

19E 超短款
大电流金属按钮
High-Current Button

Max: 16A/250VAC

绝缘耐压: 高于2000VAC



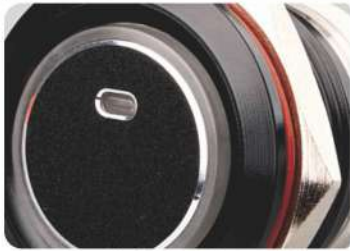
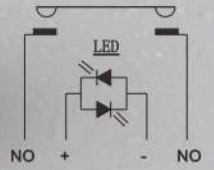
红色

绿色

蓝色

黄色

白色



凹面高光边 贴合手指



加粗镀银插脚 大电流



按键可定制字符



加大银点

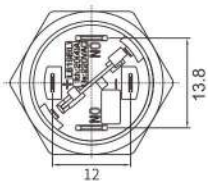
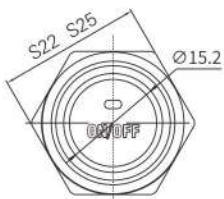
型号说明/选型, 写法举例: LB19E-P10Z/E+XDB5-24V/S(L)

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	E-19mm 超短款大电流系列													
4	头部形状	P-平头													
5	开关组合	10-1NO 常开触点,慢动双触点													
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+XD-环形+小点													
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	5-24V、220V,定制: 25-48V、110V,AC/DC 通用													
10	外壳材质	S-不锈钢、A-铝氧化, 可定制: N-铜镀铬、ST-不锈钢镀钛													
11	(L)	内部代码													

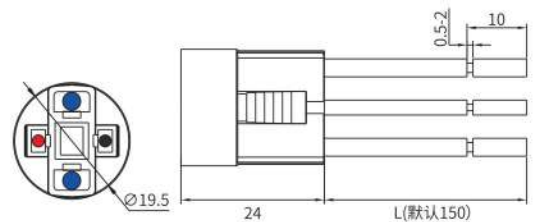
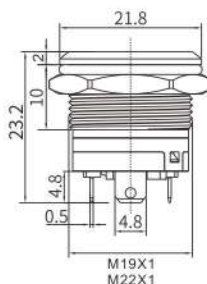
性能参数

开孔直径	对应孔径+0.2mm,例如: LB19E为19.2mm
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	PA66(RoHS),V0级阻燃	
引脚	H65镀金/银 (RoHS)	
安装面板厚度	≤7.5mm	
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±0.15mm,接行程: 0.95±0.1mm	
按压力	7±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: 35~60N	
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	IP65(可定制IP67),IK10	
约定发热电流	Ith:20A,250VAC	
电阻性负载	AC-15:110V/220V:16A	DC-13:12V/24V:16A
电感性负载	AC-15:110V/220V:4A	DC-13:110V:4A
接触电阻	≤50mΩ	
绝缘电阻	≥1000MΩ	
抗电强度(工频耐压)	2500VAC,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(参考GB/T14048.5)AC220V/16A/DC24V/16A:2万次; AC220V/8A/DC24V/8A:4万次; AC220V/3A/DC24V/3A:10万次	
机械寿命	自锁: 30万次, 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	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	ZL201930253523.0、ZL201920779873.5	
质保	66 个月	



外形尺寸


 接插件线长默认150mm, 可做其他线长
 ●灯脚线0.5mm², ●NO负载线1mm²
 接插件



中国·蓝波
LANBOO

蓝波大电流开关

Pioneer of High-Current Switches



LB19/22E 规格书

短款大电流金属按钮开关

H57/59铜镀铬,不锈钢,可定制铝氧化黑

H57/59Copper Chrome plating, stainless steel, can be customized aluminum oxide black

硅胶密封圈

Silicone seal ring

H57铜镀镍六角螺母

Hexagon nut in nickel plating

316不锈钢/6063氧化黑数控按键

Stainless steel /Aluminum oxide black CNC button

PC(V2阻燃)

V2 Flame Retardant

硅胶密封圈

Silicone seal ring

高强度不锈钢弹簧

High strength stainless steel spring

PC衬套(V2阻燃)

bushing/V2 Flame Retardant

锁钩

Locking Hook

无极灯珠贴片LED

Non-polar LED

加粗动触点:银氧化锡AgSnO₂(RoHS)

Bold moving Contact: Silver tin oxide

高强度不锈钢弹簧

High strength stainless steel spring

底座

PA66(RoHS),V0级阻燃

Base/V2 Flame Retardant

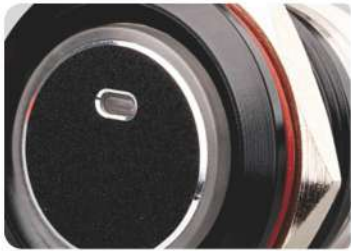
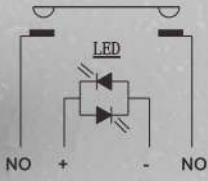
专用接插件Connector

PBT+GF20 (V0)

NO线为1.5mm²国标铜芯线

NO wires is 1.5mm² GB copper core

19E Short
High-Current Button
Max: **16A/250VAC**



Easy to press



Bold pins



Custom symbols



Increase silver contact

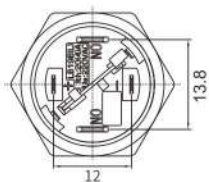
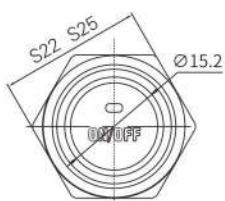
Model Description/Selection, Example:LB19E-PI0Z/E+XDB5-24V/S(L)

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.	E -19mm short large current series													
4	Head Shape	P - flat													
5	Switch Combination	10—1NO													
6	Operation Type	Latching,Monmetary													
7	Luminous Shape	E+XD - Ring + Dot													
8	LED Color	R -Red, G -Green, B -Blue, Custom: Y -Yellow, W -White													
9	LED Voltage	5-24V, 220V, Customized: 25-48V, 110V, AC/DC general purpose													
10	Shell Material	S - Stainless steel, A - Aluminum Oxidation, Customizable: N - Copper chrome plating, ST - Stainless steel titanium plating													
11	(L)	Internal code													

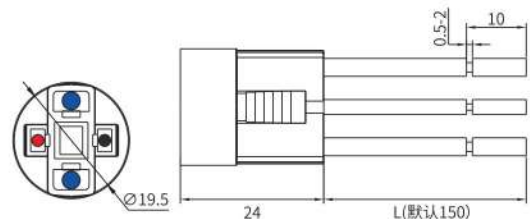
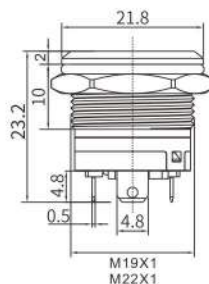
The performance parameters

Hole Diameter	Corresponding aperture +0.2mm, for example: LB19E is 19.2mm
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	AgSnO ₂ silver oxide (RoHS)	
Base Seat	PA66 (RoHS), Grade V0 flame retardant	
Pins Material	H65 Gold plated/Silver (RoHS)	
Mounting Panel Thickness	≤7.5mm	
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±0.15mm, connecting stroke: 0.95±0.1mm	
Operation Pressure	7±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: 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(customizable IP67),IK10	
Rated thermal current	I _{th} :20A,250VAC	
Resistive Load	AC-15:110V/220V:16A	DC-13:12V/24V:16A
Inductive Load	AC-15:110V/220V:4A	DC-13:110V:4A
Contact Resistance	≤50mΩ	
Insulation Resistance	≥1000MΩ	
Dielectric Strength	2500VAC,50HZ,1min	
Min. Applicable Load For Contact	3V AC/DC,5mA(Reference value, depending on environment and load conditions)	
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 (reference GB/T14048.5) AC220V/16A, DC24V/16A: 20,000 times;AC220V/8A, DC24V/8A: 40,000 times;AC220V/3A, DC24V/3A: 100,000 times	
Mechanical Life	Latching: 300,000 times, Momentary: 1 million times, (refer to 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	Patch nonpolar twin chip LED	
LED Resistance	Built-in Resistance	
LED Life	≥50000h(Reference)	
Certificate	CCC CE RoHS REACH	
Patent No.	ZL201930253523.0、ZL201920779873.5	
Quality Assurance	66 Months	



Outline Dimension


 Connector
 ● LED 0.5mm² ● NO 1mm²
 Connector: Cable length:150mm, Other lengths can be customized