

## HBS3/HBS2 Series Pushbutton Switches

## 型号说明 Model Explanation

系列号 Series Number	头部形状 Front Shape	触点结构 Contact Configuration	操作类型 Operation Type	带灯部分电压 LED Voltage	颜色 Color	防护等级 Degree of Protection
HBS3: Ø10mm HBS2: Ø12mm	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 无字母: 自复按钮 D: Indicator Z: Latching No letter: Momentary	见LED灯珠规格; 24V以下内置保护电阻, 24V以上外接保护电阻。 可定制6V以上内置保护电阻。 信号灯有两极变色, 可定制。 See the table of LED Rating; LED poles change color, can be customized.		IP40, IP65, IP67(IP67需 加装密封罩) IP40, IP65, IP67 (IP67 need cover)



## 性能参数 Parameters

环境温度	Operating Temperature	-25℃~+55℃
环境湿度	Operating humidity	45~85%RH
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	1500V, AC/50Hz, 1min
	同极端子之间 Between same class terminal	1000V, AC/50Hz, 1min
	不同电极端子之间 Between different electrode terminal	2000V, AC/50Hz, 1min
机械寿命	Mechanical Life	20万次 200,000 times
电气寿命	Electrical Life	3万次以上 Above 30,000 times
耐焊锡热	Solder heat resistance	230℃时不超过3秒

## 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/DC6V AC/DC12V AC/DC24V AC/DC110V AC/DC220V	
发光颜色 Color		
寿命 Life	40000小时(参考值) 40000 hours (reference value)	

注: 24V以下灯珠内置保护电阻, 不需外接; 24V以上灯珠需外接保护电阻(如示意图)。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。

外接电阻示意图

## 开关额定值 Switch Rating

发热电流 <sub>th</sub> 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	24V 125V(110V) 250V(220V)
直流 DC	PF=1 2A 0.2A 0.1A
交流 AC	PF=0.7 5A 5A 3A 2A

## 安装孔尺寸 Mounting Hole Size

单位: mm

类别	HBS3			HBS2		
	A	B	C	A	B	C
圆形	10	≥12	≥12	12	≥14	≥14
方形	10	≥12	≥12	12	≥14	≥14
矩形	10	≥12	≥16	12	≥14	≥18

## 开关结构说明 Switch Structure Explanation

型式 Type	C
符号 Symbol	
示意图 Diagram	
说明 Explanation	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.

## 引脚说明 Pin Description

	<ul style="list-style-type: none"> <li>最多可配置两组开关;</li> <li>C1、NO1、NC1和C2、NO2、NC2分别为一组开关;</li> <li>C脚为公用脚, NO脚为常开脚, NC脚为常闭脚;</li> <li>+、-脚为灯珠引脚, 常规灯珠配置无正负极区分;</li> <li>灯珠与开关相对独立, 可通过开关或外部电路控制灯珠状态。</li> </ul>
	<ul style="list-style-type: none"> <li>Can be configured up to two sets of switches.</li> <li>C1, NO1, NC1 and C2, NO2, NC2, are a set of switches respectively;</li> <li>Pin C is utility pin and pin NO is normally open pin, pin NC is normally closed;</li> <li>+、- pins are LED lamp pins, normal lamp configuration has no differentiate between positive and negative;</li> <li>LED and switch pin are separated, but switch and external circuit can control the LED state by connecting the LED pin.</li> </ul>