

HB5/HBY5E 按钮开关系列



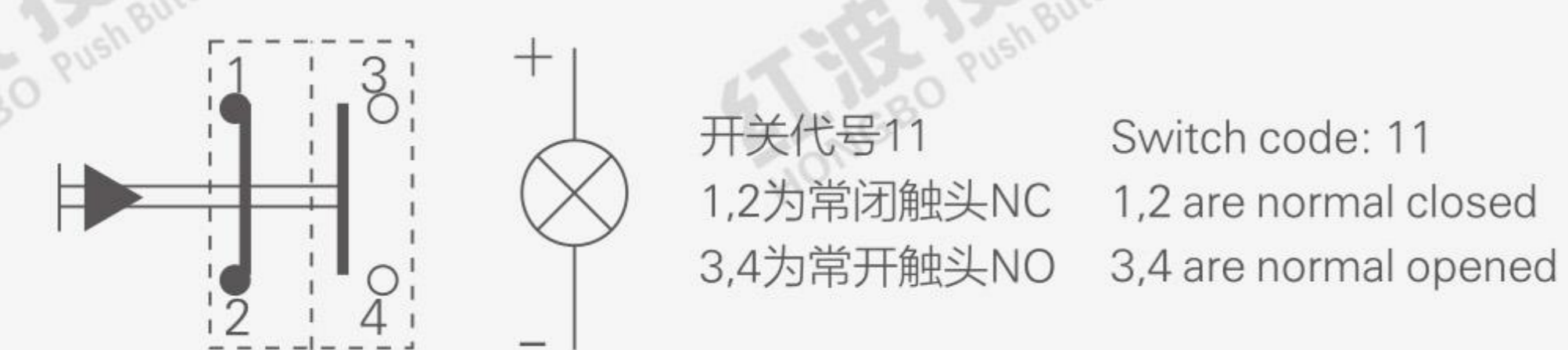
型号说明 Model Explanation

系列号 Series Number	头部形状 Shape of Head	触点结构 Contact Configuration	操作类型 Operation Type	操作位置 Operation Position	颜色 Color	带灯电压 LED Voltage	防护等级 Degree of Protection
HB5: 金属头部 HB5E: 塑料头部 HB5E1: 简洁型 HB5: Metal head HB5E: Plastic head HB5E1: Simple type	J: 双头按钮 平钮+平钮 S: 双头按钮 平钮+高钮 无字母: 圆形 J: Double-headed Flat head with Flat head S: Double-headed Flat head with High head NA: Round	10: 1NO 01: 1NC 11: 1NO1NC 22: 2NO2NC	无字母: 自复按钮 D: 指示灯 G: 高头按钮 Z: 自锁按钮 F: 带防水罩按钮 T: 带标志按钮 X: 选择按钮 XB: 长柄选择按钮 Y: 钥匙按钮 M: 蘑菇头按钮 TS: 转动复位急停 TL: 推拉式急停 S: 双头按钮 NA: Momentary D: Indicator G: High head Pushbuttons Z: Latching F: With water-proof cover Pushbuttons T: With marking Pushbuttons X: Selector Switches XB: Long Handle Selector Switches Y: Key Switches M: Mushroom head Pushbuttons TS: Turn to release E-stop TL: Push-pull E-stop S: Double-headed pushbuttons	◇选择钮及钥匙钮的操作类型 2: 二位置 3: 三位置 ◆动作类型 1: 自锁式 2: 右自复式 3: 全自复式 4: 左自复式 ◇Operation Position of Selector Switches and Key Switches 2: 2 Position 3: 3 Position ◆Operation type 1: Maintained 2: Right Momentary 3: Latching 4: Left Momentary	R Red G Green Y Yellow W White B Blue A Orange N Black	见LED灯珠规格表 See the table of LED Rating	无字母: IP40 P: IP65 FP: IP67 NA: IP40 P: IP65 FP: IP67

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
触点材料 Contact material	银 Silver 银合金 Silver alloy 银镀金, 镀层厚 3μm Silver plated gold, Plating thickness 3μm
接触电阻 Contact Resistance	≤50mΩ
绝缘电阻 Insulation Resistance	≥100MΩ
介电强度 Dielectric Strength	3000V, AC50Hz
耐振动性 Vibration Resistance	50Hz, 振幅约1.0mm Amplitude 1.0mm
耐冲击性 Shock resistance	> 10g
机械寿命 Mechanical Life	自复按钮 Momentary 100万次 1,000,000 times 自锁按钮、选择按钮 Latching button, Selector switch 50万次 500,000 times 钥匙按钮、急停按钮 Key switch, E-stop switch 20万次 200,000 times
电气寿命 Electrical Life	5万次以上 Above 50,000 times
接线 Terminal	螺钉压入式端子, 接线能力: 最小1x0.5mm ² , 最大, 带或不带接线端子: 2x1.5mm ² 或1x2.5mm ² Screw terminal, connecting ability: Min: 1x0.5mm ² , Max: 2x1.5mm ² or 1x2.5mm ² (with or without connecting link)
操作力 Operating Force	800gf~2200gf, 依开关元件数量而定 800gf~2200gf according to the quantity of switch units
操作行程 Operating Travel	(按钮)约5.5mm (Buton) About 5.5mm

接线图 Contacts Circuit



开关额定值 Switch Rating

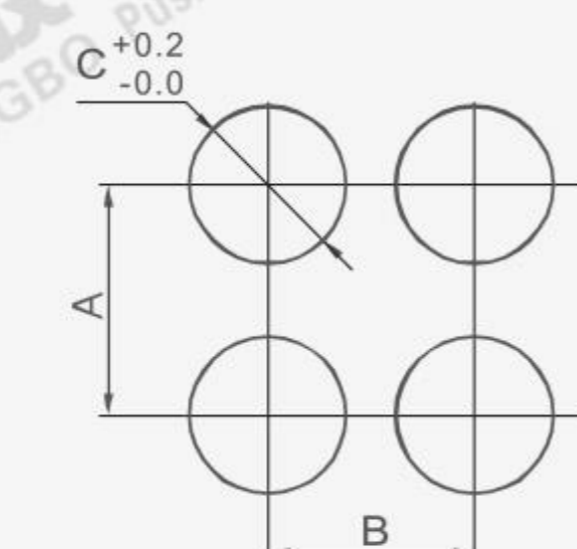
额定绝缘电压Ui Rated insulation voltage	AC600V
发热电流Ith Conventional thermal current	10A
额定电压 Rated Voltage	24V 48V 110V 220V 380V 500V
直流 DC	10A 5A 2.2A 1.1A
交流 AC PF=0.7	10A 6A 4A 2A

LED灯珠规格 LED Lamp Specifications

灯珠类型 Lamp Type	双向LED灯珠 Bi-directional LED lamp
额定电压 Rated Voltage	AC/DC 6V, 12V, 24V, 110V, 220V, 380V AC110V, 220V, 380V
额定电流 Rated Current	约20mA about 20mA
发光颜色 Color	R G Y O B W
寿命 Life	40000小时(参考值) 40000 hours (reference value)

注: 灯珠内置保护电阻, 不需外接。如需直流单向LED灯珠可定制; 其他电压规格可按要求定制; 红绿变色可定做。
Note: 1. The lamp contains current-limiting resistor inside and doesn't need connect outside.
2. The standard is using AC/DC LED lamp, DC LED lamp, dual-color LED lamp and other voltages can be customized, customized if you need.

安装孔尺寸 Mounting Hole Size



安装面板厚0.5~5mm
Panel thickness is 0.5~5mm

型号Model	A	B	C
按钮/钥匙钮 Pushbuttons/Key switches	≥50	≥40	Ø22.5
选择按钮 Selector switches	≥55	≥40	Ø25.5
蘑菇头按钮 Mushroom head	≥50	≥50	
大蘑菇头按钮 Big Mushroom head	≥70	≥70	

备注: 1. 当用于孔径为25mm时, 加装一只变径圈即可
2. A和B均指最小尺寸
Note: 1. Can be used in 25mm installation hole with a diameter changing circle.
2. A and B are both the min. dimensions.