



12E 系列

大电流金属按钮

High-Current Button

Max:7A/250VAC
7A/DC24V

绝缘耐压:高于2000VAC



个性凹面头部



配套插件



镀金镀银插脚



高亮均匀发光

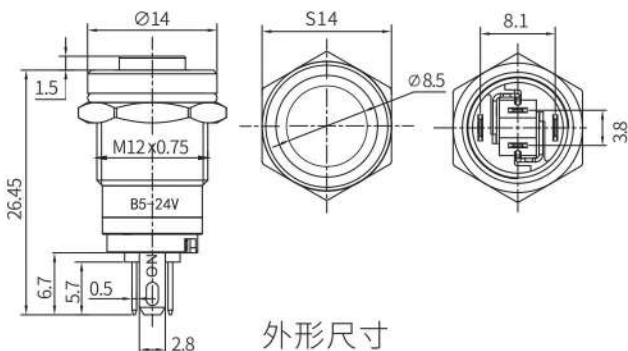
型号说明/选型, 写法举例: LB12E-P10Z/E+DYB5-24V/N(L)

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	12mm													
3	系列号	E小型短款大电流系列													
4	头部形状	P—平头、G—高头													
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—环形, E+DY—环形电源符号													
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(外接电阻), 定制:3V、25-48V 与 110V(外接电阻), AC/DC 通用													
10	外壳材质	N—铜镀铬, 可定制:S—不锈钢、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:LB12E为12.2mm
外壳	H57/59铜镀铬, 可定制:304不锈钢(RoHS)、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	PA46 (RoHS), V0 级阻燃
引脚	H65镀金/银 (RoHS)
安装面板厚度	≤8mm
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: 约2.9±0.1mm, 接通过程: 约0.65±0.15mm
按压力	约5N
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 25~40N, 带灯 40~60N
引脚反向推力	≥50N 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	I _{th} : 10A, 250VAC
电阻性负载	AC-12: 220V: 7A DC-13: 12V/24V: 7A
电感性负载	AC-12: 110V/220V: 3A DC-13: 12V/24V: 3A
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 AC220V/0.5A、DC24V/2A: 1 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	贴片无极双芯片 LED
LED降压方式	5-24V 内置微型降压电阻, >24V 外接电阻
LED寿命	≥50000h (参考值)
产品认证	CCC CE RoHS (定制) REACH (定制)
专利号	ZL201930132100.3、ZL201930132095.6、ZL201920516569.1
质保	66 个月



接插件



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

LB12E 规格书

7A大电流金属按钮

H57/59铜镀铬,可定制不锈钢外壳
H57/59Copper Chrome plating,can be customized stainless steel

PC透光罩(V2阻燃)
PC diffuser V2 Flame Retardant

触点:银氧化锡AgSnO₂(RoHS)
Contact:Silver tin oxide

无极LED灯珠
Non-polar LED

H65镀金插脚
H65 Gold-plated pin

衬套, PA66(RoHS),V0级阻燃
Bushing, V2 Flame Retardant

专用接插件Connector
PBT+GF20 (V0)

硅胶密封圈
Silicone seal ring

H57铜镀镍六角螺母
Hexagon nutin nickel plating

316不锈钢数控按键
Stainless steel CNC button

硅胶密封圈
Silicone seal ring

桃心,自锁机构
Latching Mechanism

高强度不锈钢弹簧
High strength stainless steel spring

锁钩
Locking Hook

H65镀银插脚
H65 Silver-plated pin

蓝波按钮.精工造
LANBOO BUTTON SEKO MANUFACTURING



Concave head



Connector



Gold-plated pins



Uniform luminescence

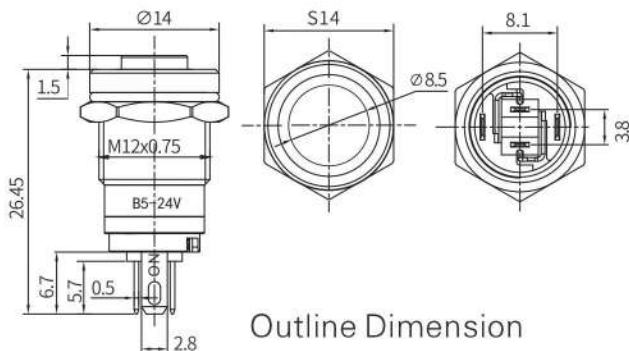
Model Description/Selection, Example: LB12E-PI0Z/E+DYB5-24V/N(L)

The Corresponding Number	LB	●●	●	—	●	●●	●	/	●	●	●●	/	●	L	
	1	2	3		4	5	6		7	8	9		10	11	
1	LB	LANBOO													
2	Install Diameter	12mm													
3	Series No.	E small short current series													
4	Head Shape	P-flat head, G-tall head													
5	Switch Combination	10-1NO normally open contact, slow-moving double contact													
6	Action Form	Latching, Momentary													
7	Luminous Shape	E—ring, customization: E+DY - ring + power symbol													
8	LED Color	R-Red, G-Green, B-Blue, custom: Y-Yellow, W-White													
9	LED Voltage	5-24V, 220V (external resistance), customized: 3V, 25-48V and 110V (external resistance), AC/DC universal													
10	Shell Material	N-Copper chrome plating, customizable: S-Stainless steel, A-Aluminum Oxide, ST-Stainless steel titanium plating													
11	(L)	Internal code													

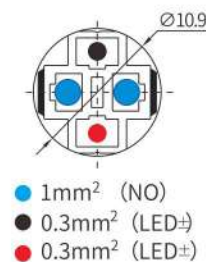
The performance parameters

Hole Diameter	Corresponding aperture +0.2mm, for example: LB12E is 12.2mm
Shell	H57/59 Copper chrome plating, customizable: 304 stainless steel (RoHS), 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	PA66 (RoHS), Grade V0 flame retardant

Pins Material	H65 Gold plated/Silver (RoHS)	
Mounting Panel Thickness	≤8mm	
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: about 2.9±0.1mm, connecting stroke: about 0.65±0.15mm	
Operation Pressure	About 5N	
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 25 ~ 40N, With LED 40 ~ 60N	
Pin Reverse Thrust	≥50N, 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	Ith: 10A, 250VAC	
Resistive Load	AC-12: 220V:7A	DC-13: 12V/24V:7A
Inductive Load	AC-12: 110V/220V:3A	DC-13: 12V/24V:3A
Contact Resistance	≤50mΩ	
Insulation Resistance	≥1000MΩ	
Dielectric Strength	2500VAC, 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/0.5A, DC24V/2A: 10,000 times (Refer to GB/T14048.5)	
Mechanical Life	Latching:200,000 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	5-24V Built-in Resistance, 24VAn External Resistor	
LED Life	≥50000h (Reference)	
Certificate	CCC CE RoHS REACH	
Patent No.	ZL201930132100.3, ZL201930132095.6, ZL201920516569.1	
Quality Assurance	66 Months	



Outline Dimension


 Connector: Cable length:150mm
 Other lengths can be customized

Connector