

ONPOW61 系列金属按钮

series metal push button

Φ16~25「三色灯架构」抗破坏防水按钮开关

Φ16~25 "Tri-color light" anti-vandal waterproof push button switch

- 采用三色灯架构，支持无极变色
Adopting tri-color lamp structure, support infinite color change
- 全系可定制Φ16~25 金属蘑菇钮产品
All products can be customized with Φ16~25 metal mushroom buttons
- 具备良好的“耐振动、防水防尘、抗破坏”性能
Vibration-resistant, waterproof and dustproof, and vandal-resistant
- 产品适用于小型控制面板，可搭配线路板完成三色控制
Applicable to: Small control panel, combined with circuit board to complete tri-color control





性能特征 Performance characteristic

工作环境温度 Operating temperature	-25℃~+55℃(无冰冻)开关本体周围必须空气流通 -25℃~+55℃(No freezing), keep the air flowing around	工作环境湿度 Operating humidity	45~85 % RH(无结露) 45~85 % RH(Non condensing)
触点接触电阻 Contact resistance	≤50mΩ	绝缘电阻 Insulation resistance	≥1000MΩ(500VDC)
工频耐压 Power frequency withstand voltage	1500V(AC 50Hz), 1min	耐振动性 Vibration resistance	5~50Hz, 振幅 1.2mm 5~50Hz, Amplitude 1.2mm
耐焊锡热 Resistant to soldering heat	320℃, 3s	开关额定值 Switch rating	参考下方表格, 其他参数请咨询我们提供 Refer table, please consult us for other parameters
机械寿命 Mechanical life	自复: 100万次以上, 自锁: 50万次以上 Momentary≥1000000 cycles, Latching≥500000 cycles	电气寿命 Electrical life	5万次以上 ≥50000 cycles
基座材料 Base material	PA	尾部配置 Terminal type	接线插片(2.8×0.5mm) Pin terminal(2.8×0.5mm)
螺母扭矩 Torque	0.6~1.2N·m	操作压力 Operating force	约3N(1NO1NC), 约4N(2NO2NC) About 3N(1NO1NC), About 4N(2NO2NC)
操作行程 Operating travel	约3mm About 3mm	面板前端防护等级 Front panel protection degree	IP65/IP67(16mm可定制IP68),IK09 IP65/IP67(16mm, IP68 customizable),IK09

开关额定值 Switch rating

电气寿命 Electrical life		5万次以上 ≥50000 cycles	1万次 10000 cycles
负载类型 Load Type	AC-12电阻性负载 AC-12 Resistive load	250VAC/3A	250VAC/5A
	AC-15电感性负载 AC-15 Inductive load	250VAC/2A	250VAC/3A
	DC-12电阻性负载 DC-12 Resistive load	24VDC/5A	24VDC/10A

注: 1.AC-12/DC-12负载采用绕线电阻,AC-15负载采用绕线电阻+电感组合;
2.电感性负载功率因数为0.7;
3.通断时间: 通1秒, 断9秒, 6次/分钟。
Note: 1.Winding resistance is adopted for AC-12/DC-12 load, and winding resistance+inductance combination is adopted for AC-15 load;
2.The power factor of inductive load is 0.7;
3.On-off time: 1 second on, 9 seconds off, 6 times/minute.

CCC认证 CCC certification(GB/T 14048.5)

额定绝缘电压 Ui Rated insulation voltage Ui		250V
约定自由空气发热电流 Ith Conventional free air heating current Ith		5A
额定冲击耐受电压 Uimp Rated impulse withstand voltage Uimp		1.5kV
负载类型 Load Type	AC-15电感性负载 AC-15 Inductive load	250VAC/1A
	AC-12电阻性负载 AC-12 Resistive load	250VAC/5A

UL认证 UL certification(UL60947)

AC-15电感性负载 AC-15 Inductive load	B300(120V/3A;240V/1.5A)
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CE认证 CE certification(EN60947)

通用负载 Gen Use Load	250VAC/5A
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ONPOW61系列 型号说明 ONPOW61 series model description

对应符号 Symbol	符号名称 Symbol name	具体说明 Specify
☆	安装孔径 Panel cutout dimension	16:Φ16mm / 19: Φ19mm / 22: Φ22mm / 25: Φ25mm
★	头部形状 Head shape	F: 平圆形 F: Flat round
□	开关组合 Contact structure	11: 1NO1NC / 22: 2NO2NC / 无数字表示指示灯 11: 1NO1NC / 22: 2NO2NC / No letter means Indicator
■	操作类型 Operation type	Z: 自锁按钮 / 无字母代表自复按 Z: Latching / No letter means Momentary
◇	带灯类型 Lamp type	E: 环形 / ET: 环形+电源符号 / 无字母代表不带灯 E: Ring / ET: Ring+Power symbol / No letter means without light
△	带灯颜色 Lamp color	R: 红 / G: 绿 / Y: 黄 / B: 蓝 / W: 白色 R: Red / G: Green / Y: Yellow / B: Blue / W: White
▲	带灯电压 Lamp voltage	6V / 12V / 24V / 110V / 220V, 其他电压等级可定做 6V / 12V / 24V / 110V / 220V, other voltage levels can be customized
◎	壳体材料 Crust material	S: 不锈钢 / A: 铝合金镀黑 S: Stainless steel / A: Al alloy (Black)
※	防护等级 Protection degree	无字母代表IP65 / FP: IP67 No letter means IP65 / FP: IP67

注：请仔细阅读产品说明，选取相应代号，其中三色灯型号见详情页。
Note: Tri-color light model reference details page.

开关结构 Switch structure

型式 Type	示意图 Schematic diagram	符号 Symbol
C		

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：1.灯珠与开关相对独立；2.灯珠接线无正负极区分。
Note: 1.The lamp beads and switches are relatively independent;
2.No positive or negative polarity distinction in wiring.

引脚说明 Pin description

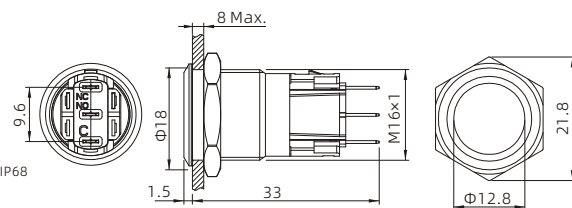
ONPOW6116/ONPOW6119	ONPOW6122/ONPOW6125

ONPOW61 系列
Series
支持定制蘑菇钮产品
Customizable mushroom button

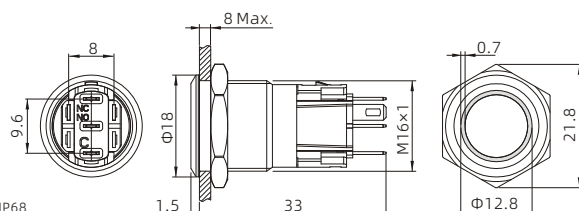




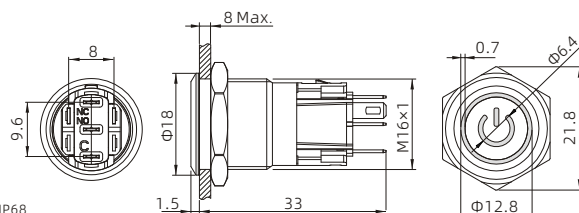
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操作类型 ■ Operation mode	无字母代表自复按钮 / Z: 自锁按钮 No letter means Momentary / Z: Latching
外壳材料 Crust material	不锈钢 Stainless steel
防护等级※ Protection degree	无字母代表IP65 / FP:IP67 / 可定制IP68 No letter means IP65 / FP:IP67/Customizable IP68
适用附件 Appendix	M12-16F / M36-A



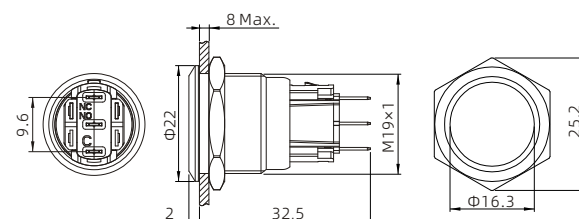
开关组合 Contact structure	1NO1NC
操作类型 ■ Operation mode	无字母代表自复按钮 / Z: 自锁按钮 No letter means Momentary / Z: Latching
带灯颜色 △ Lamp color	R G Y B W
带灯电压 ▲ Lamp voltage	6V / 12V / 24V / 110V / 220V
外壳材料 ◎ Crust material	S: 不锈钢 / A: 铝合金镀黑 S: Stainless steel / A: Al alloy (Black)
防护等级※ Protection degree	无字母代表IP65 / FP:IP67 / 可定制IP68 No letter means IP65/FP:IP67/Customizable IP68
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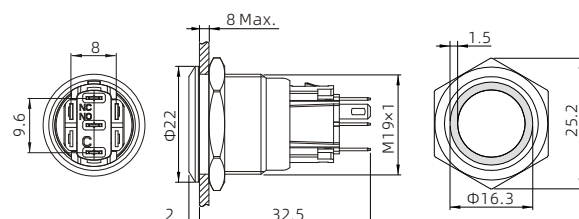
开关组合 Contact structure	1NO1NC
操作类型 ■ Operation mode	无字母代表自复按钮 / Z: 自锁按钮 No letter means Momentary / Z: Latching
带灯颜色 △ Lamp color	R G Y B W
带灯电压 ▲ Lamp voltage	6V / 12V / 24V / 110V / 220V
外壳材料 Crust material	不锈钢 Stainless steel
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适用附件 Appendix	M12-16F / M36-A



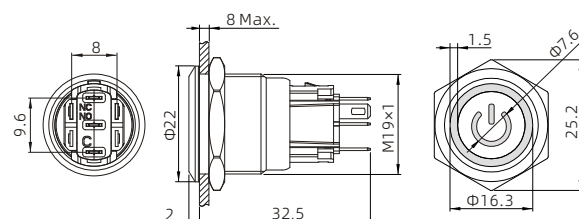
开关组合 Contact structure	1NO1NC
操作类型 ■ Operation mode	无字母代表自复按钮 / Z: 自锁按钮 No letter means Momentary / Z: Latching
外壳材料 Crust material	不锈钢 Stainless steel
防护等级※ Protection degree	无字母代表IP65 / FP:IP67 No letter means IP65 / FP: IP67
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操作类型 ■ Operation mode	无字母代表自复按钮 / Z: 自锁按钮 No letter means Momentary / Z: Latching
带灯颜色 △ Lamp color	R G Y B W
带灯电压 ▲ Lamp voltage	6V / 12V / 24V / 110V / 220V
外壳材料 ◎ Crust material	S: 不锈钢 / A: 铝合金镀黑 S: Stainless steel / A: Al alloy (Black)
防护等级※ Protection degree	无字母代表IP65 / FP:IP67 No letter means IP65/FP:IP67
适用附件 Appendix	M12-19F / M36-A

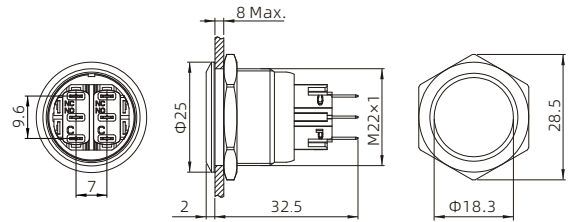


开关组合 Contact structure	1NO1NC
操作类型 ■ Operation mode	无字母代表自复按钮 / Z: 自锁按钮 No letter means Momentary / Z: Latching
带灯颜色 △ Lamp color	R G Y B W
带灯电压 ▲ Lamp voltage	6V / 12V / 24V / 110V / 220V
外壳材料 Crust material	不锈钢 Stainless steel
防护等级※ Protection degree	无字母代表IP65 / FP:IP67 No letter means IP65/FP:IP67
适用附件 Appendix	M12-19F / M36-A

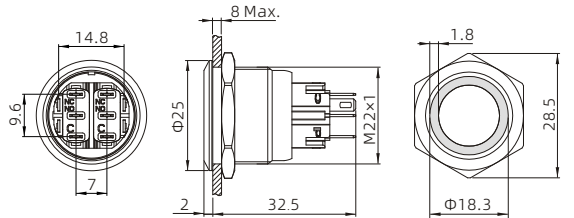




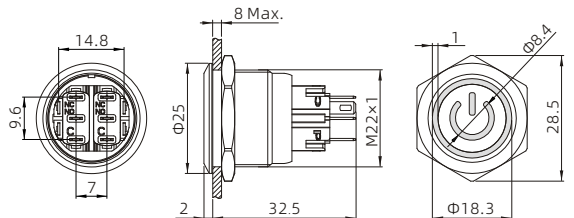
开关组合□ Contact structure	11:1NO1NC / 22:2NO2NC
操作类型■ Operation mode	无字母代表自复按钮 / Z: 自锁按钮 No letter means Momentary / Z: Latching
外壳材料 Crust material	不锈钢 Stainless steel
防护等级※ Protection degree	无字母代表IP65 / FP:IP67 No letter means IP65 / FP: IP67
适用附件 Appendix	M12-22F / M36-B



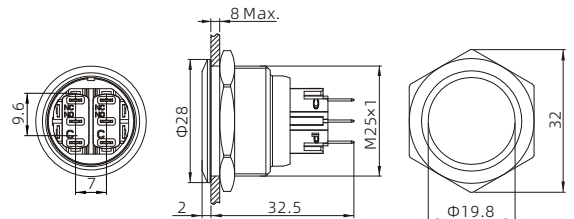
开关组合□ Contact structure	11:1NO1NC / 22:2NO2NC
操作类型■ Operation mode	无字母代表自复按钮 / Z: 自锁按钮 No letter means Momentary / Z: Latching
带灯颜色△ Lamp color	R G Y B W
带灯电压▲ Lamp voltage	6V / 12V / 24V / 110V / 220V
外壳材料◎ Crust material	S:不锈钢 / A:铝合金镀黑 S:Stainless steel / A: Al alloy (Black)
防护等级※ Protection degree	无字母代表IP65 / FP:IP67 No letter means IP65 / FP: IP67
适用附件 Appendix	M12-22F / M36-B



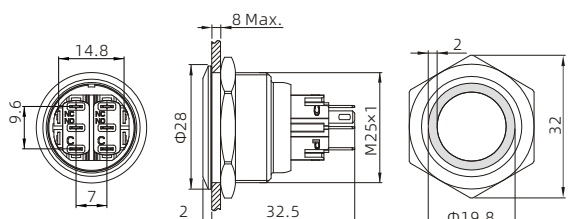
开关组合□ Contact structure	11:1NO1NC / 22:2NO2NC
操作类型■ Operation mode	无字母代表自复按钮 / Z: 自锁按钮 No letter means Momentary / Z: Latching
带灯颜色△ Lamp color	R G Y B W
带灯电压▲ Lamp voltage	6V / 12V / 24V / 110V / 220V
外壳材料 Crust material	不锈钢 Stainless steel
防护等级※ Protection degree	无字母代表IP65 / FP:IP67 No letter means IP65 / FP: IP67
适用附件 Appendix	M12-22F / M36-B



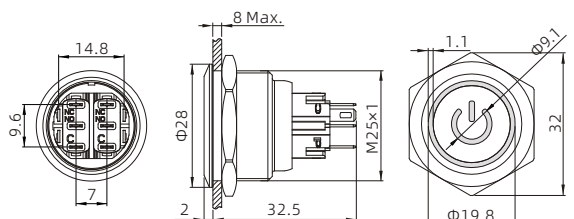
开关组合□ Contact structure	11:1NO1NC / 22:2NO2NC
操作类型■ Operation mode	无字母代表自复按钮 / Z: 自锁按钮 No letter means Momentary / Z: Latching
外壳材料 Crust material	不锈钢 Stainless steel
防护等级※ Protection degree	无字母代表IP65 / FP:IP67 No letter means IP65 / FP: IP67
适用附件 Appendix	M12-25F / M36-B



开关组合□ Contact structure	11:1NO1NC / 22:2NO2NC
操作类型■ Operation mode	无字母代表自复按钮 / Z: 自锁按钮 No letter means Momentary / Z: Latching
带灯颜色△ Lamp color	R G Y B W
带灯电压▲ Lamp voltage	6V / 12V / 24V / 110V / 220V
外壳材料◎ Crust material	S:不锈钢 / A:铝合金镀黑 S:Stainless steel / A: Al alloy (Black)
防护等级※ Protection degree	无字母代表IP65 / FP:IP67 No letter means IP65 / FP: IP67
适用附件 Appendix	M12-25F / M36-B



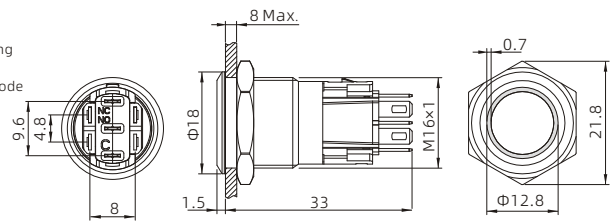
开关组合□ Contact structure	11:1NO1NC / 22:2NO2NC
操作类型■ Operation mode	无字母代表自复按钮 / Z: 自锁按钮 No letter means Momentary / Z: Latching
带灯颜色△ Lamp color	R G Y B W
带灯电压▲ Lamp voltage	6V / 12V / 24V / 110V / 220V
外壳材料 Crust material	不锈钢 Stainless steel
防护等级※ Protection degree	无字母代表IP65 / FP:IP67 No letter means IP65 / FP: IP67
适用附件 Appendix	M12-25F / M36-B



ONPOW6116F-11 ■E/★RGB/▲/S/※ (可生产三引脚双色灯)(Dual color lamps can be customized)



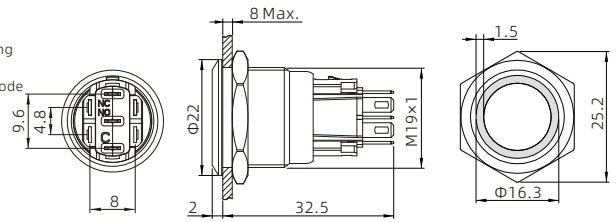
开关组合 Contact structure	1NO1NC
操作类型 ■ Operation mode	无字母代表自复按钮 / Z: 自锁按钮 No letter means Momentary / Z: Latching
带灯结构 ★ Lamp structure	41: 三色共阴 42: 三色共阳 41: Common cathode 42: Common anode
带灯颜色 Lamp color	R G B
带灯电压 ▲ Lamp voltage	DC6V / 12V / 24V
外壳材料 Crust material	不锈钢 Stainless steel
防护等级 ※ Protection degree	无字母代表IP65 / FP:IP67 No letter means IP65/FP:IP67



ONPOW6119F-11 ■E/★RGB/▲/S/※ (可生产三引脚双色灯)(Dual color lamps can be customized)



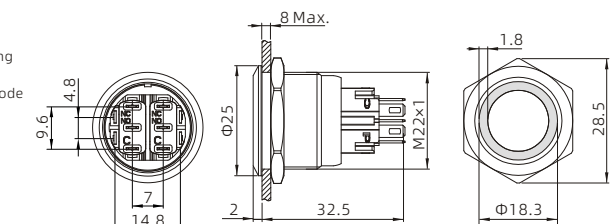
开关组合 Contact structure	1NO1NC
操作类型 ■ Operation mode	无字母代表自复按钮 / Z: 自锁按钮 No letter means Momentary / Z: Latching
带灯结构 ★ Lamp structure	41: 三色共阴 42: 三色共阳 41: Common cathode 42: Common anode
带灯颜色 Lamp color	R G B
带灯电压 ▲ Lamp voltage	DC6V / 12V / 24V
外壳材料 Crust material	不锈钢 Stainless steel
防护等级 ※ Protection degree	无字母代表IP65 / FP:IP67 No letter means IP65/FP:IP67



ONPOW6122F-11 ■E/★RGB/▲/S/※ (可生产三引脚双色灯)(Dual color lamps can be customized)



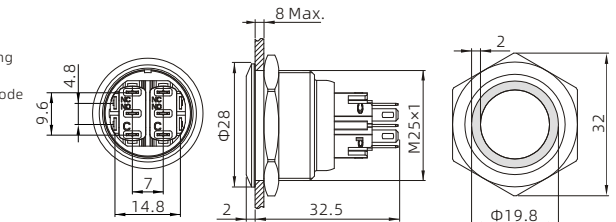
开关组合 Contact structure	11:1NO1NC / 22:2NO2NC
操作类型 ■ Operation mode	无字母代表自复按钮 / Z: 自锁按钮 No letter means Momentary / Z: Latching
带灯结构 ★ Lamp structure	41: 三色共阴 42: 三色共阳 41: Common cathode 42: Common anode
带灯颜色 Lamp color	R G B
带灯电压 ▲ Lamp voltage	DC6V / 12V / 24V
外壳材料 Crust material	不锈钢 Stainless steel
防护等级 ※ Protection degree	无字母代表IP65 / FP:IP67 No letter means IP65/FP:IP67



ONPOW6125F-11 ■E/★RGB/▲/S/※ (可生产三引脚双色灯)(Dual color lamps can be customized)



开关组合 Contact structure	11:1NO1NC / 22:2NO2NC
操作类型 ■ Operation mode	无字母代表自复按钮 / Z: 自锁按钮 No letter means Momentary / Z: Latching
带灯结构 ★ Lamp structure	41: 三色共阴 42: 三色共阳 41: Common cathode 42: Common anode
带灯颜色 Lamp color	R G B
带灯电压 ▲ Lamp voltage	DC6V / 12V / 24V
外壳材料 Crust material	不锈钢 Stainless steel
防护等级 ※ Protection degree	无字母代表IP65 / FP:IP67 No letter means IP65/FP:IP67



引脚说明(RGB三色灯) Pin description (RGB tri-color lamp)

ONPOW6116/6119	ONPOW6122/6125
C:公共脚(C+/C-) C:Common(C+/C-) a:LED引脚(红) a:LED(Red) d:LED引脚(蓝) d:LED(Blue) b:LED引脚(绿) b:LED(Green)	C:公共脚(C+/C-) C:Common(C+/C-) a:LED引脚(红) a:LED(Red) d:LED引脚(蓝) d:LED(Blue) b:LED引脚(绿) b:LED(Green)

灯珠规格(RGB三色灯) Lamp specifications (RGB tri-color lamp)

灯珠类型 Lamp type	单向三色LED灯珠 One-way tri-color LED lamp
发光颜色 Lamp color	R G B
LED寿命 LED life	≥40000h
额定电压 Lamp voltage	无电阻: R 1.8V, G 2.8V, B 2.8V No resistor: 内置电阻: DC6V, DC12V, DC24V Built-in resistor: DC6V, DC12V, DC24V
电流 Current	<20mA
灯珠等效电路 Circuit diagram	共阴 Common cathode 共阳 Common anode 采用单向LED灯珠, 区分正负极 Distinguish the positive and negative poles when wiring