气寿命 Electrical life		5万次以上 Over 50,000 times
尾部配置 Tail configuration		接线插片(2.8×0.5mm) Pin(2.8×0.5mm)
耐焊锡热 Resistance to soldering heat		320℃ 3s
操作力 Operating power		约1.7N(1NO1NC) / 约3N(2NO2NC) About 1.7N(1NO1NC) / About 3N(2NO2NC)
操作行程 Operation itinerary		约3mm About 3mm
基座材料 Base material		PBT
螺母扭矩 Nut torque		约0.6N·m About 0.6N·m

LAS1-A系列型号说明 LAS1-A Series model description

按钮、信号灯型号说明: LAS1-A ☆ ★ - □ ■ ○ / △ / ▲ / ※
Button and signal light model description:

对应符号 Symbol	符号名称 Symbol Name	具体说明 Specific Explanation
☆	分类代号 Classification code	P:标准扩展边框(可安装于Φ22mm) / W:银色扩展边框(可安装于Φ22mm) / 无字母表示普通型 P: Standard extension frame (can be installed on Φ 22mm)/W: Silver extension frame (can be installed on Φ 22mm)/ No letters indicate regular type
★	头部形状 Head shape	Y:圆形 / F:方形 / J:矩形 / DF:大方形(仅限普通型) / DJ:大矩形(仅限普通型) Y: Round/F: Square/J: Rectangular/DF: Large Square (for regular type only)/ DJ: Large Rectangle (for regular type only)
□	开关组合 Switch combination	11:1NO1NC / 22:2NO2NC / 无数字代表指示灯 11: 1NO1NC/22:2NO2NC/No number represents indicator light
■	操作类型 Operation type	DS:短体信号指示灯 / D:信号指示灯 / Z:自锁按钮 / 无字母代表自复按钮 DS: Short body indicator / D: indicator / Z: Latching / no letter represents Momentary
○	发光图标类型 Luminous icon type	T:电源符号 / 无字母代表普通带灯 T: Power symbol/no letter represents ordinary with light 注:T型为特殊产品, 仅限圆形银色边框; 其他图标符号可按要求定做 Note: T-type is a special product, limited to circular silver borders only; Other icon symbols can be customized according to requirements
△	颜色 Color	R:红 / G:绿 / Y:黄 / B:蓝 / W:白 / N 黑 R: Red / G: Green / Y: Yellow / B: Blue / W: White / N:Black
▲	电压 Voltage	6V / 12V / 24V / 110V / 220V / 其他电压等级可定做 (默认交直流通用LED, 内置电阻) 6V / 12V / 24V / 110V / 220V / Other voltage levels can be customized (default AC/DC universal LED, built-in resistor)
※	防护等级 Protection grade	无字母代表IP40 / P:IP65 No letters represent IP40/P: IP65

旋钮、钥匙钮型号说明: LAS1-A ☆ ★ - □ ■ / ◇ ◆ ● / △ / ▲ / ※
Model Description of Knobs and Keyknobs:

对应符号 Symbol	符号名称 Symbol Name	具体说明 Specific Explanation
☆	分类代号 Classification code	P:标准扩展边框(可安装于Φ22mm) / W:银色扩展边框(可安装于Φ22mm) / 无字母表示普通型 P: Standard extension frame (can be installed on Φ22mm) / W: Silver extension frame (can be installed on Φ22mm) / No letters indicate regular type
★	头部形状 Head shape	Y:圆形 / F:方形 / J:矩形 Y: Circular / F: Square / J: Rectangular
□	开关组合 Switch combination	11:1NO1NC / 22:2NO2NC
■	操作类型 Operation type	X:选择钮 / Y:钥匙钮 X: Selection button / Y: Key button
◇	选择钮及钥匙钮操作位置 Selection button and key button operation position	2:二位置 / 3:三位置 2: Two positions / 3: Three positions
◆	选择钮及钥匙钮动作类型 Select button and key button action types	1:保持式 / 3:全自复式 1: Maintaining / 3: Fully self resetting
●	钥匙保留位置 Key retention position	
△	颜色 Color	R:红 / G:绿 / Y:黄 / B:蓝 / W:白 / N:黑 R: Red / G: Green / Y: Yellow / B: Blue / W: White / N:Black
▲	电压 Voltage	6V / 12V / 24V / 110V / 220V / 其他电压等级可定做 (默认交直流通用LED, 内置电阻) 6V / 12V / 24V / 110V / 220V / Other voltage levels can be customized (default AC/DC universal LED, built-in resistor)
※	防护等级 Protection grade	无字母代表IP40 / P:IP65 No letters represent IP40 / P: IP65

急停钮型号说明: LAS1-A ☆ Y - □ ■ / ※
Model description of emergency stop button:

对应符号 Symbol	符号名称 Symbol Name	具体说明 Specific Explanation
☆	分类代号 Classification code	P:标准扩展边框(可安装于Φ22mm) / 无字母表示普通型 P: Standard extension frame (can be installed on Φ22mm) / no letters indicate regular type
□	开关组合 Switch combination	11:1NO1NC / 22:2NO2NC
■	操作类型 Operation type	TS:急停钮 / TSB:B型急停钮 TS: Emergency stop button / TSB: B-type emergency stop button
※	防护等级 Protection grade	无字母代表IP40 / P:IP65 No letters represent IP40 / P: IP65

注: 请仔细阅读产品具体说明后, 根据不同符号在该表中选取相应代号。
Note: Please carefully read the specific product instructions and select the corresponding code in this table based on different symbols.

Φ 16mm产品图样 Product drawings

规格参数 Specification parameters

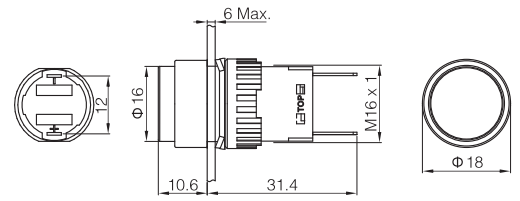
外形尺寸 Dimensions



LAS1-AY-D/Δ/▲/※

颜色△
Color
带灯电压▲
Lamp voltage
防护等级
Protection degree
适用附件
Appendix

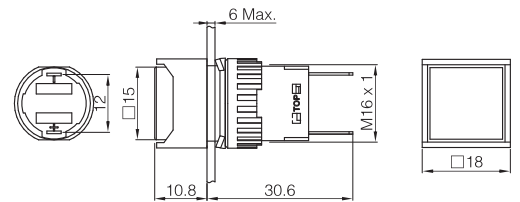
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6V / 12V / 24V / 110V / 220V
无字母代表IP40 / P: IP65
No letters represent IP40 / P: IP65
S01 / S19 / S09-S1Y / S04 / S05



LAS1-AF-D/Δ/▲/※

颜色△
Color
带灯电压▲
Lamp voltage
防护等级
Protection degree
适用附件
Appendix

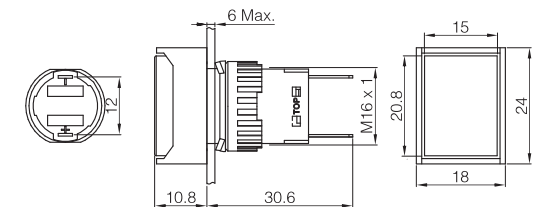
R G Y B W
6V / 12V / 24V / 110V / 220V
无字母代表IP40 / P: IP65
No letters represent IP40 / P: IP65
S01 / S19 / S09-S1F / S04 / S05



LAS1-AJ-D/Δ/▲/※

颜色△
Color
带灯电压▲
Lamp voltage
防护等级
Protection degree
适用附件
Appendix

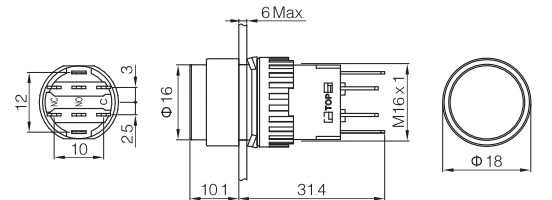
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6V / 12V / 24V / 110V / 220V
无字母代表IP40 / P: IP65
No letters represent IP40 / P: IP65
S02 / S19 / S09-S1J / S04 / S05



LAS1-AY-□■/Δ/▲/※

开关组合□
Contact structure
操作类型■
Operation mode
颜色△
Color
带灯电压▲
Lamp voltage
防护等级
Protection degree
适用附件
Appendix

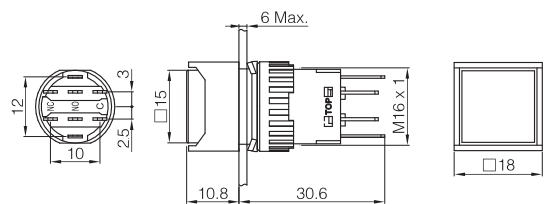
11: 1NO1NC / 22: 2NO2NC
无字母表示自复 / Z: 自锁
No letter means Momentary / Z: Latching
R G Y B W N
6V / 12V / 24V / 110V / 220V
无字母代表IP40 / P: IP65
No letters represent IP40 / P: IP65
S01 / S19 / S09-S1Y / S04 / S05



LAS1-AF-□■/Δ/▲/※

开关组合□
Contact structure
操作类型■
Operation mode
颜色△
Color
带灯电压▲
Lamp voltage
防护等级
Protection degree
适用附件
Appendix

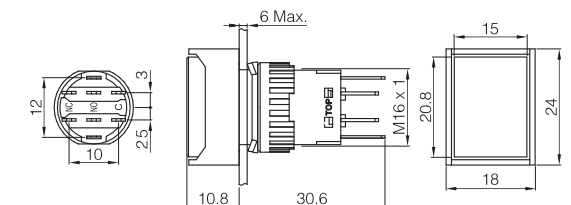
11: 1NO1NC / 22: 2NO2NC
无字母表示自复 / Z: 自锁
No letter means Momentary / Z: Latching
R G Y B W N
6V / 12V / 24V / 110V / 220V
无字母代表IP40 / P: IP65
No letters represent IP40 / P: IP65
S01 / S19 / S09-S1F / S04 / S05



LAS1-AJ-□■/Δ/▲/※

开关组合□
Contact structure
操作类型■
Operation mode
颜色△
Color
带灯电压▲
Lamp voltage
防护等级
Protection degree
适用附件
Appendix

11: 1NO1NC / 22: 2NO2NC
无字母表示自复 / Z: 自锁
No letter means Momentary / Z: Latching
R G Y B W N
6V / 12V / 24V / 110V / 220V
无字母代表IP40 / P: IP65
No letters represent IP40 / P: IP65
S02 / S19 / S09-S1J / S04 / S05



S01



S02



S09-S1Y



S09-S1F



S09-S1J



S19

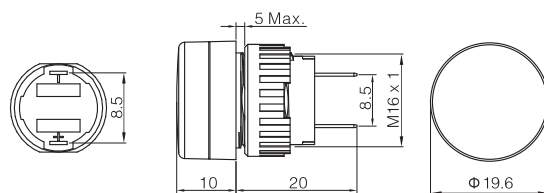
Φ16mm产品图样 Product drawings

规格参数 Specification parameters

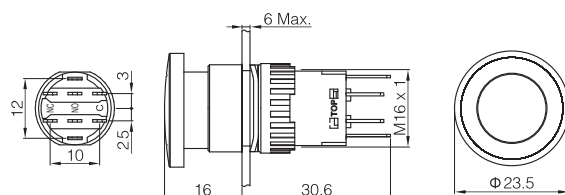
外形尺寸 Dimensions



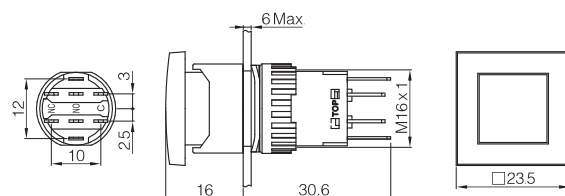
颜色△ R G Y B W
Color
带灯电压▲ 6V / 12V / 24V / 110V / 220V
Lamp voltage
防护等级 无字母代表IP40 / P: IP65
Protection degree
适用附件 S01 / S19 / S09-S1Y /
Appendix



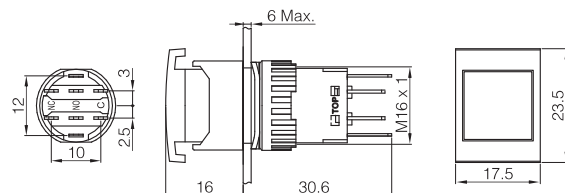
开关组合□ 11: 1NO1NC / 22: 2NO2NC
Contact structure
操作类型■ 无字母表示自复 / Z: 自锁
Operation mode
颜色△ R G
Color
带灯电压▲ 6V / 12V / 24V / 110V / 220V
Lamp voltage
防护等级 无字母代表IP40 / P: IP65
Protection degree
适用附件 S04 / S05 / T34-16
Appendix



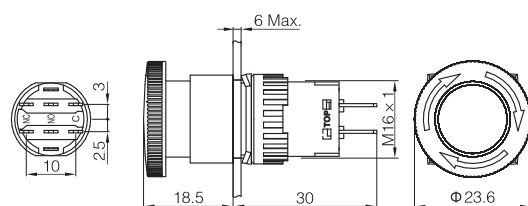
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Contact structure
操作类型■ 无字母表示自复 / Z: 自锁
Operation mode
颜色△ R G Y
Color
带灯电压▲ 6V / 12V / 24V / 110V / 220V
Lamp voltage
防护等级 无字母代表IP40 / P: IP65
Protection degree
适用附件 S04 / S05
Appendix



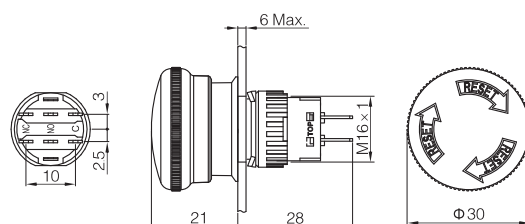
开关组合□ 11: 1NO1NC / 22: 2NO2NC
Contact structure
操作类型■ 无字母表示自复 / Z: 自锁
Operation mode
颜色△ R G Y
Color
带灯电压▲ 6V / 12V / 24V / 110V / 220V
Lamp voltage
防护等级 无字母代表IP40 / P: IP65
Protection degree
适用附件 S04 / S05
Appendix



开关组合□ 11: 1NO1NC / 22: 2NO2NC
Contact structure
防护等级 无字母代表IP40 / P: IP65
Protection degree
适用附件 S04 / S05 / S18A
Appendix



开关组合□ 11: 1NO1NC / 22: 2NO2NC
Contact structure
防护等级 无字母代表IP40 / P: IP65
Protection degree
适用附件 S04 / S05 / T34-16
Appendix



Φ 16mm产品图样 Product drawings

规格参数 Specification parameters

外形尺寸 Dimensions



LAS1-AY-□X/◇◆/△/▲/※

开关组合□
Contact structure

操作位置◇◆
operation position

颜色△
Color

带灯电压▲
Lamp voltage

防护等级※
Protection degree

适用附件
Appendix

1NO1NC / 22: 2NO2NC

L R L R L C R L C R

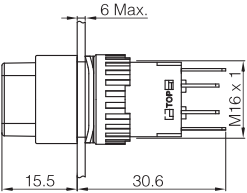
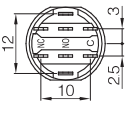
21 23 31 33

R G Y N

6V / 12V / 24V / 110V / 220V

无字母代表IP40 / P:IP65(仅保持式)
No letters represent IP40/P: IP65 (hold only)

S19 / S04 / S05



12 3 2.5 10 6 Max. 15.5 30.6 M16 x 1 Φ 18



LAS1-AF-□X/◇◆/△/▲/※

开关组合□
Contact structure

操作位置◇◆
operation position

颜色△
Color

带灯电压▲
Lamp voltage

防护等级※
Protection degree

适用附件
Appendix

1NO1NC / 22: 2NO2NC

L R L R L C R L C R

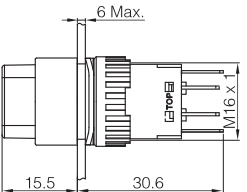
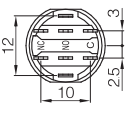
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R G Y N

6V / 12V / 24V / 110V / 220V

无字母代表IP40 / P:IP65(仅保持式)
No letters represent IP40/P: IP65 (hold only)

S04 / S05



12 3 2.5 10 6 Max. 15.5 30.6 M16 x 1 18



LAS1-AJ-□X/◇◆/△/▲/※

开关组合□
Contact structure

操作位置◇◆
operation position

颜色△
Color

带灯电压▲
Lamp voltage

防护等级※
Protection degree

适用附件
Appendix

1NO1NC / 22: 2NO2NC

L R L R L C R L C R

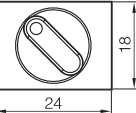
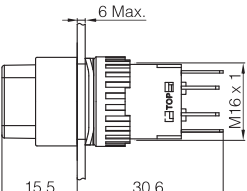
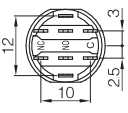
21 23 31 33

R G Y N

6V / 12V / 24V / 110V / 220V

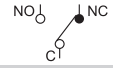
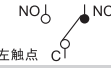
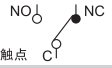
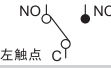
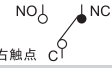
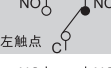
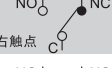
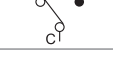
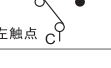
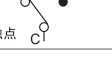
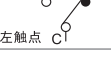
无字母代表IP40 / P:IP65(仅保持式)
No letters represent IP40/P: IP65 (hold only)

S04 / S05



12 3 2.5 10 6 Max. 15.5 30.6 M16 x 1 18 24

旋钮、钥匙工作位置触头状态 Knob and key working position contact status

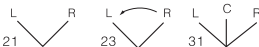
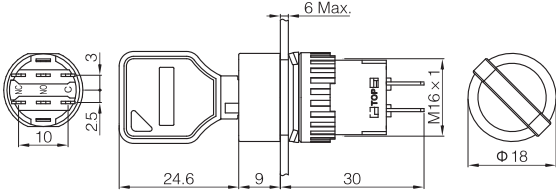
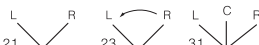
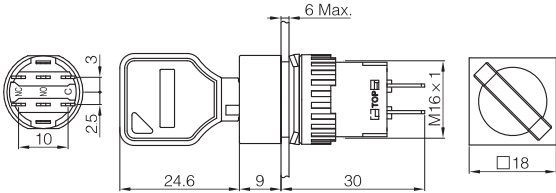
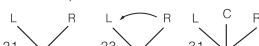
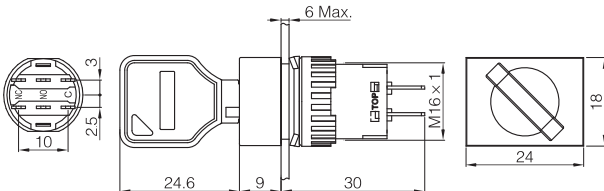
开关类型 Switch type 动作位置 Action position	90° 2 位置 90° 2 positions		45° 3 位置 45° 3 positions	
	1NO1NC	2NO2NC	2NO2NC	
		 左触点 C1  右触点 C1	 左触点 C1	 右触点 C1
			 左触点 C1	 右触点 C1
		 左触点 C1  右触点 C1	 左触点 C1	 右触点 C1



Φ 16mm产品图样 Product drawings

规格参数 Specification parameters

外形尺寸 Dimensions

 LAS1-AY-□Y/◇◆●/※	开关组合□ Contact structure 操作位置◇◆ operation position 钥匙保留位置● Key retention position 防护等级※ Protection degree 适用附件 Appendix	1NO1NC / 22: 2NO2NC  参考注意事项 Reference precautions 无字母代表IP40 / P:IP65(仅保持式) No letters represent IP40/P: IP65 (hold only) S19 / S04 / S05	
 LAS1-AF-□Y/◇◆●/※	开关组合□ Contact structure 操作位置◇◆ operation position 钥匙保留位置● Key retention position 防护等级※ Protection degree 适用附件 Appendix	1NO1NC / 22: 2NO2NC  参考注意事项 Reference precautions 无字母代表IP40 / P:IP65(仅保持式) No letters represent IP40/P: IP65 (hold only) S04 / S05	
 LAS1-AJ-□Y/◇◆●/※	开关组合□ Contact structure 操作位置◇◆ operation position 钥匙保留位置● Key retention position 防护等级※ Protection degree 适用附件 Appendix	1NO1NC / 22: 2NO2NC  参考注意事项 Reference precautions 无字母代表IP40 / P:IP65(仅保持式) No letters represent IP40/P: IP65 (hold only) S04 / S05	

Note

注意
事项

●: 钥匙保留位置
Key retention position
无字默认为A型
Default for wordless type A

A: B: C: D: E: G: H:

提供2把钥匙，使用时须旋转到位。
Provide 2 keys, which must be rotated into place when in use.

旋钮、钥匙工作位置触头状态 Knob and key working position contact status

开关类型 Switch type 动作位置 Action position	90° 2 位置 90° 2 positions		45° 3 位置 45° 3 positions	
	1NO1NC	2NO2NC	2NO2NC	
	