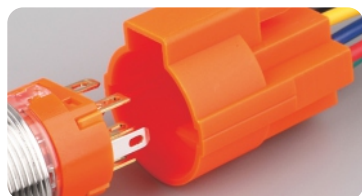


1NO1NC
2NO2NC



大手柄钥匙



专用插件 防误碰设计



镀金/镀银插脚 银触点



头部防水IP65 带指示灯

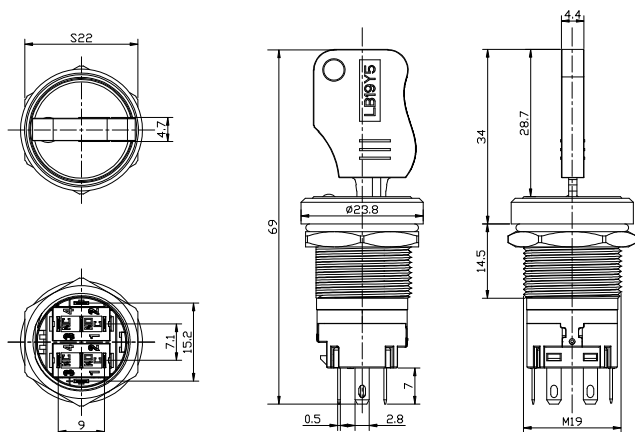
型号说明/选型，写法举例：LB19Y5-Y11Z/R5-24V/S/2(L)

对应编号	LB	●●	●	—	●	●●	●	/	●	●●	/	●	●	L	
	1	2	3		4	5	6		7	8		9	10	11	
1	LB	LANBOO 蓝波代码													
2	安装孔径	19、22mm													
3	系列号	Y5—带定位双开带灯钥匙钮系列													
4	头部形状	Y—钥匙													
5	开关组合	11—1NO1NC 1常开1常闭触点，22—2NO2NC 2常开2常闭触点，快动单触点													
6	动作形式	Z—保持式													
7	发光颜色	R—红色、G—绿色，定制：Y—黄色、W—白色、B—蓝色													
8	LED 电压	5-24V、220V，定制：3-8V、25-48V、110V，AC/DC 通用													
9	外壳材质	S—不锈钢，定制：N—铜镀铬													
10	档位	2—2档，3—3档													
11	(L)	内部代码													

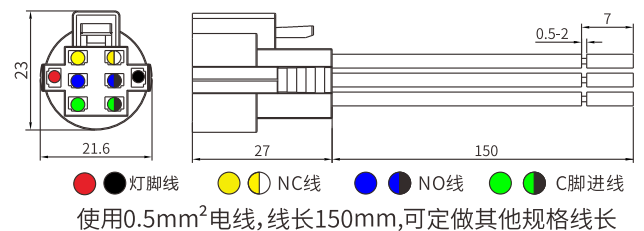
性能参数

开孔直径	对应孔径+0.2mm,例如：LB19Y5为19.2mm
外壳	S—304不锈钢 (RoHS)、N—H57/59铜镀铬
钥匙柄	PA66, V2级阻燃
透光材料	PC(RoHS),V2级阻燃
螺母	H57/59铜镀镍，可定制：304不锈钢 (RoHS)
O型圈	硅胶 (RoHS)
触点	银氧化锡AgSnO2(RoHS)
底座	PC(RoHS),V2级阻燃
引脚	H65镀金/银 (RoHS)

安装面板厚度	≤12mm
拧紧力矩	0.8-1.2N.m
螺纹验证	将螺母锁紧至垫圈明显变形, 然后拆下, 如此循环 5 次, 无异常
旋转力	2档: 约4N, 3档: 约5N
旋转角度	2档: 60°, 3档: 各50°
接线形式	引脚式, 可选配套接插件
耐焊性	≤380°C(25~50W 电烙铁) ≤2 秒
插片可焊性试验	各引脚分别焊接1mm ² 电线, 50N正向拉力后, 无脱落
与线束的配合试验	150mm线长, ≤50mΩ, LED灯通电无闪烁, 拉开力: 无灯(3脚) 20~35N, 带灯(8脚) 40~65N(卡扣松开情况下)
引脚反向推力	≥50N 无位移, 1min
头部/尾部防脱拉力	≥180N, 1min
工作环境温度	-40°C~+80°C, 非真空状态、不结冰情况下
工作环境湿度	45~90%RH
贮存环境温度	包装完好情况下, -40°C~+55°C
贮存环境湿度	包装完好情况下, 45~90%RH
防护等级	防水IP65, 防撞IK10(参考GB/T 20138)
约定发热电流	Ith: 5A, 250VAC
电阻性负载	AC-15: 110V: 1A, 220V: 0.5A DC-13: 12V/24V: 1A
电感性负载	AC-15: 110V/220V: 0.2A DC-13: 110V: 0.2A
接触电阻	≤50mΩ
绝缘电阻	≥1000MΩ
抗电强度(工频耐压)	3000VAC, 50HZ, 1min(开关脚与外壳); 1.89KVAC, 50HZ, 1min(LED灯脚与外壳)
触点最小适用负载	3V AC/DC, 5mA(参考值, 取决于环境与负载情况)
耐振性	XYZ 三向, 60HZ, 振幅 2mm
产品防跌落	头部竖直跌落 1 米, 3 次, 能正常工作
包装跌落	600mm 高度连续跌落 4 次, 产品无损坏
温升	按 GB/T14048.5 标准中 8.3.3.3 条款
盐雾试验	72h, 3 个周期, (参考 GB/T 2423.18-2012)
低温试验	-40°C, 96h, 接触电阻 ≤200mΩ、按压力变化值 ≤30%, LED 正常
高温试验	80°C, 96h, 接触电阻 ≤200mΩ、按压力变化值 ≤30%, LED 正常
高低温冲击试验 (含 LED 灯老化试验)	-40~+85°C, 85%RH, 40min/循环, 50 个循环, 接触电阻 ≤200mΩ、按压力变化值 ≤30%, LED 正常
电气寿命	阻性负载 AC220V/1A、DC24V/1A: 10 万次, AC220V/3A、DC24V/3A: 5 万次, AC220V/5A、DC24V/5A: 0.5 万次, (参考 GB/T14048.5)
机械寿命	2 档: 20 万次、3 档: 20 万次 (参考 GB/T14048.5)
ESD 静电	人体模式: 2KV, 可定制 8KV
LED 额定电流	≤24V, ≤20mA; >24V, ≤10mA
LED 灯珠类型	贴片无极双芯片 LED
LED 降压方式	内置降压电阻
LED 寿命	≥50000h(参考值)
产品认证	CCC CE RoHS(定制) REACH(定制)
专利号	ZL201930471066.2
质保	66 个月

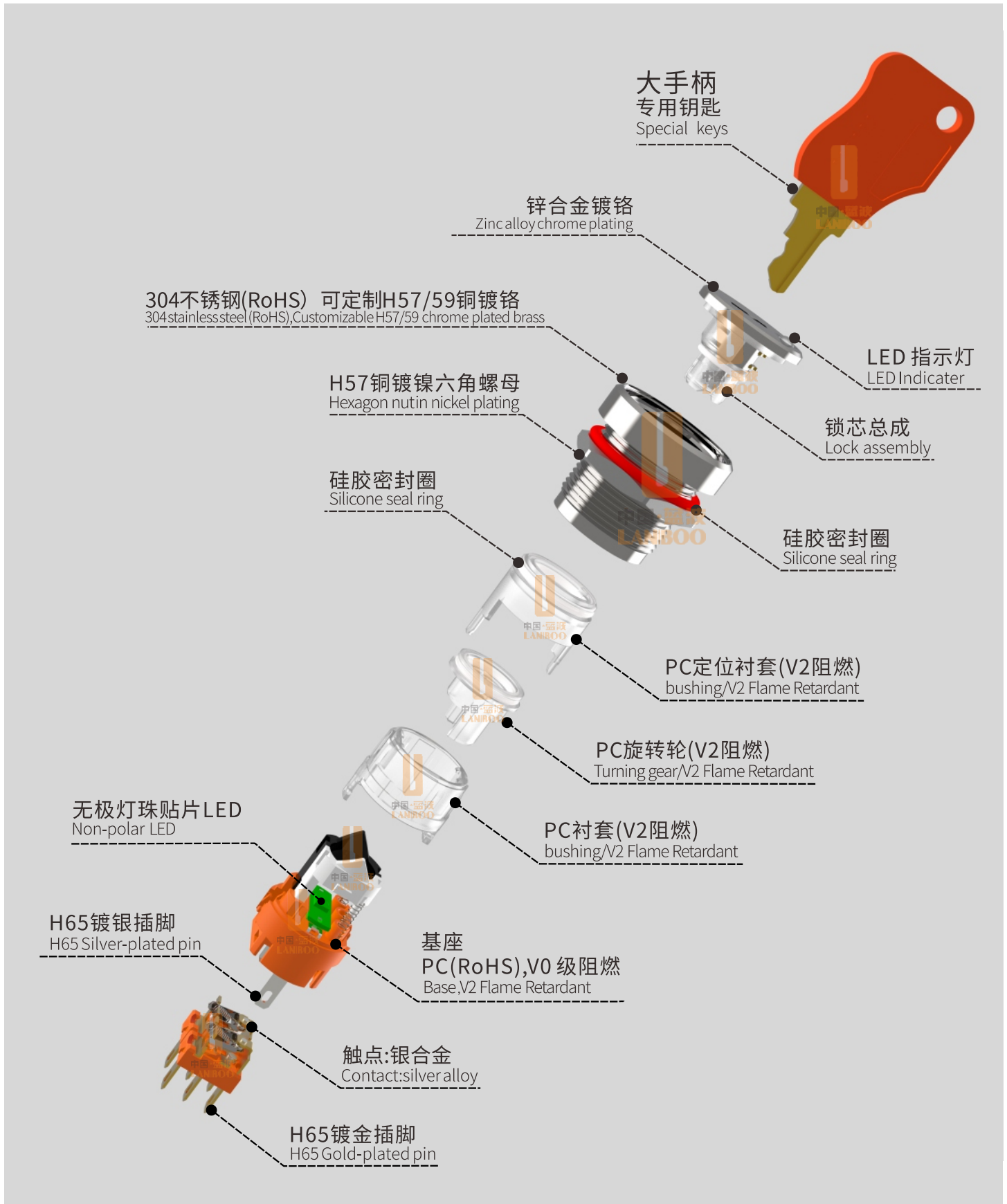


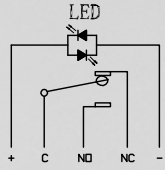
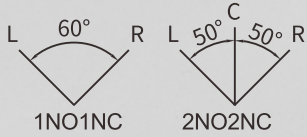
外形尺寸



使用0.5mm²电线, 线长150mm, 可定做其他规格线长

接插件

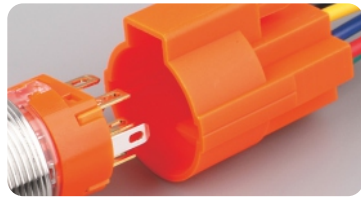




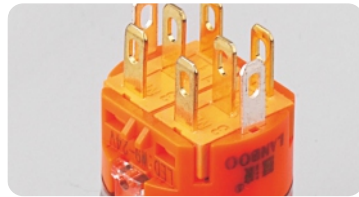
1NO1NC
2NO2NC



Big handle key



Connector



Gold plated pin silver contact



Head IP65 With LED

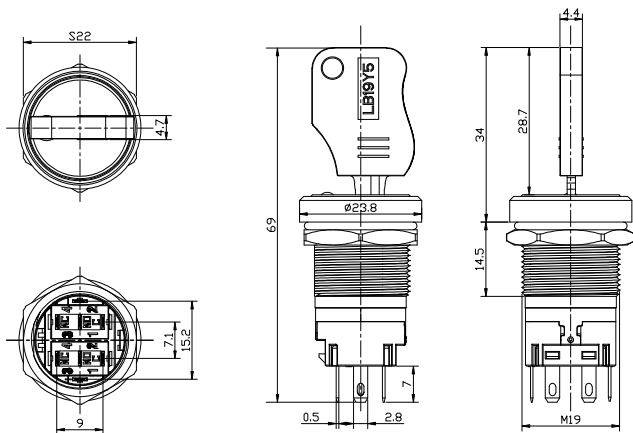
Model Description/Selection, Example: LB19Y5-Y11Z/R5-24V/S/2(L)

The Corresponding Number	LB	●●	●	—	●	●●	●	/	●	●●	/	●	●	L
	1	2	3		4	5	6		7	8		9	10	11
1	LB	LANBOO												
2	Install Diameter	19、22mm												
3	Series No.	Y5 - With LED Key switch series												
4	Head Shape	Y - Key switch												
5	Switch Combination	11 -1NO1NC , 22 - 2NO2NC , quick moving single contact												
6	Action Form	Retentive												
7	LED Color	R -Red, G -Green, custom: Y -Yellow, W -White, B -Blue												
8	LED Voltage	5-24V、220V, Customized: 3-8V、25-48V、110V, AC/DC General purpose												
9	Shell Material	S -Stainless steel, customized: N -Copper chrome plating												
10	Gear	2-2 Gears, 3-3 Gears												
11	(L)	Internal code												

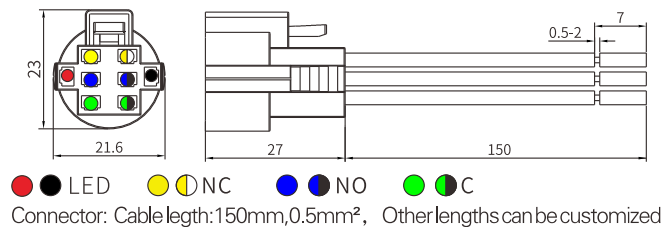
The performance parameters

Hole Diameter	Corresponding aperture +0.2mm, for example: LB19X5 is 19.2mm
Shell	S—304Stainless steel (RoHS), H57/59 chrome plated brass
Key	PA66, V2 flame retardant
Pervious To Light Material	PC (RoHS), V2 flame Retardant
Nut	H57/59 Nickel copper plating, Customized: 304 stainless steel (RoHS)
O-Ring	Silica gel (RoHS)
Contact Material	AgSnO2 silver oxide (RoHS)
Base Seat	PC (RoHS), V2 flame retardant
Pins Material	H65 Gold plated/Silver (RoHS)

Mounting Panel Thickness	≤12mm
Nut Tightening torque	0.8-1.2N.m
Thread Verification	Lock the nut until the washer is visibly deformed, then remove the nut. Repeat 5 times no abnormalities
Rotating Force	2 Gears: About 4N; 3 Gears: About 5N
Rotation Angle	2 Gears: 60°; 3 Gears: Each 50°
Connection Mode	Pins, Special connector can be selected
Soldering Resistance	≤380°C(25~50W) ≤2 Seconds,
Pins Welding Strength	Each pin is welded with 1mm ² wire, 30N forward tension without falling off
Matching test with wiring harness	Wires length 150 mm, ≤50mΩ, Power on, LED flicker free, Pull force: Without LED 20~35N, With LED 40~65N
Pin Reverse Thrust	≥50N, 1min
Head Detaching Resistance	≥180N, 1min
Working Environment Temperature	-40°C~+80°C, Non-vacuum, non-freeze
Working Environment Humidity	45~90%RH
Storage Ambient Temperature	Packing in good condition, -40~+55°C
Storage Ambient Humidity	Packing in good condition, 45~90%RH
Protection Level	IP65, IK10(GB/T 20138)
Rated thermal current	I _{th} : 5A, 250VAC
Resistive Load	AC-15: 110V:1A, 220V:0.5A DC-13: 12V/24V:1A
Inductive Load	AC-15: 110V/220V:0.2A DC-13: 110V:0.2A
Contact Resistance	≤50mΩ
Insulation Resistance	≥1000MΩ
Dielectric Strength	3000VAC, 50HZ, 1min(Pins and Shell); 1.89KVAC, 50HZ, 1min(LED and Shell)
Min. Applicable Load For Contact	3V AC/DC, 5mA(Reference value, depending on the environment and load)
Resistance To Vibration	XYZ, 60HZ, The amplitude 2mm
Product Fall-Proof	Head vertical drop 1 meter, 3 times, can work normally
Packaging Fall-Proof	600mm height continuous drop for 4 times, no damage to the product
Temperature Rise	According to clause 8.3.3.3 in GB/T14048.5 standard
Salt Spray Test	72H, 3 cycles (refer to GB/T 2423.18-2012)
Low Temperature Test	-40°C, 96h, Contact resistance ≤200mΩ, Change in pressure ≤30%, LED Normal
High Temperature Test	80°C, 96h, Contact resistance ≤200mΩ, Change in pressure ≤30%, LED Normal
High And Low Temperature Impact Test	-40~+85°C, 85%RH, 40min/Circulation, 50 Circulation, Contact resistance ≤200mΩ, Change in pressure ≤30% LED Normal
Electrical Life	Resistance load AC220V/1A, DC24V/1A: 100,000 times, AC220V/3A, DC24V/3A: 50,000 times, AC220V/5A, DC24V/5A: 5,000 times, (refer to GB/T14048.5)
Mechanical Life	2 gear: 200,000, 3 gear: 200,000 (Refer to GB/T14048.5)
ESD Electrostatic	Body mode: 2KV, customizable 8KV
LED Rated Current	≤24V, ≤20mA; >24V, ≤10mA
LED Bead Type	Chip nonpolar dual chip LED
LED Resistance	Built-in Resistance
LED Life	≥50000h(Reference)
Certificate	CCC UL CE RoHS REACH
Patent No.	ZL201930471066.2
Quality Assurance	66 Months



Outline Dimension



Connector