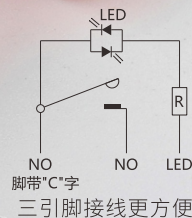




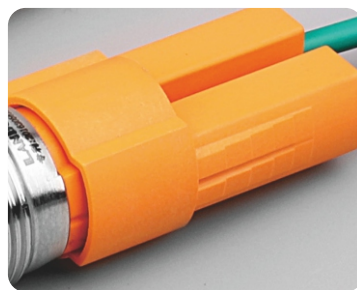
3-8V(定制) 9-24V 220V



柔光光圈,长寿命LED



高精数控,精致美观



专用插件,阻燃耐温



加大银触点,粗脚,电流大

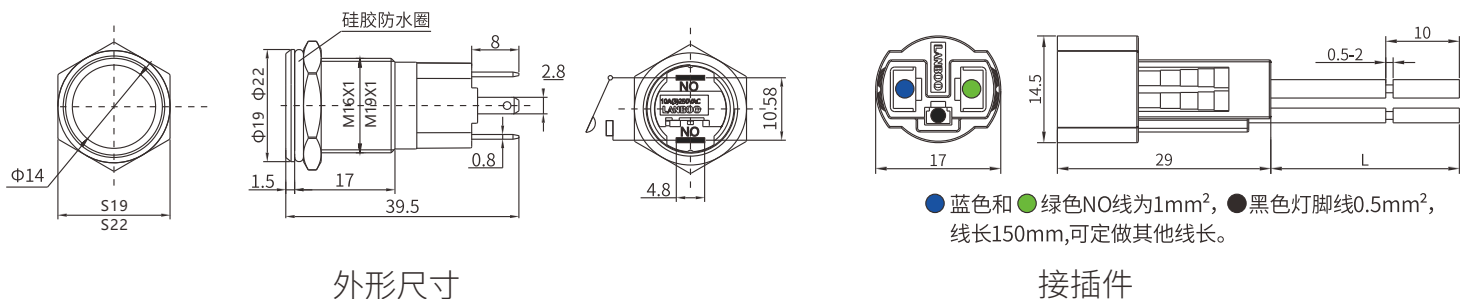
型号说明/选型, 写法举例: LB16B-P10Z/E+DYB9-24V/N(L)

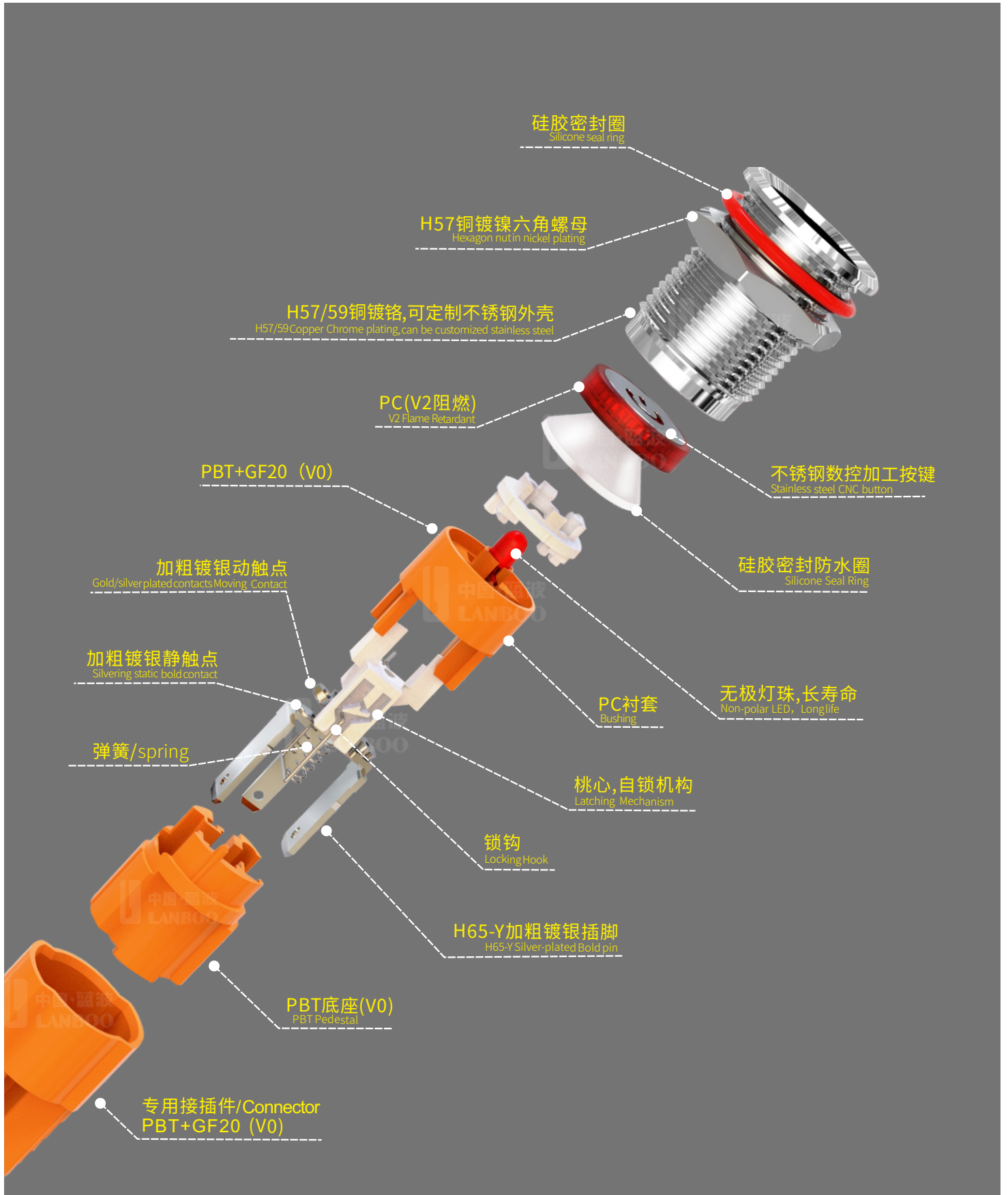
对应编号	LB	●●	●	—	●	●●	●	/	●	●	●●	/	●	L
	1	2	3		4	5	6		7	8	9		10	11
1	LB	LANBOO 蓝波代码												
2	安装孔径	16、19mm												
3	系列号	B—开关与灯共脚大电流系列												
4	头部研状	P—平头、G—高头												
5	开关组合	10—1NO常开触点,慢动单触点												
6	动作形式	Z—自锁式(保持式),F—自复式(点动式)												
7	发光形状	E—环形、DY—电源符号、E+DY—环形+电源符号,定制:D—单点(中心灯)												
8	发光颜色	R—红色、G—绿色、B—蓝色,定制:Y—黄色、W—白色												
9	LED 电压	9-24V、220V,定制:3-8V、25-48V、110V,AC/DC 通用												
10	外壳材质	N—铜镀铬、S—不锈钢,可定制:A—铝氧化、ST—不锈钢镀钛												
11	(L)	内部代码												

性能参数

开孔直径	对应孔径+0.2mm,例如:LB16B为16.2mm
外壳	H57/59铜镀铬、304不锈钢 (RoHS),可定制:6063铝氧化 (RoHS)、ST—不锈钢镀钛
按键	316不锈钢 (RoHS),可定制:6063铝氧化 (RoHS)、ST—不锈钢镀钛
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	PBT (RoHS), V0级阻燃	
引脚	H65 镀银 (RoHS)	
安装面板厚度	≤13mm	
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	
动作行程	总行程: 3.6±0.1mm, 接通行程: 1.4±0.2mm	
按压力	7.5±0.8N	
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, 80N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30~50N, 带灯35~60N (卡扣松开情况下)	
引脚反向推力	≥80N无位移, 1min	
头部防脱顶牛	≥200N, 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: 15A, 250VAC	
电阻性负载	AC-15: 110V/220V:10A	DC-13: 12V/24V:10A
电感性负载	AC-15: 110V/220V:3A	DC-13: 110V:3A
接触电阻	≤50mΩ	
绝缘电阻	≥1000MΩ	
抗电强度 (工频耐压)	1500VAC, 50HZ, 1min	
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灯加速老化试验)	-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/10A、DC24V/10A:2万次, (参考GB/T14048.5)	
机械寿命	自锁:20 万次, 自复:100 万次, (参考 GB/T14048.5)	
极限按压测试	在底部保持 5s 时间, 再松开, 4 次/min, 进行 2000 次试验	
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	圆柱无极双芯片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	ZL201630225280.6、ZL201620561266.8、ZL201821492378.8	
质保	66 个月	







中国·蓝波
LANBOO

蓝波大电流开关

Pioneer of High-Current Switches

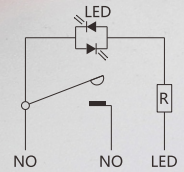
CCC CE RoHS Intertek ISO9001 多项专利

LB16/19B Specification

10A High-Current Button



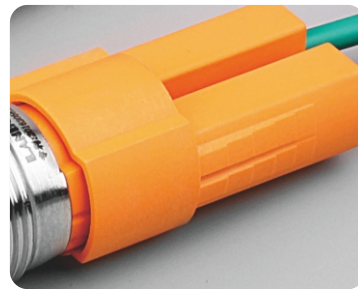
- LED Type
- Without
 - Ring
 - Ring+Power symbol
- LED Color
- Red
 - Green
 - Blue
 - Yellow
 - White
- LED Voltage 3-8V_(custom) 9-24V 220V



Soft light aperture



Seiko CNC



Connector



The big silver contact

Model Description/Selection, Example: LB16B-P10Z/E+DYB9-24V/N(L)

The Corresponding Number	LB	●●	●	-	●	●●	●	/	●	●	●●	/	●	L	
	1	2	3		4	5	6		7	8	9		10	11	
1	LB	LANBOO													
2	Install Diameter	16, 19mm													
3	Series No.	B - Switch and lamp common foot large current series													
4	Head Shape	P - flat head, G - tall head													
5	Switch Combination	10 - 1NO normally open contact, slow moving single contact													
6	Action Form	Latching, Momentary													
7	Luminous Shape	E - ring, DY - Power symbol, E+DY - ring + power symbol, customization: D - Single point (center light)													
8	LED Color	R - Red, G - Green, B - Blue, custom: Y - Yellow, W - White													
9	LED Voltage	9-24V, 220V, customized: 3-8V, 25-48V, 110V, AC/DC general purpose													
10	Shell Material	N - Copper chrome plated, S - Stainless steel, customizable: A - Aluminum oxide, ST - Stainless steel titanium plated													
11	(L)	Internal code													

The performance parameters

Hole Diameter	Corresponding aperture +0.2mm, for example: LB16B is 16.2mm
Shell	H57/59 Copper chrome plating, 304 stainless steel (RoHS), customizable: 6063 aluminum oxide (RoHS), ST-stainless steel titanium plating
Key	316 stainless steel (RoHS), customizable: 6063 aluminum oxide (RoHS), ST-stainless steel titanium plating
Pervious To Light Material	PC (RoHS), V2 flame retardant
Nut	H57/59 Nickel copper plating, customizable: 304 stainless steel (RoHS)

O-Ring	Silica gel (RoHS)
Contact Material	AgSnO2 silver oxide (RoHS)
Base Seat	PBT (RoHS), Grade V0 flame retardant
Pins Material	H65 Silver (RoHS)
Mounting Panel Thickness	≤13mm
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
Action Stroke	Total stroke: 3.6±0.1mm, connecting stroke: 1.4±0.2mm
Operation Pressure	7.5±0.8N
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, 80N forward tension without falling off
Matching test with wiring harness	Wires length 150 mm, ≤ 50mΩ, Power on, LED flicker free, Pull force: Without LED 30 ~ 50N, With LED 35 ~ 60N
Pin Reverse Thrust	≥80N, 1min
Head Anti-off Strength	≥200N, 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°C~+55°C
Storage Ambient Humidity	Packing in good condition, 45~90%RH
Protection Level	IP65, IK10 (GB/T 20138)
Rated thermal current	Ith: 15A, 250VAC
Resistive Load	AC-15: 110V/220V:10A DC-13: 12V/24V:10A
Inductive Load	AC-15: 110V/220V:3A DC-13: 110V:3A
Contact Resistance	≤50mΩ
Insulation Resistance	≥1000MΩ
Dielectric Strength	1500VAC, 50HZ, 1min
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	Resistive load AC220V/10A, DC24V/10A: 20,000 times (refer to GB/T14048.5)
Mechanical Life	Latching: 200,000times, Momentary: 1000000 times, (GB/T14048.5)
Limit Press Test	Keep 5s at the bottom, release again, 4 times /min, conduct 2000 tests
ESD Electrostatic	Body mode: 2KV, customizable 8KV
LED Rated Current	≤24V, ≤20mA; >24V, ≤10mA
LED Type	Cylindrical nonpolar dual chip LED
LED Resistance	Built-inr Resistance
LED Life	≥50000h (Reference)
Certificate	CCC CE RoHS REACH
Patent No.	ZL201630225280.6, ZL201620561266.8, ZL201821492378.8
Quality Assurance	66 Months

