

## HBS1-BGQ/HBGQ22,25,28,30



## 型号说明 Model Explanation

系列号 Series Number	安装孔尺寸 Mounting Hole Size	头部形状 Front Shape	开关组合 Contact Configuration	带灯类型 Lamp Type	操作类型 Operation Type	接线类型 Terminal Type	带灯颜色 LED Color	带灯部分电压 LED Voltage	外壳材料 Shell Material	外壳电镀颜色 Shell Plating Color
HBS1-BGQ HBGQ	19: Ø19mm 22: Ø22mm 25: Ø25mm 28: Ø28mm 30: Ø30mm	F: 平圆形 H: 高平圆形 F: Flat Round H: High Round	11: 1NO 1NC 22: 2NO 2NC 33: 3NO 3NC	D: 单点 E: 环形 E: 环形电源符号 D: Dot E: Ring E: Ring Power Symbol	Z: 自锁式 无: 无自锁式 Z: Latching No letter Z: Momentary	J: 接线插片 J: Pin Terminal	R: Red G: Green Y: Yellow O: Orange B: Blue W: White R: Red G: Green B: Blue	ACDC0V ACDC12V ACDC24V ACDC36V ACDC110V ACDC220V 其他电压等级可订做 Other voltage can be made to order	N: 黄铜镀镍 S: 不锈钢 T: 锌铝合金 N: Nickel-plated Brass S: Stainless Steel T: Zn-Al Alloy	R: Red G: Green B: Blue O: Gold N: Black W: White

## 性能参数 Parameters

开关额定值 Switch Rating	AC-5A/250V	表面防爆等级 Explosion proof grade	IK08(针对金属材料)
环境温度 Operating Temperature	-40°C ~ +80°C	防护等级 Degree of Protection	IP 67
接触电阻 Contact Resistance	≤50MΩ	操作压力 Operating Pressure	3-5N
绝缘电阻 Insulation Resistance	≥1000MΩ	操作行程 Operating Stroke	3mm
介电强度 Dielectric Strength	AC1890V, 5s	螺母扭矩 Screw Torque	5-14N
机械寿命 Mechanical Life	≥1000,000次	外壳 Shell material	黄铜镀镍/不锈钢 Nickel-plated Brass/Stainless Steel
电气寿命 Electrical Life	≥50,000次	材质 Material	按键 Press key material: 不锈钢 Stainless steel 底座 Base material: 塑料 Plastic base 触点 Contact material: 银合金 Silver alloy
开关结构 Contact Type	双断点快动触头 Double-break fast-motion changeover contact		
开关组合 Contact Configuration	1NO 1NC / 2NO 2NC / 3NO 3NC		

## 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)	额定电流 Rated Current	约15mA about 15mA
额定电压 Rated Voltage	1.8V、2.8V、6V、12V、24V、36V、110V、220V	发光颜色 Color	R G B W R G B
		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

灯珠等效电路 Lamp Equivalent Circuit	单色发光 Monochrome light	双色发光 Double color light
<p>采用交直流通用的LED灯珠, 接线端子无正负极区分; 灯珠内置保护电阻, 不需外接。 AC-DC Universal LED lamp, terminal differentiate between positive and negative; lamp beads built-in protection resistors, no external.</p>	<p>高亮LED发光, 基本发光颜色5种: (红绿蓝黄白)其它可定制; 双色发光基本型是共负极和切换正负极。</p>	

## 开关结构说明 Switch Structure Explanation

型式 Type	符号 Symbol	示意图 Diagram	说明 Explanation
Za			具有四个端子的双断点快动切换触头开关 Double break snap-action changeover contacts switch with four terminals.

## 引脚说明 Pin Description

HBS1-BGQ	HBGQ22	HBGQ25, 28, 30	说明 Explanation
			1,2,3,4为一组开关; 1,2为常闭触头; 3,4为常开触头; 常规灯珠配置无正负极区分; 灯珠已内置保护电阻无需外接; 灯珠可与开关相对独立, 可通过开关或外部电路控制灯珠状态。  Pin 1,2,3,4 are a set of switch; NC pin1, pin2 is normally closed contact; NO pin3, pin4 is normally open contact; Normal lamp configuration has no differentiate between positive and negative, LED has built-in protection resistors, no need external connection; LED and switch pin are separated, but switch and external circuit can control the LED state by connecting the LED pin.

## HBS1-BGQ/HBGQ22,25,28,30 Series Metal Pushbutton



## 部分产品焊接注意事项 Welding Precautions

任何不正确的焊接操作都可能导致产品塑料变形、开关接触不良等。用户在使用引脚式按钮开关、信号灯时, 因焊接不当导致产品损坏的现象时有发生, 故敬请各位用户在接线操作时务必注意以下几点:

- 选择合适的电烙铁, 加快焊接速度, 建议使用30W以下电烙铁在320°C时2秒内完成焊接。
- 助焊剂必须适量, 焊接时尽量将开关引脚朝下。
- 尽量采用插线端子连接, 避免焊接连接。

Any improper welding operation may lead to product plastic deformation, poor switch contact. Users using pin-type button switches, lights, due to improper welding damage to the product. Phenomenon occurs from time to time, so please be sure to pay attention to the following points in the wiring operation:

- Choose the right electric iron, speed up the welding speed, it is recommended to use the following 30W electric iron at 320 °C When 2 seconds to finish welding.
- Flux must be moderate, try to switch the pin down when welding.
- Try to use plug-in terminals to avoid welding connections.

## 防护与安装说明 Protection and installation instructions

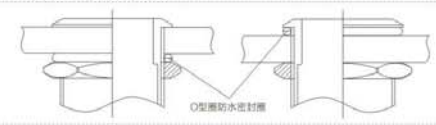
金属按钮开关外壳采用金属材料, 与塑料开关相比, 不紧增强了其美观性, 外观颜色可多样化, 并且大幅度提升了头部安装面板以上其防尘防水性能、防爆性能及防腐性等。防水等级IP65, 防爆能力IK08。

Pushbutton use metal housing, not only the appearance would be more beautiful and multi-colorful compared with plastic indicator, but also enhance the dustproof and waterproof, explosion resistance and corrosion resistance performance of the head (above the panel mount), etc. IP65 waterproof, Explosion-proof IK08.

## 内部P防尘、防水结构



## 外部O型密封圈安装方法



## 标识定做 Identification custom

金属按钮开关的按键表面可以激光刻字、图案或发光文字与图案, 可根据客户要求定制, 具有新颖与美观性, 并替代指示牌的作用。

The surface of the key metal button switch, can be laser engraving patterns or luminous words and patterns, can be customized according to customer requirements, with novel and beautiful appearance, and replace the role of signs.

## 激光刻字效果图



## 激光刻穿发光效果图



## 符号定制举例



## 配套接插件型号说明 The mating connector model description

配套接插件具有快速安装、快速拆卸、方便操作、导电性能优越, 保护按钮开关插脚、美观等诸多特点, 是按钮开关配套必不可缺的组件。

The mating connector with fast installation, remove the fast, convenient operation, reliable connection, a superior conductivity, button switch pins, beautiful etc. many characteristics, is the button switch kit essential components.



注: 配套连接器与按钮为分开采购, 且连接器不单独零售。  
Note: the matching connector and button are purchased separately, and the connector does not retail separately.

## 安装效果预览 Installation Effect Preview



HBS1-BGQ/HBGQ22,25,28,30



HBS1-BGQ-□/■/●

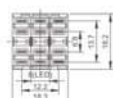
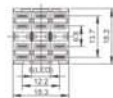
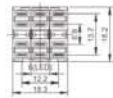
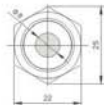
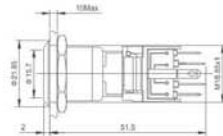
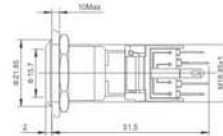
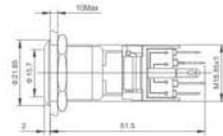
- 安装孔尺寸: Ø19mm
- 头部形状: 平圆形
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC/2NO 2NC/3NO 3NC
- 操作类型: 自复式/自锁式
- 灯珠颜色: 黄/绿/黄/蓝/白(双色可选)
- 外壳材料: 黄铜镀镍/不锈钢
- 防护等级: IP67, IK08
- Mounting Hole Size: Ø19mm
- Shape: Flat Round
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC/2NO 2NC 3NO 3NC
- Operation Type: Momentary/Latching
- The Crust Material: Nickel-plated Brass/ Stainless Steel
- Protection Degree: IP67, IK08

HBS1-BGQ-□D/■/▲/△/●

- 安装孔尺寸: Ø19mm
- 头部形状: 平圆形单点带灯
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC/2NO 2NC/3NO 3NC
- 操作类型: 自复式/自锁式
- 灯珠颜色: 红/绿/黄/蓝/白(双色可选)
- 外壳材料: 黄铜镀镍/不锈钢
- 防护等级: IP67, IK08
- Mounting Hole Size: Ø19mm
- Shape: Flat Round Dot Illuminated
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC/2NO 2NC 3NO 3NC
- Operation Type: Momentary/Latching
- Lamp Color: Red/Green/Yellow/Orange Blue/White(Could be bi-color LED)
- The Crust Material: Nickel-plated Brass/ Stainless Steel
- Protection Degree: IP67, IK08

HBS1-BGQ-□E/■/▲/△/●

- 安装孔尺寸: Ø19mm
- 头部形状: 平圆形带电涌符号
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC/2NO 2NC/3NO 3NC
- 操作类型: 自复式/自锁式
- 灯珠颜色: 红/绿/黄/蓝/白(双色可选)
- 外壳材料: 黄铜镀镍/不锈钢
- 防护等级: IP67, IK10
- Mounting Hole Size: Ø19mm
- Shape: Flat Round Ring Illuminated Power Symbol
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC/2NO 2NC 3NO 3NC
- Operation Type: Momentary/Latching
- Lamp Color: Red/Green/Yellow/Orange Blue/White(Could be bi-color LED)
- The Crust Material: Nickel-plated Brass/ Stainless Steel
- Protection Degree: IP67, IK10

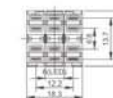
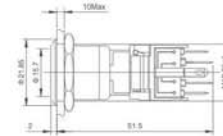


HBS1-BGQ/HBGQ22,25,28,30 Series Metal Pushbutton



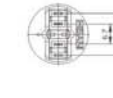
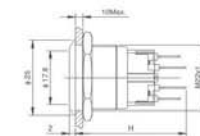
HBS1-BGQ-□E/■/▲/△/●

- 安装孔尺寸: Ø19mm
- 头部形状: 平圆形带电涌符号
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC/2NO 2NC/3NO 3NC
- 操作类型: 自复式/自锁式
- 灯珠颜色: 红/绿/黄/蓝/白(双色可选)
- 外壳材料: 黄铜镀镍/不锈钢
- 防护等级: IP67, IK10
- Mounting Hole Size: Ø19mm
- Shape: Flat Round Ring Illuminated Power Symbol
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC/2NO 2NC 3NO 3NC
- Operation Type: Momentary/Latching
- Lamp Color: Red/Green/Yellow/Orange Blue/White(Could be bi-color LED)
- The Crust Material: Nickel-plated Brass/ Stainless Steel
- Protection Degree: IP67, IK10



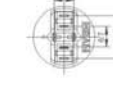
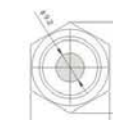
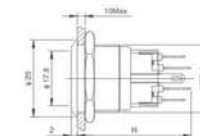
HBS1-BGQ-□E/■/▲/△/●

- 安装孔尺寸: Ø22mm
- 头部形状: 平圆形
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC
- 操作类型: 自复式/自锁式
- 外壳材料: 不锈钢
- 防护等级: IP65, IK10
- Mounting Hole Size: Ø22mm
- Shape: Flat Round
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC
- Operation Type: Momentary/Latching
- The Crust Material: Stainless Steel
- Protection Degree: IP65, IK10



HBS1-BGQ-□E/■/▲/△/●

- 安装孔尺寸: Ø22mm
- 头部形状: 平圆形单点带灯
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC
- 操作类型: 自复式/自锁式
- 灯珠颜色: 红/绿/黄/蓝/白(双色可选)
- 外壳材料: 不锈钢
- 防护等级: IP65, IK10
- Mounting Hole Size: Ø22mm
- Shape: Flat Round Dot Illuminated
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC
- Operation Type: Momentary/Latching
- Lamp Color: Red/Green/Yellow/Orange Blue/White(Could be bi-color LED)
- The Crust Material: Stainless Steel
- Protection Degree: IP65, IK10





HBS1-BGQ/HBGQ22,25,28,30



HBGQ22-11E/■/▲/●/○

- 安装孔尺寸: Ø22mm
- 头部形状: 平圆型环型带灯
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC
- 操作类型: 自复式/自锁式
- 灯珠颜色: 红/绿/黄/橙/蓝/白(双色可选)
- 外壳材料: 不锈钢
- 防护等级: IP65, IK10

- Mounting Hole Size: Ø22mm
- Shape: Flat Round Ring Illuminated
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC
- Operation Type: Momentary/Latching
- Lamp Color: Red/Green/Yellow/Orange Blue/White(Could be bi-color LED)
- The Crust Material: Stainless Steel
- Protection Degree: IP65, IK10

HBGQ22-11ET/■/▲/●/○

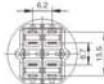
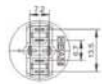
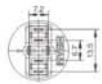
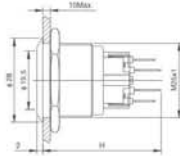
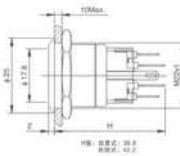
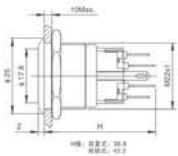
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- 头部形状: 平圆型环型带电源符号
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC
- 操作类型: 自复式/自锁式
- 灯珠颜色: 红/绿/黄/橙/蓝/白(双色可选)
- 外壳材料: 不锈钢
- 防护等级: IP65, IK10

- Mounting Hole Size: Ø22mm
- Shape: Flat Round Ring Illuminated Power Symbol
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC
- Operation Type: Momentary/Latching
- Lamp Color: Red/Green/Yellow/Orange Blue/White(Could be bi-color LED)
- The Crust Material: Stainless Steel
- Protection Degree: IP65, IK10

HBGQ25-□/■/▲/●/○

- 安装孔尺寸: Ø25mm
- 头部形状: 平圆型
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC/2NO 2NC
- 操作类型: 自复式/自锁式
- 外壳材料: 不锈钢
- 防护等级: IP65, IK10

- Mounting Hole Size: Ø25mm
- Shape: Flat Round
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC/2NO 2NC
- Operation Type: Momentary/Latching
- The Crust Material: Stainless Steel
- Protection Degree: IP65, IK10



HBS1-BGQ/HBGQ22,25,28,30 Series Metal Pushbutton



HBGQ25-□/■/▲/●/○

- 安装孔尺寸: Ø25mm
- 头部形状: 平圆型单点带灯
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC/2NO 2NC
- 操作类型: 自复式/自锁式
- 灯珠颜色: 红/绿/黄/橙/蓝/白(双色可选)
- 外壳材料: 不锈钢
- 防护等级: IP65, IK10

- Mounting Hole Size: Ø25mm
- Shape: Flat Round Dot Illuminated
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC/2NO 2NC
- Operation Type: Momentary/Latching
- Lamp Color: Red/Green/Yellow/Orange Blue/White(Could be bi-color LED)
- The Crust Material: Stainless Steel
- Protection Degree: IP65, IK10

HBGQ25-□E/■/▲/●/○

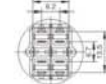
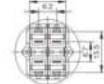
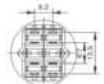
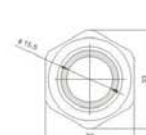
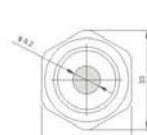
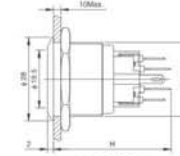
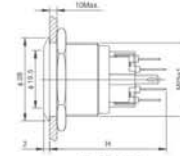
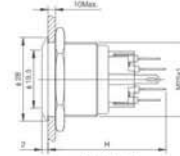
- 安装孔尺寸: Ø25mm
- 头部形状: 平圆型环型带灯
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC/2NO 2NC
- 操作类型: 自复式/自锁式
- 灯珠颜色: 红/绿/黄/橙/蓝/白(双色可选)
- 外壳材料: 不锈钢
- 防护等级: IP65, IK10

- Mounting Hole Size: Ø25mm
- Shape: Flat Round Ring Illuminated
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC/2NO 2NC
- Operation Type: Momentary/Latching
- Lamp Color: Red/Green/Yellow/Orange Blue/White(Could be bi-color LED)
- The Crust Material: Stainless Steel
- Protection Degree: IP65, IK10

HBGQ25-□ET/■/▲/●/○

- 安装孔尺寸: Ø25mm
- 头部形状: 平圆型环型带电源符号
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC/2NO 2NC
- 操作类型: 自复式/自锁式
- 灯珠颜色: 红/绿/黄/橙/蓝/白(双色可选)
- 外壳材料: 不锈钢
- 防护等级: IP65, IK10

- Mounting Hole Size: Ø25mm
- Shape: Flat Round Ring Illuminated Power Symbol
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC/2NO 2NC
- Operation Type: Momentary/Latching
- Lamp Color: Red/Green/Yellow/Orange Blue/White(Could be bi-color LED)
- The Crust Material: Stainless Steel
- Protection Degree: IP65, IK10



HBS1-BGQ/HBGQ22,25,28,30



HBGQ28-□/■/□

- 安装孔尺寸: Ø28mm
- 头部形状: 平圆形
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC/2NO 2NC
- 操作类型: 自复式/自锁式
- 外壳材料: 不锈钢
- 防护等级: IP65, IK10

- Mounting Hole Size: Ø28mm
- Shape: Flat Round
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC/2NO 2NC
- Operation Type: Momentary/Latching
- The Crust Material: Stainless Steel
- Protection Degree: IP65, IK10

HBGQ28-□E/■/▲/△/□

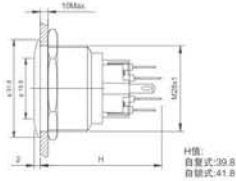
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- 头部形状: 平圆形环刻带灯
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC/2NO 2NC
- 操作类型: 自复式/自锁式
- 灯珠颜色: 红/绿/黄/蓝/白(双色可选)
- 外壳材料: 不锈钢
- 防护等级: IP65, IK10

- Mounting Hole Size: Ø28mm
- Shape: Flat Round Ring Illuminated
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC/2NO 2NC
- Operation Type: Momentary/Latching
- Lamp Color: Red/Green/Yellow/Orange Blue/White(Could be bi-color LED)
- The Crust Material: Stainless Steel
- Protection Degree: IP65, IK10

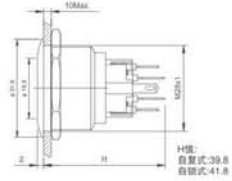
HBGQ30-□/■/□

- 安装孔尺寸: Ø30mm
- 头部形状: 平圆形
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC/2NO 2NC
- 操作类型: 自复式/自锁式
- 外壳材料: 不锈钢
- 防护等级: IP65, IK10

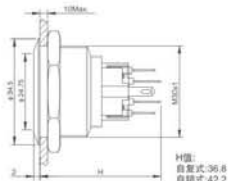
- Mounting Hole Size: Ø30mm
- Shape: Flat Round
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC/2NO 2NC
- Operation Type: Momentary/Latching
- The Crust Material: Stainless Steel
- Protection Degree: IP65, IK10



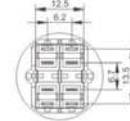
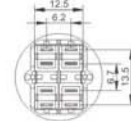
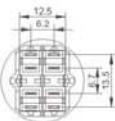
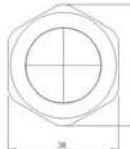
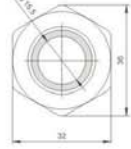
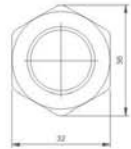
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自锁式-41.8



H型: 自复式-39.8  
自锁式-41.8



H型: 自复式-36.8  
自锁式-42.2



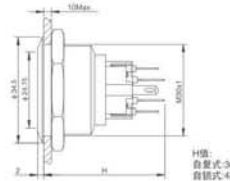
HBS1-BGQ/HBGQ22,25,28,30 Series Metal Pushbutton



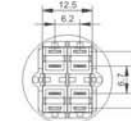
HBGQ30-□D/■/▲/□

- 安装孔尺寸: Ø30mm
- 头部形状: 平圆形带点带灯
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC/2NO 2NC
- 操作类型: 自复式/自锁式
- 灯珠颜色: 红/绿/黄/蓝/白(双色可选)
- 外壳材料: 不锈钢
- 防护等级: IP65, IK10

- Mounting Hole Size: Ø30mm
- Shape: Flat Round Dot Illuminated
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC/2NO 2NC
- Operation Type: Momentary/Latching
- Lamp Color: Red/Green/Yellow/Orange Blue/White(Could be bi-color LED)
- The Crust Material: Stainless Steel
- Protection Degree: IP65, IK10



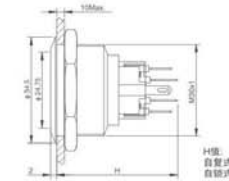
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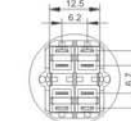
HBGQ30-□E/■/▲/□

- 安装孔尺寸: Ø30mm
- 头部形状: 平圆形环刻带灯
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC/2NO 2NC
- 操作类型: 自复式/自锁式
- 灯珠颜色: 红/绿/黄/蓝/白(双色可选)
- 外壳材料: 不锈钢
- 防护等级: IP65, IK10

- Mounting Hole Size: Ø30mm
- Shape: Flat Round Ring Illuminated
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC/2NO 2NC
- Operation Type: Momentary/Latching
- Lamp Color: Red/Green/Yellow/Orange Blue/White(Could be bi-color LED)
- The Crust Material: Stainless Steel
- Protection Degree: IP65, IK10



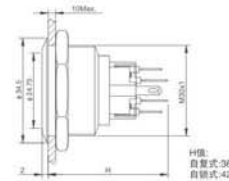
H型: 自复式-36.8  
自锁式-42.2



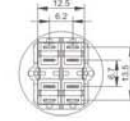
HBGQ30-□ET/■/▲/□

- 安装孔尺寸: Ø30mm
- 头部形状: 平圆形环刻带电源符号
- 开关额定值: 5A/250VAC
- 开关组合: 1NO 1NC/2NO 2NC
- 操作类型: 自复式/自锁式
- 灯珠颜色: 红/绿/黄/蓝/白(双色可选)
- 外壳材料: 不锈钢
- 防护等级: IP65, IK10

- Mounting Hole Size: Ø30mm
- Shape: Flat Round Ring Illuminated Power Symbol
- Switch Rating: 5A/250VAC
- Contact Configuration: 1NO 1NC/2NO 2NC
- Operation Type: Momentary/Latching
- Lamp Color: Red/Green/Yellow/Orange Blue/White(Could be bi-color LED)
- The Crust Material: Stainless Steel
- Protection Degree: IP65, IK10



H型: 自复式-36.8  
自锁式-42.2





# DAU

HBS0GQ  
METAL BUTTON SERIES

Mounting hole size: Ø22.025mm;  
Strong Metal texture and elegant appearance design;  
Rated voltage:380 VAC, Rated current: 10A;  
Head(above the panel mount)could be IP65 waterproof, IK10 explosion-proof.







型号说明 Model Explanation



性能参数 Parameters

额定绝缘电压 UI Rated insulation voltage	AC660V	表面防爆等级 Explosion proof grade	IK10(针对金属材料)
约定发热电流 Ith Conventional heating current	10A	防护等级 Degree of Protection	IP 65
环境温度 Operating Temperature	-40°C~+80°C	操作压力 Operating Pressure	3~5N
接触电阻 Contact Resistance	≤50MΩ	操作行程 Operating Stroke	3mm
绝缘电阻 Insulation Resistance	≥1000MΩ	螺母扭矩 Screw Torque	5~14N
机械寿命 Mechanical Life	≥1000,000次	外壳 Shell material	黄铜镀镍/不锈钢 Nickel-plated Brass/Stainless Steel
电气寿命 Electrical Life	≥50,000次	材质 Material	按键 Press key material 不锈钢 Stainless steel 底座 Base material 塑料底座 Plastic base 触点 Contact material 银合金 Silver alloy
开关结构 Contact Type	双断点快动触点 Double-break fast-motion changeover contact		
开关组合 Contact Configuration	1NO 1NC / 2NO 2NC / 3NO 3NC		

触点参数 Contact Ratings

额定使用电压 Rated voltage	24V	120V	240V	380V
AC 电阻性负载(AC-12)	10A	10A	6A	2A
(50/60Hz) 电感性负载(AC-15)	10A	6A	3A	1.9A
DC 电阻性负载(DC-12)	8A	2.2A	1.1A	-
电感性负载(DC-13)	4A	1.1A	0.55A	-

最小适用负载 [参考值] = 3V AC/DC - 5mA (可使用范围取决于使用条件和负载类型) 触点为银触点。

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	6V~220V
额定电流 Rated Current	约15mA about 15mA
发光颜色 Color	R G 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
Za			具有四个端子的双断点快动转换触点开关 Double break snap-action changeover contacts switch with four terminals.

安装拆卸方法 Installation



HBS0GQ22F-□/■/◎

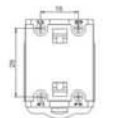
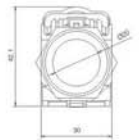
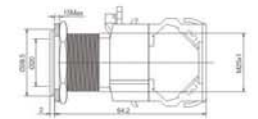
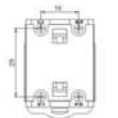
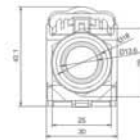
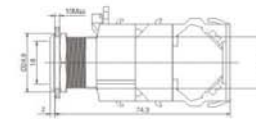
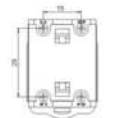
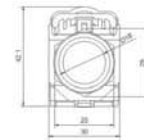
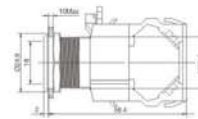
- 安装孔尺寸: Ø22mm
- 头部形状: 平圆形
- 开关额定值: 10A/380VAC
- 开关组合: 1NO 1NC / 2NO 2NC / 3NO 3NC
- 操作类型: 自复式/自锁式
- 外壳材料: 黄铜镀镍/不锈钢
- 防护等级: IP65, IK10
- Mounting Hole Size: Ø22mm
- Shape: Flat Round
- Switch Rating: 10A/380VAC
- Contact Configuration: 1NO 1NC / 2NO 2NC / 3NO 3NC
- Operation Type: Momentary/Latching
- The Crust Material: Nickel-plated Brass/ Stainless Steel
- Protection Degree: IP65, IK10

HBS0GQ22F-□E/■/△/▲/◎

- 安装孔尺寸: Ø22mm
- 头部形状: 平圆形环形带灯
- 开关额定值: 10A/380VAC
- 开关组合: 1NO 1NC / 2NO 2NC / 3NO 3NC
- 操作类型: 自复式/自锁式
- 灯珠颜色: 红/绿/黄/蓝/白
- 外壳材料: 黄铜镀镍/不锈钢
- 防护等级: IP65, IK10
- Mounting Hole Size: Ø22mm
- Shape: Flat Round Ring Illuminated
- Switch Rating: 10A/380VAC
- Contact Configuration: 1NO 1NC / 2NO 2NC / 3NO 3NC
- Operation Type: Momentary/Latching
- Lamp Color: Red/Green/Yellow/Orange Blue/White
- The Crust Material: Nickel-plated Brass/ Stainless Steel
- Protection Degree: IP65, IK10

HBS0GQ25F-□/■/◎

- 安装孔尺寸: Ø25mm
- 头部形状: 平圆形
- 开关额定值: 10A/380VAC
- 开关组合: 1NO 1NC / 2NO 2NC / 3NO 3NC
- 操作类型: 自复式/自锁式
- 外壳材料: 不锈钢
- 防护等级: IP65, IK10
- Mounting Hole Size: Ø25mm
- Shape: Flat Round
- Switch Rating: 10A/380VAC
- Contact Configuration: 1NO 1NC / 2NO 2NC / 3NO 3NC
- Operation Type: Momentary/Latching
- The Crust Material: Nickel-plated Brass/ Stainless Steel
- Protection Degree: IP65, IK10





HBS0GQ25F-□E/■/▲/◎

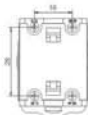
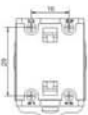
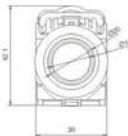
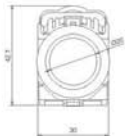
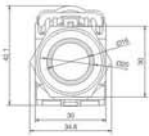
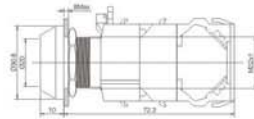
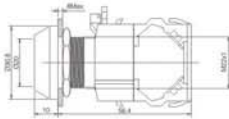
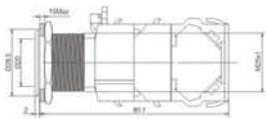
- 安装孔尺寸: Ø25mm
- 头部形状: 半圆形环状带灯
- 开关额定值: 10A/380VAC
- 开关组合: 1NO 1NC / 2NO 2NC / 3NO 3NC
- 操作类型: 自复式/自锁式
- 灯珠颜色: 红/绿/黄/橙/蓝/白
- 外壳材料: 不锈钢
- 防护等级: IP65, IK10
- Mounting Hole Size: Ø25mm
- Shape: Flat Round Ring Illuminated
- Switch Rating: 10A/380VAC
- Contact Configuration: 1NO 1NC / 2NO 2NC / 3NO 3NC
- Operation Type: Momentary/Latching
- Lamp Color: Red/Green/Yellow/Orange/Blue/White
- The Crust Material: Nickel-plated Brass/ Stainless Steel
- Protection Degree: IP65, IK10

HBS0GQ22DB-□E/■/▲/◎

- 安装孔尺寸: Ø22mm
- 头部形状: 平圆形
- 开关额定值: 5A/250VAC
- 开关组合: 2NO 2NC
- 操作类型: 自复式/自锁式
- 外壳材料: 锌合金
- 防护等级: IP65, IK10
- Mounting Hole Size: Ø22mm
- Shape: Flat Round
- Switch Rating: 5A/250VAC
- Contact Configuration: 2NO 2NC
- Operation Type: Momentary/Latching
- The Crust Material: Nickel-plated Brass/ Stainless Steel
- Protection Degree: IP65, IK10

HBS0GQ22DB-□E/■/▲/◎

- 安装孔尺寸: Ø22mm
- 头部形状: 半圆形环状带灯
- 开关额定值: 5A/250VAC
- 开关组合: 2NO 2NC
- 操作类型: 自复式/自锁式
- 灯珠颜色: 红/绿/黄/橙/蓝/白
- 外壳材料: 锌合金
- 防护等级: IP65, IK10
- Mounting Hole Size: Ø22mm
- Shape: Flat Round Ring Illuminated
- Switch Rating: 5A/250VAC
- Contact Configuration: 2NO 2NC
- Operation Type: Momentary/Latching
- Lamp Color: Red/Green/Yellow/Orange/Blue/White
- The Crust Material: Nickel-plated Brass/ Stainless Steel
- Protection Degree: IP65, IK10



安装效果图 Install Renderings



产品外观 Appearance	产品名称 Name	适用孔径 Diameter	产品外观 Appearance	产品名称 Name	适用孔径 Diameter
	防水、防尘罩 Waterproof, Dustproof Cover	所有孔径 All Diameter		HBS1-AGQ 快速安装连接件 Quick connector	所有孔径 All Diameter
	保护盖 Protective cover	Ø19 Ø22		HBGQ22 快速安装连接件 Quick connector	Ø22
	防护罩 Protective cover	Ø22		HBGQ25 快速安装连接件 Quick connector	Ø25
	警示圈 Warning ring	Ø16 Ø22		金属防水按钮盒 (孔数可定制) Metal button box (Hole number can be customized)	所有孔径 All Diameter
	保护罩 Protective cover	Ø22		防水按钮盒(白灰/白黄) (孔数可定制) Water proof button box (White-grey/ White-yellow) (Hole number can be customized)	Ø22
	面板塞 Panel plug	Ø16 Ø22 Ø25		防水按钮盒(橙黑/黑白) (孔数可定制) Water proof button box (Orange-black/ Black-white) (Hole number can be customized)	Ø22
	变径圈 Diagonal circle	Ø16 Ø22 Ø25		防水按钮盒 (孔数可定制) Water proof button box (Hole number can be customized)	Ø16
	标牌框 Symbol frame	Ø16 Ø22 Ø25 Ø30		门禁牌 Door control panel	Ø16 Ø19
	HBS0GQ 系列灯箱 LED Base	Ø22 Ø25		门禁牌 Door control panel	所有孔径 All Diameter



# IP Protection Degree Explanation



## 第一位数码(防止固体异物进入)

The first digital(to prevent the entry of solid foreign objects)

IP	要求 Requirement	举例 Example
0	无防护 Unprotected	
1	直径50mm的球型物体不得完全进入,不得触及危险部件,如手指。 50mm diameter spherical objects may not enter, and not touch the dangerous parts. Such as the arm.	
2	直径12.5mm的球型物体不得完全进入,铰接试插与危险部件有足够的间隙,如手指。 Diameter 12.5mm spherical objects must not enter, hinged test means and dangerous parts have sufficient clearance. Such as a finger.	
3	直径2.5mm的试具不得进入,如工具。 Allowed to enter the trial with 2.5mm in diameter. Such as tools.	
4	直径1mm的试具不得进入,如金属丝。 1mm in diameter test with will not be allowed to enter. Such as metal wire.	
5	允许有限的灰尘进入(没有有害的沉积)。 Allow limited dust to enter (no harmful deposits).	
6	完全防止灰尘进入。 Completely prevent dust from entering.	

## 第二位数码(防止进水造成有害影响)

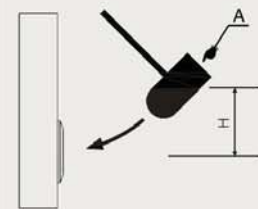
Second digital (to prevent water harmful effects)

IP	简述 Briefly	举例 Example	防水 Waterproof
0	无防护 Unprotected	无 No	无防护 Unprotected
1	水进入少量许水,允滴防防止垂直下。 Prevent the vertically falling drops of water to allow a small amount of water to enter.		垂直滴水 Vertical drips of water
2	防止当外壳在15°范围内倾斜时垂直下落滴水,允许少量水进入。 Prevent the shell in the range of 15° tilted vertically falling drops of water to allow a small amount of water to enter.		15°滴水与垂直面成 And the vertical plane of 15° drips
3	防止与垂直面成60°范围内淋水,允许少量水进入。 Prevent vertical to 60° range of watering, allow a small amount of water to enter.		少量淋水 A small amount of water spray
4	防止任何方向的溅水,允许少量水进入。 Splashing water to prevent any direction, allowing a small amount of water to enter.		任何方向的溅水 Any direction of the splashing
5	防止喷水,允许少量水进入。 To prevent water spray, allowing a small amount of water to enter.		任何方向的喷水 Water spray in any direction
6	防止强烈喷水,允许少量水进入。 Prevent strong water spray, allowing a small amount of water to enter.		任何方向的强烈喷水 Water spray in any direction
7	防止15mm~1m深的浸水影响。 Prevent the impact of 15mm~1m deep soaking.		短时间浸水 Short-term flooding
8	防止在有压力下长期浸水。 Prevent long-term im mersion in water under pressure.		持续浸水 Continuous im mersion in water

## 外壳防护等级说明 Crust Protection Degree Explanation

防护等级 Protection Degree	锤质量A Hammer Quality A	锤实初始高度H H:The Hammer initial height H	撞击能量 Hit capacity
IK01	150g	10cm	0.15J
IK02	200g	10cm	0.20J
IK03	250g	15cm	0.35J
IK04	250g	20cm	0.50J
IK05	350g	20cm	0.70J
IK06	250g	40cm	1J
IK07	500g	40cm	2J
IK08	1.25kg	40cm	5J
IK09	2.50kg	40cm	10J
IK10	50kg	40cm	20J

撞击示意图 Hit diagram



说明  
Explanation

外壳的相同部位在受到3次相应等级能量的机械撞击后,不使开关受到有害影响。  
The same parts of the shell by three times the energy of the appropriate level of mechanical shock, do not make the switch to be adversely affected.

符合标准 Meet the standards: GB/T20138-2006, IEC62262:2002  
采用试验标准 The experimental standard: GB/T2423.55-2006, IEC60068-2-75:1997

# Identifies Examples



## 文字标识 Text identity

分闸	合闸	启动	停止	打开	关闭	上升	下降	开	关
1	2	3	4	5	6	7	8	9	10
复位	故障	试验	电源	手动	自动	事故	备用	投入	切除
11	12	13	14	15	16	17	18	19	20
ON	OFF	UP	DOWN	STOP	START	OPEN	COLSE	RESET	FAULT
21	22	23	24	25	26	27	28	29	30

## 数字及符号 Numbers and symbols

1	2	3	4	5	6	7	8	9	0
31	32	33	34	35	36	37	38	39	40
▲	▼	#	*	>	+	-	△	⚠	⏻
41	42	43	44	45	46	47	48	49	50

## ISO符号 ISO Symbols

51 直线移动 51 Linear Movement	52 转动 52 Turn	53 启动 53 Start	54 停止 54 Stop	55 启动停止 55 Start/Stop	56 点动 56 Jog
57 泵 57 Pump	58 冷却泵 58 Chilled Water Pump	59 润滑泵 59 Lubrication pump	60 液压泵 60 Hydraulic pump	61 自动或半自动循环 Automatic or semi-automatic cycle	62 限位直线移动 Limit linear movement

## 特殊符号 Special Symbols

63	64	65	66	67	68

注: 以上图标符号均需定制。  
Note: The above symbols need to be customized.