

HBS1-AW&AP / HBS1-BW&BP 按钮开关系列



系列号 Series Number	分类代号 Variety code	头部形状 Front Shape	触点结构 Contact Configuration	操作类型 Operation Type	发光图标类型 Illuminated symbol	操作位置 Operation Position	带灯部分电压 LED Voltage	颜色 Color	防护等级 Degree of Protection
HBS1-A HBS1-B	P:黑色边框 W:银色边框 frame P:Black W:Silver frame	Y:圆形 F:方形 J:矩形 Y:Round F:Square J:Rectangle	11: 1NO 1NC 22: 2NO 2NC	D: 指示灯 Z: 自锁按钮 T: 选择钮 Y: 钥匙钮 TS: 急停钮 无字母: 自复按钮 D: Indicator Z: Latching X: Selector Switch Y: Key Switch TS: Emergency Stop Switch No letter: Momentary	T: 电源符号 无字母: 普通带灯 T: power sign No letter: normal type 注: T型为特殊产品, 仅限圆形银色边框; 其他图标符号可按要求定做。 Note: T type is special for round silver frame. Other symbol can be made to order.	◇ 选择钮及钥匙钮的操作位置 Operation position of Selector switch and Key-lock switch 2: 二位 2Position 3: 三位 3Position ◆ 选择钮及钥匙钮动作类型 Action of Selector Switch and Key-lock Switch 1: 保持式 Latching 2: 右自复式 Right-momentary 3: 全自复式 Full-momentary 4: 左自复式 Left-momentary ● 钥匙保留位置 Key-lock maintain position	见LED灯珠规格; See the table of LED Rating;	R Red G Green Y Yellow O Orange B Blue W White N Black	IP65, 无字母: IP40 IP65 No letter: IP40

性能参数 Parameters

环境温度 Operating Temperature	-25℃ ~ +55℃ (无冰冻) 照明开关本体周围 必须空气流通 (No freezing) Keep the air flowing around illuminated pushbutton
环境湿度 Operating humidity	45~85%RH(无结露) Non condensing
接触电阻 Contact Resistance	≤50mΩ
绝缘电阻 Insulation Resistance	≥100MΩ
介电强度 Dielectric Strength	触点与灯珠引脚之间 Contact between lamp bead pin 2000V, AC50Hz, 1min 同极端子之间 Between same class terminal 1000V, AC50Hz, 1min 不同极端子之间 Between different electrode terminal 2000V, AC50Hz, 1min
耐振抗性 Vibration Resistance	50Hz, 振幅约1.2mm
耐冲击性 Shock resistance	>10g
机械寿命 Mechanical Life	自复钮 Momentary 100万次 1,000,000 times 自锁钮、选择钮 Latching button, Selector switch 50万次 500,000 times 钥匙钮、急停钮 Key switch, E-stop switch 20万次 200,000 times
电气寿命 Electrical Life	3万次以上 Above 30,000 times
接线 Wiring	焊接线直径 Dia of welding line 2×0.8mm ² 最大铜线面积 Max copper wire area 0.75mm ² 镀金接线插片 Wiring insert 2.8×0.5mm ²
耐焊锡热 Solder heat resistance	230℃时不超过3秒
操作行程 Operating distance	(按钮)约3mm (Button) About 3mm

开关额定值 Switch Rating

额定绝缘电压Ui Rated insulation voltage	250V
发热电流Ith Conventional thermal current	5A 温度不超过最大额定值所允许的电流 5A (Temperature not more than the maximum allowed continuous working current)
额定电压 Rated Voltage	12V 24V 110V 220V
交流 AC 50/60Hz	电阻性负载 - - 1A 0.5A 电感性负载 - - 0.7A 0.5A
额定电流 Rated current	直流 DC 电阻性负载 1A 1A 0.2A - 电感性负载 0.7A 0.7A 0.1A -
触点材料 Contact material	银合金 Silver alloy
最小适应负载: 3VAC/DC5mA(参考值) (可使用范围取决于使用环境和负载种类) Minimum load: 3VAC/DC 5mA(reference) (range of use depend on operation environment and load type)	

LED灯珠规格 LED Lamp Specifications

灯珠类型 Lamp Type	双向LED灯珠(交直流通用) Bi-directional LED lamp (AC DC Universal)
额定电压 Rated Voltage	1.8V, 2.8V, 6V, 12V, 24V, 36V, 110V, 220V
额定电流 Rated Current	约20mA about 20mA
发光颜色 Color	R G Y O B W
寿命 Life	50000小时(参考值) 50000 hours (reference value)



注: 如需单向直流LED灯珠可定做; 其他电压规格可按要求定做。
Note: Unidirectional DC LED lamp can be customized if needed; other voltage specifications could be special made

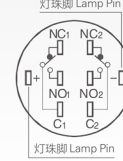
开关结构说明 Switch Structure Explanation

型式Type	符号Symbol	示意图Diagram	说明Explanation
C	NO NC		具有三个端子的单断点快动转换触头开关 Single breakpoint snap-action contacts switch with three terminals.

HBS1-AW&AP / HBS1-BW&BP Series Pushbutton Switches



引脚说明 Pin Description



- 最多可配置两组开关;
- C1、NO1、NC1和C2、NO2、NC2分别为一组开关;
- C脚为公用脚, NO脚为常开脚, NC脚为常闭脚;
- +、-脚为灯珠引脚, 常规灯珠配置无正负极区分;
- 灯珠与开关相对独立, 可通过开关或外围电路控制灯珠状态。
- Can be configured up to two sets of switches.
- C1, NO1, NC1 and C2, NO2, NC2 are a set of switches respectively;
- Pin C is utility pin and pin NO is normally open pin, pin NC is normally closed;
- +, - pins are LED lamp pins, normal lamp configuration has no differentiate between positive and negative;
- LED and switch pin are separated, but switch and external circuit can control the LED state by connecting the LED pin.

选择钮、钥匙钮操作位置 Operation position of Selector switch and Key switch

区分 Sort	复位方式 Reset Style	钥匙拔出位置 Key/Out Positon
2段 2Position	自锁 Latching	自复 Momentary
代号 Code	21	23
3段 3Position	自锁 Latching	自复 Momentary
代号 Code	31	32 34 33

选择/钥匙开关旋转角度90°是基本 Selector/Key switches basic rotation angle 90°

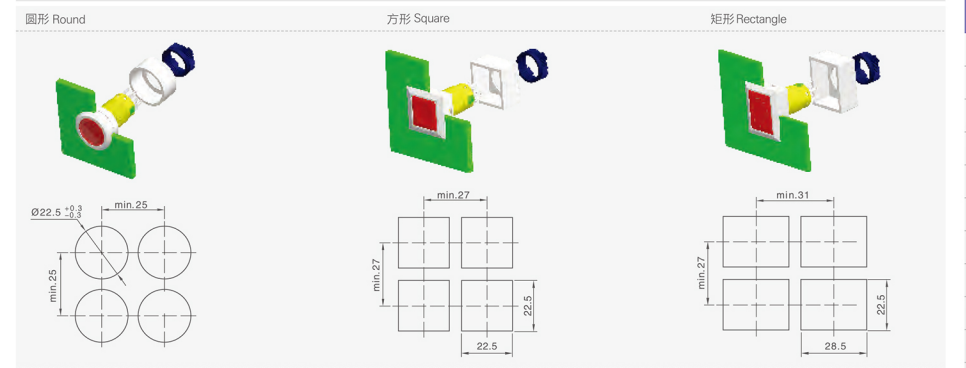
操作位规格 Operation

90° 2位 2 Position	触点 Contact
自锁 Latching	1NO1NC
自复 Momentary	2NO2NC

45° 3位
3 Position

自锁 Latching	左锁右复 Left lock Right reset	左复右锁 Left reset Right lock	自复 Momentary	触点 Contact
				3NO3NC

安装孔尺寸 Mounting Hole Size



安装效果预览 Installation Effect Preview

