








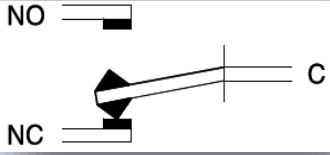
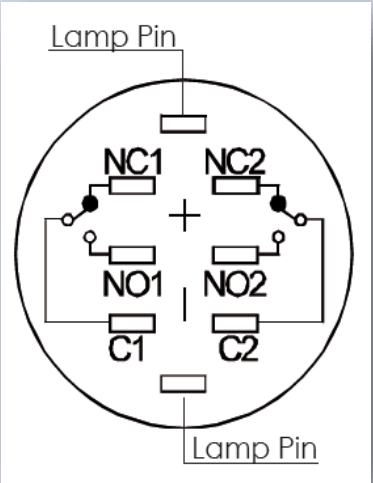
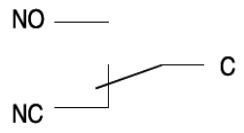
HBS1 AY AF AJ


mounting hole : Φ 16


Order Code - Configurazione di un modello

Configura un pulsante o un interruttore facendo uso della seguente simbologia :

|  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|
| Fronte Front Shape | Contatti Contact configuration | Modalità di funzionamento Operation type | Selezione Operation position of selector and Key-Lock switch | Colore Led color | Volt Led Led voltage | Grado IP Protective Degree |
| Y : round F : square J : rectangular M : mushroom DF : big square DJ : big rectangle | 11 : 1NO 1NC 22 : 2NO 2NC | D : indicator light Z : self-lock button Y : key button X : select button TS : push lock screw button The momentary type is without letter | Indicate selector and Key-lock Position 2 : two position 3 : three position --- 1 :maintained 2 : reset at right 3 :reset at left 4 : full reset | R Red G Green Y Yellow O Orange B Blue W White | 6 12 24 110 220 | IP40 (IP67)* * Su richiesta * On demand |

| Description - Descrizione | Figura | |
|--|---|---|
| Diagramm each single contact Schema elettrico (singolo contatto) Se doppio, il contatto è ripetuto |  |  |
| Symbol Simbolo |  | |
| Nota : Diagramm is referred for one single contact Riferito ad ogni singolo contatto | Can be configured two sets of switches: C1 and C2 (C1 = 11 1NCNO C2 = 22 2NONC) . +/- pins are led terminals Possono essere configurati due serie di contatti C1 singolo e C2 doppio : (C1 = 11 1NONC C2 = 22 2NONC) I terminali +/- appartengono al diodo led. | |

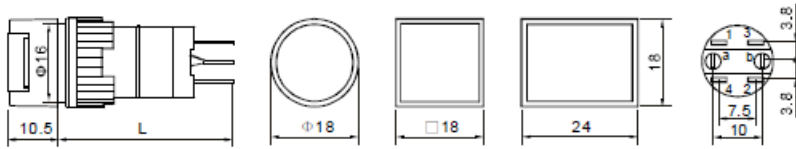
| | | | | |
|--------------|---|----------|----------------------------------|----------------------------|
| LampType | LED lamp(AC/DC) | | | Lamp Circuit Diagram |
| LEDColor |  | | | |
| Life | 40000hours(Reference) | | | |
| RatedVoltage | AC/DC6V | AC/DC12V | AC/DC110V | |
| | AC/DC24V | AC/DC36V | AC/DC220V | |
| RatedCurrent | About15mA | | About3mA | |
| Dropping Way | Innerresistance | | Outerresistance when using6Vlamp | |



Using AC/DC led lamp. Terminals have no difference of anode and cathode.
 Non c'è differenza di polarità ai terminali del led. Collegando una resistenza esterna si può adattare il funzionamento del led ad una tensione superiore : ad esempio il led interno è di 5V. Con una resistenza esterna da 1K il led può funzionare a 12V.

HBS1 AY AF AJ mounting hole : $\Phi 16$

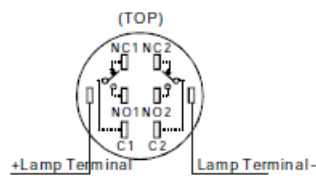
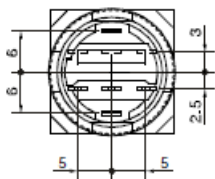
Shape and Dimensions



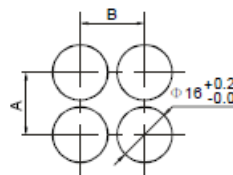
| Type | L |
|--------------------|------|
| Monopole(1NO, 1NC) | 36mm |
| Dipole(2NO, 2NC) | 44mm |

Bottom View

Terminal Arrangement



Installation Dimensions



| Category | A | B |
|-----------------|-----------------------|-----------------------|
| Round | $\approx 18\text{mm}$ | $\approx 18\text{mm}$ |
| Square | $\approx 18\text{mm}$ | $\approx 18\text{mm}$ |
| Rectangular | $\approx 18\text{mm}$ | $\approx 24\text{mm}$ |
| Mushroom | $\approx 24\text{mm}$ | $\approx 24\text{mm}$ |
| Big square | $\approx 24\text{mm}$ | $\approx 24\text{mm}$ |
| Big rectangular | $\approx 18\text{mm}$ | $\approx 24\text{mm}$ |

Lamp Ratings

| Lamp Type | AC LED Lamp (Standard) | | | Neon Lamp | | | | |
|---------------|------------------------|----------|-----------|--------------------|--------|---|---|---|
| | AC/DC6V | AC/DC12V | AC/DC24V | AC110V | AC220V | | | |
| Rated Voltage | AC/DC110V | | AC/DC220V | | | | | |
| Cover Color: | R | G | Y | O | B | W | R | G |
| Life | About 40,000 hours | | | About 20,000 hours | | | | |

Note: the lamp contains a current-limiting resistor inside and doesn't need external connection.

DC LED lamp, dual-color LED lamp and other voltages can be customized.

Nell'ordine specificare :

■ = contatti ▲ = colore ▲ = led tensione

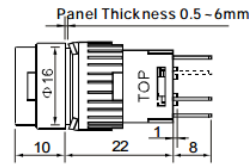


HBS1 AF AY AJ mounting hole : $\Phi 16$

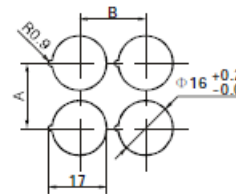


HBS1AY ■ ▲ ▲

- Mounting hole size : 16mm
- Switch rating : 5A 250Vac1
- Contact configuration : 1 - 2 x NONC
- Operation type : Momentary - Latching
- The crust material : Plastic
- Protection degree : IP40
- Operating 2 Position



Installation Dimensions



| type | A | B |
|-----------------|--------|--------|
| Round | ≅ 18mm | ≅ 18mm |
| Square | ≅ 18mm | ≅ 18mm |
| Rectangular | ≅ 18mm | ≅ 24mm |
| Mushroom | ≅ 24mm | ≅ 24mm |
| Big square | ≅ 24mm | ≅ 24mm |
| Big rectangular | ≅ 18mm | ≅ 24mm |



HBS1AF ■ ▲ ▲

- Mounting hole size : 16mm
- Switch rating : 5A 250Vac1
- Contact configuration : 1 - 2 x NONC
- Operation type : Momentary - Latching
- The crust material : Plastic
- Protection degree : IP40
- Illuminated R/G/Y/O/B/W
- Operating 2 Position

■ = contatti ▲ = colore ▲ = tensione

| | HBS1AY | HBS1AF |
|----------------------------|----------------------------|----------------------------|
| Terminal Type | Pin Terminal (2.8 x 0.5mm) | Pin Terminal (2.8 x 0.5mm) |
| Switch specifications PF=1 | Ith: 5A / Ui: 250VAC1 | Ith: 5A / Ui: 250VAC1 |
| Contact Resistance (mΩ) | ≤ 50 | ≤ 50 |
| Insulation Resistance (MΩ) | ≥ 100 | ≥ 100 |
| Dielectric Strength (VAC) | 2000 | 2000 |
| Operating Temperature | -25°C ~ +55°C | -20°C ~ +55°C |
| Mechanical Life (times) | > 1.000.000 | > 1.000.000 |
| Electrical Life (times) | > 30.000 | > 30.000 |
| Panel Thickness (mm) | 1 ~ 6 | 1 ~ 6 |
| Torque (Nm) | 5 ~ 14 | 5 ~ 14 |
| Operating Pressure (N) | about 0,3 | about 0,3 |
| Protection Degree | IP40 (IP65) | IP40 (IP65) |
| Contact | Silver CdO | Silver CdO |
| Button | SPDT – DPDT | SPDT – DPDT |
| Case | Plastic | Plastic |
| Base | PBT | PBT |
| Rated Voltage (V) | 6/12/24/110/220 | 6/12/24/110/220 |
| Color | R G Y O B W | R G Y O B W |

Material

Lamp
Parameter

HBS1 AY AF AJ

mounting hole : Φ 16



HBS1AJ ■ ▲ ▲

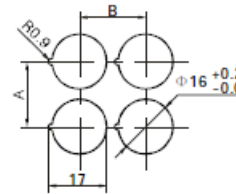


HBS1AY11TS ▲ ▲ Mushroom

- Mounting hole size : 16mm
- Switch rating : 5A 250Vac1
- Contact configuration : 1 - 2 x NONC
- Operation type : Momentary - Latching
- The crust material : Plastic
- Protection degree : IP40
- Operating 2 Position

- Mounting hole size : 16mm
- Switch rating : 5A 250Vac1
- Contact configuration : 1 - 2 x NONC
- Operation type : Momentary - Latching
- The crust material : Plastic
- Protection degree : IP40
- Operating 2 Position

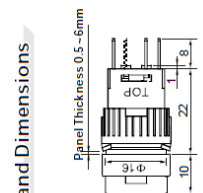
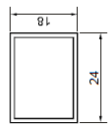
Installation Dimensions



| type | A | B |
|-----------------|--------|--------|
| Round | ≥ 18mm | ≥ 18mm |
| Square | ≥ 18mm | ≥ 18mm |
| Rectangular | ≥ 18mm | ≥ 24mm |
| Mushroom | ≥ 24mm | ≥ 24mm |
| Big square | ≥ 24mm | ≥ 24mm |
| Big rectangular | ≥ 18mm | ≥ 24mm |

■ = contatti ▲ = colore ▲ = tensione

| | HBS1AJ | HBS1AY11TS |
|----------------------------|---|----------------------------|
| Terminal Type | Pin Terminal (2.8 x 0.5mm) | Pin Terminal (2.8 x 0.5mm) |
| Switch specifications PF=1 | Ith: 5A / Ui: 250VAC1 | Ith: 5A / Ui: 250VAC1 |
| Contact Resistance (mΩ) | ≤ 50 | ≤ 50 |
| Insulation Resistance (MΩ) | ≥ 100 | ≥ 100 |
| Dielectric Strength (VAC) | 2000 | 2000 |
| Operating Temperature | -25°C ~ +55°C | -25°C ~ +55°C |
| Mechanical Life (times) | > 1.000.000 | > 1.000.000 |
| Electrical Life (times) | > 30.000 | > 30.000 |
| Panel Thickness (mm) | 1 ~ 6 | 1 ~ 6 |
| Torque (Nm) | 5 ~ 14 | 5 ~ 14 |
| Operating Pressure (N) | about 0,3 | about 0,3 |
| Protection Degree | IP40 (IP65) | IP40 (IP65) |
| Contact | Silver CdO | Silver CdO |
| Button | SPDT | SPDT |
| Case | Plastic | Plastic |
| Base | PBT | PBT |
| Rated Voltage (V) | | |
| Color | R G Y O B W | |



Shape and Dimensions

Material

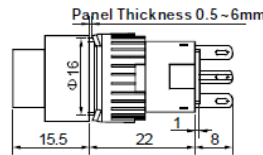
Lamp Parameter

HBS1-A Selector mounting hole : $\Phi 16$

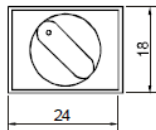


HBS1AY-X ◆ ■ ▲ ▲

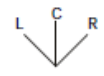
- Mounting hole size : 16mm
- Switch rating : 5A 250Vac1
- Contact configuration : 1 x NONC 2 x NONC
- Operation type : 2 – 3 Position Selector
- The crust material : Plastic
- Protection degree : IP40 (IP65)
- Operating 90° 2 Position



Shape and Dimensions



90° 2 Position



45° 3 Position



HBS1AY11XD2 ◆ ■ ▲ ▲

- Mounting hole size : 16mm
- Switch rating : 5A 250Vac1
- Contact configuration : 1 x NONC 2 x NONC
- Operation type : 2 – 3 Position Selector
- The crust material : Plastic
- Protection degree : IP40 (IP65)
- Illuminated R/G/Y/O/B/W
- Operating 90° 2 Position

◆ = Posizione ■ = contatti ▲ = colore ▲ = tensione

| | HBS1AY-X | HBS1AY-XD ▲ ▲ | Material |
|----------------------------|---|---|-------------------|
| Terminal Type | Pin Terminal (2.8 x 0.5mm) | Pin Terminal (2.8 x 0.5mm) | |
| Switch specifications PF=1 | Ith: 5A / Ui: 250VAC1 | Ith: 5A / Ui: 250VAC1 | |
| Contact Resistance (mΩ) | ≤ 50 | ≤ 50 | |
| Insulation Resistance (MΩ) | ≥ 100 | ≥ 100 | |
| Dielectric Strength (VAC) | 2000 | 2000 | |
| Operating Temperature | -25°C ~ +55°C | -20°C ~ +55°C | |
| Mechanical Life (times) | > 1.000.000 | > 1.000.000 | |
| Electrical Life (times) | > 30.000 | > 30.000 | |
| Panel Thickness (mm) | 1 ~ 6 | 1 ~ 6 | |
| Torque (Nm) | 5 ~ 14 | 5 ~ 14 | |
| Operating Pressure (N) | about 0,3 | about 0,3 | |
| Protection Degree | IP40 (IP65) | IP40 (IP65) | |
| Contact | Silver CdO | Silver CdO | |
| Button | Key lock - Selector | Key lock - Selector | |
| Case | Plastic | Plastic | |
| Base | PBT | PBT | |
| Rated Voltage (V) | 6/12/24/110/220 | 6/12/24/110/220 | Lamp Parameter |
| Color | R G Y O B W | R G Y O B W | |

HBS1-A Selector mounting hole : Φ 16



HBS1AF-X ◆ ■ ▲ ▲

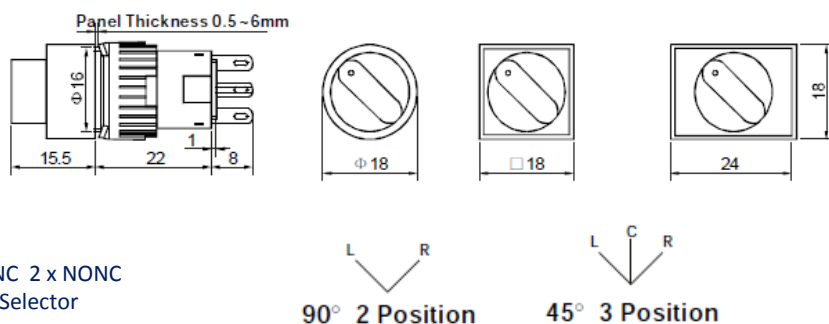
- Mounting hole size : 16mm
- Switch rating : 5A 250Vac1
- Contact configuration : 1 x NONC 2 x NONC
- Operation type : 2 – 3 Position Selector
- The crust material : Plastic
- Protection degree : IP40
- Operating 90° 2 Position



HBS1AJ-X ◆ ■ ▲ ▲

- Mounting hole size : 16mm
- Switch rating : 5A 250Vac1
- Contact configuration : 1 x NONC 2 x NONC
- Operation type : 2 – 3 Position Selector
- The crust material : Plastic
- Protection degree : IP40
- Operating 90° 2 Position

Shape and Dimensions



◆ = Posizione ■ = contatti ▲ = colore ▲ = tensione

| | HBS1AF-X | HBS1AJ-X | Material |
|----------------------------|----------------------------|----------------------------|----------|
| Terminal Type | Pin Terminal (2.8 x 0.5mm) | Pin Terminal (2.8 x 0.5mm) | |
| Switch specifications PF=1 | Ith: 5A / Ui: 250VAC1 | Ith: 5A / Ui: 250VAC1 | |
| Contact Resistance (mΩ) | ≤ 50 | ≤ 50 | |
| Insulation Resistance (MΩ) | ≥ 100 | ≥ 100 | |
| Dielectric Strength (VAC) | 2000 | 2000 | |
| Operating Temperature | -25°C ~ +55°C | -20°C ~ +55°C | |
| Mechanical Life (times) | > 1.000.000 | > 1.000.000 | |
| Electrical Life (times) | > 30.000 | > 30.000 | |
| Panel Thickness (mm) | 1 ~ 6 | 1 ~ 6 | |
| Torque (Nm) | 5 ~ 14 | 5 ~ 14 | |
| Operating Pressure (N) | about 0,3 | about 0,3 | |
| Protection Degree | IP40 (IP65) | IP40 (IP65) | |
| Contact | Silver CdO | Silver CdO | |
| Button | Key lock - Selector | Key lock - Selector | |
| Case | Plastic | Plastic | |
| Base | PBT | PBT | |
| Rated Voltage (V) | 6/12/24/110/220 | 6/12/24/110/220 | |
| | R G Y O B W | R G Y O B W | |

HBS1-A Key Selector switch mounting hole : $\Phi 16$



HBS1AY-Y ◆ ■

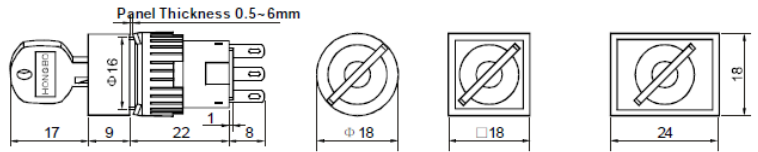


HBS1AF-Y ◆ ■

- Mounting hole size : 16mm
- Switch rating : 5A 250Vac1
- Contact configuration : 1 x NONC 2 x NONC
- Operation type : 2 – 3 Position Selector
- The crust material : Plastic
- Protection degree : IP40
- Operating 90° 2 Position

- Mounting hole size : 16mm
- Switch rating : 5A 250Vac1
- Contact configuration : 1 x NONC 2 x NONC
- Operation type : 2 – 3 Position Selector
- The crust material : Plastic
- Protection degree : IP40
- Operating 90° 2 Position

Shape and Dimensions



◆ = Posizione ■ = contatti

| | HBS1AY11Y | HBS1AF11F | Material |
|----------------------------|----------------------------|----------------------------|----------|
| Terminal Type | Pin Terminal (2.8 x 0.5mm) | Pin Terminal (2.8 x 0.5mm) | |
| Switch specifications PF=1 | Ith: 5A / Ui: 250VAC1 | Ith: 5A / Ui: 250VAC1 | |
| Contact Resistance (mΩ) | ≤ 50 | ≤ 50 | |
| Insulation Resistance (MΩ) | ≥ 100 | ≥ 100 | |
| Dielectric Strength (VAC) | 2000 | 2000 | |
| Operating Temperature | -25°C ~ +55°C | -20°C ~ +55°C | |
| Mechanical Life (times) | > 1.000.000 | > 1.000.000 | |
| Electrical Life (times) | > 30.000 | > 30.000 | |
| Panel Thickness (mm) | 1 ~ 6 | 1 ~ 6 | |
| Torque (Nm) | 5 ~ 14 | 5 ~ 14 | |
| Operating Pressure (N) | about 0,3 | about 0,3 | |
| Protection Degree | IP40 (IP65) | IP40 (IP65) | |
| Contact | Silver CdO | Silver CdO | |
| Button | Key lock - Selector | Key lock - Selector | |
| Case | Plastic | Plastic | |
| Base | PBT | PBT | |
| Rated Voltage (V) | | | |

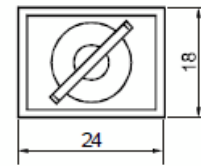
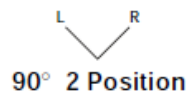
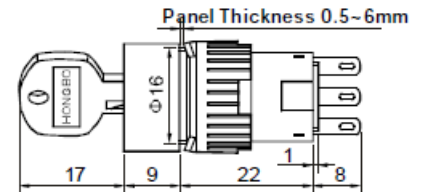
HBS1-A Key Selector switch mounting hole : $\Phi 16$



HBS1AJ-Y ◆ ■

- Mounting hole size : 16mm
- Switch rating : 5A 250Vac1
- Contact configuration : 1 x NONC 2 x NONC
- Operation type : 2 – 3 Position Selector
- The crust material : Plastic
- Protection degree : IP40
- Operating 90° 2 Position

Shape and Dimensions












◆ = Posizione ■ = contatti

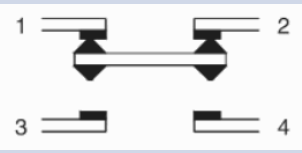
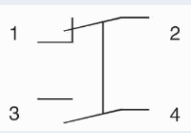
| | HBS1AJ-Y | |
|----------------------------|----------------------------|-----------------|
| Terminal Type | Pin Terminal (2.8 x 0.5mm) | |
| Switch specifications PF=1 | Ith: 5A / Ui: 250VAC1 | |
| Contact Resistance (mΩ) | ≤ 50 | |
| Insulation Resistance (MΩ) | ≥ 100 | |
| Dielectric Strength (VAC) | 2000 | |
| Operating Temperature | -25°C ~ +55°C | |
| Mechanical Life (times) | > 1.000.000 | |
| Electrical Life (times) | > 30.000 | |
| Panel Thickness (mm) | 1 ~ 6 | |
| Torque (Nm) | 5 ~ 14 | |
| Operating Pressure (N) | about 0,3 | |
| Protection Degree | IP40 (IP65) | |
| Contact | Silver CdO | Material |
| Button | Key lock - Selector | |
| Case | Plastic | |
| Base | PBT | |
| Rated Voltage (V) | | |

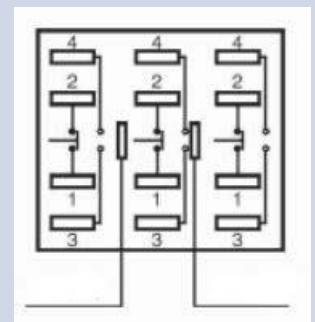
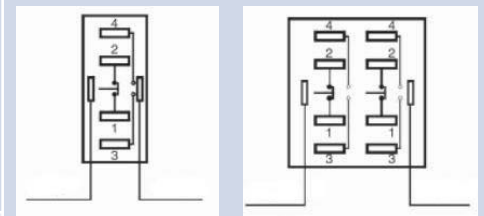
HBS1-BY SERIES mounting hole : Φ 16mm


Order Code - Configurazione di un modello

Configura un pulsante o un interruttore impiegando la seguente simbologia :

|  |  |  |  |  |  |  |
|---|--|--|--|---|---|---|
| Fronte Front Shape | Contatti Contact configuration | Led Lamp Type | Contatti Oper. Type | Colore Led color | Volt Led Led volt. | Materiale Material |
| F : flat round H : H round C : C concave G : H concave | 11 : 1NO 1NC 22 : 2NO 2NC 33 : 3NO 3 NC S : screw terminal J : solder terminal  Action of selector and Key - lock button Azione del selettore 1 Keep 3 Full- momentary | D : dot led E : ring led  Operation position of selector and key - lock button : Posizione del selettore 2 Position 2 3 Position 3 | Z : latching X : selector Y : key-lock M : buzzer SM : flash buz. No letter : Push button Pulsante | R Red G Green Y Yellow O Orange B Blue W White | 6 12 24 36 110 220 | N = Nickel plated brass S = Stainless Steel A = Zn-Al Alloy P = Plastic |

| Description - Descrizione | Figura |
|---|--|
| Diagramm each single contact Schema elettrico (singolo contatto) |  |
| Symbol Simbolo |  |
| Nota : Diagramm is referred for one single contact Riferito ad ogni singolo contatto | Can be configured two sets of switches: C1 and C2 (C1 = 11 1NCNO C2 = 22 2NONC) . +/- pins are led terminals Possono essere configurati due serie di contatti, C1 singolo e C2 doppio : (C1 = 11 1NONC C2 = 22 2NONC) I terminali +/- appartengono al diodo led. |



| | | | | |
|--------------|---|----------|----------------------------------|----------------------------|
| LampType | LED lamp(AC/DC) | | | Lamp Circuit Diagram |
| LEDColor |  | | | |
| Life | 40000hours(Reference) | | | |
| RatedVoltage | AC/DC6V | AC/DC12V | AC/DC110V | |
| | AC/DC24V | AC/DC36V | AC/DC220V | |
| RatedCurrent | About15mA | | About3mA | |
| Dropping Way | Innerresistance | | Outerresistance when using6Vlamp | |



Using AC/DC led lamp. Terminals have no difference of anode and cathode.
 Non c'è differenza di polarità ai terminali del led. Collegando una resistenza esterna si può adattare il funzionamento del led ad una tensione superiore : ad esempio il led interno è di 5V. Con una resistenza esterna da 1K il led può funzionare a 12V.

HBS1-BY SERIES mounting hole : Φ 16mm



HBS1-BYD



HBS1-BY Selector



HBS1-BFD

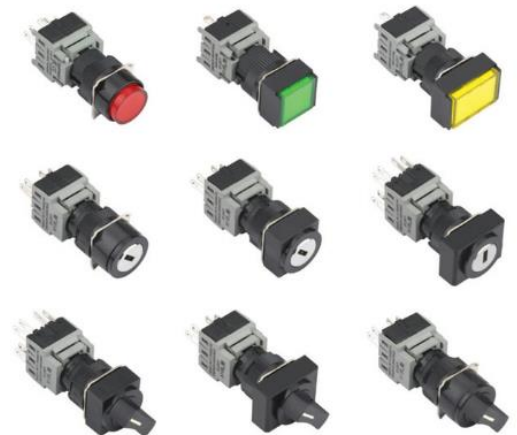


HBS1-BJD



Basic Info

- Model NO.: HBS1-Bxx-11, 11Z, 22, 22Z, 33, 33Z
- Number of Switch: Double Control Switch
- Kind: Double-pole on-off Switch
- Detection Method: Retro-reflective Mode
- Certification: CE, RoHS, ISO9001
- Rating Value: 5A/250V AC
- Terminal Type: Pin Terminal
- Contact: Silver Alloy
- Head Color: Red/Green/Blue/White/Orange/Yellow
- Operation Type: Momentary/Latching
- Illuminated Type: Head Illuminated
- Specification: CE, ROHS, ISO9001



HBS1-BY-D SERIES mounting hole : Φ 16mm

HBS1-BD-11DR12



- Mounting hole size : 16mm
- Switch rating : 5A 230Vac
- Contact configuration : 1 x NONC 2 x NONC 3 x NONC ■
- Operation type : Momentary - ■
- The crust material : Plastic
- Protection degree : IP40 – IP65 (special made)
- Front Head Shape Round ▲ ▲

■ = op. contatti ▲ = colore ▲ = V Led ■ = conf. contatti

HBS1-BD-11DZR12



- Mounting hole size : 16mm
- Switch rating : 5A 230Vac
- Contact configuration : 1 x NONC 2 x NONC 3 x NONC ■
- Operation type : Latching ■
- The crust material : Plastic
- Protection degree : IP40 - IP65 (special made)
- Front Head Shape Round ▲ ▲

| ■ ▲ ▲ ■ | | HBS1-BD-11DR12 (HBS1-BD ■ ▲ ▲) | HBS1-BD-11DZR12 (HBS1-BD ■ ▲ ▲) |
|------------------------------|-------------------|-------------------------------------|--------------------------------------|
| Terminal Type | | Pin terminal | Pin terminal |
| Switch Type | | Momentary 11NO1NC/2NO2NC | Latching 11NO1NC/2NO2NC |
| Switch Specifications | | Ith : 5A/250VAC | Ith : 5A/250VAC |
| Contact Resistance (mΩ) | | ≤ 50 | ≤ 50 |
| Insulation Resistance (MΩ) | | ≥ 100 | ≥ 100 |
| Dielectric Strength (VAC) | | 2000 | 2000 |
| Operating Temperature | | -25°C +55°C | -25°C +55°C |
| Mechanical Life (times) | | > 1.000.000 | > 1.000.000 |
| Torque /Nm) | | 5-14 | 5-14 |
| Operating Pressure (N) | | About 2,5 | About 2,5 |
| Operating Stroke (mm) | | About 3 | About 3 |
| Protection Degree | | IP40 - IP67 (special made) | IP40- IP67 (special made) |
| Material | Contact | Silver Alloy | Silver Alloy |
| | Button | Plastic | Plastic |
| | Case | Plastic | Plastic |
| | Base | PBT | PBT |
| Lamp | Type | AC Led 40.000 hours | AC Led 40.000 hours |
| | Rated Voltage (V) | AC/DC 6/12/24/36/110/220 | AC/DC 6/12/24/36/110/220 |
| | Color | R G Y O B W | R G Y O B W |

HBS1-BF-D SERIES mounting hole : Φ 16mm

HBS1-BF-11DR12



- Mounting hole size : 16mm
- Switch rating : 5A 230Vac
- Contact configuration : 1 x NONC 2 x NONC 3 x NONC ■
- Operation type : Momentary - ■
- The crust material : Plastic
- Protection degree : IP40 – IP65 (special made)
- Front Head Shape Square ▲ ▲

■ = op. contatti ▲ = colore ▲ = V Led ■ = conf. contatti

HBS1-BF-11DZR12



- Mounting hole size : 16mm
- Switch rating : 5A 230Vac
- Contact configuration : 1 x NONC 2 x NONC 3 x NONC ■
- Operation type : Latching ■
- The crust material : Plastic
- Protection degree : IP40 - IP65 (special made)
- Front Head Shape Square ▲ ▲

| ■ ▲ ▲ ■ | | HBS1-BF-11DR12 (HBS1-BF ■ ▲ ▲) | HBS1-BF-11DZR12 (HBS1-BF ■ ▲ ▲) |
|--------------------------------------|-------------------|-------------------------------------|--------------------------------------|
| Terminal Type | | Pin terminal | Pin terminal |
| Switch Type | | Momentary 11NO1NC/2NO2NC | Latching 11NO1NC/2NO2NC |
| Switch Specifications | | Ith : 5A/250VAC | Ith : 5A/250VAC |
| Contact Resistance (m Ω) | | \leq 50 | \leq 50 |
| Insulation Resistance (M Ω) | | \geq 100 | \geq 100 |
| Dielectric Strength (VAC) | | 2000 | 2000 |
| Operating Temperature | | -25°C +55°C | -25°C +55°C |
| Mechanical Life (times) | | > 1.000.000 | > 1.000.000 |
| Torque /Nm) | | 5-14 | 5-14 |
| Operating Pressure (N) | | About 2,5 | About 2,5 |
| Operating Stroke (mm) | | About 3 | About 3 |
| Protection Degree | | IP40 - IP67 (special made) | IP40- IP67 (special made) |
| Material | Contact | Silver Alloy | Silver Alloy |
| | Button | Plastic | Plastic |
| | Case | Plastic | Plastic |
| | Base | PBT | PBT |
| Lamp | Type | AC Led 40.000 hours | AC Led 40.000 hours |
| | Rated Voltage (V) | AC/DC 6/12/24/36/110/220 | AC/DC 6/12/24/36/110/220 |
| | Color | R G Y O B W | R G Y O B W |

HBS1-BJ-D SERIES mounting hole : Φ 16mm

1-BGQ11ER-S



- Mounting hole size : 16mm
- Switch rating : 5A 230Vac
- Contact configuration : 1 x NONC 2 x NONC 3 x NONC ■
- Operation type : Momentary - ■
- The crust material : Plastic
- Protection degree : IP40 – IP65 (special made)
- Front Head Shape Rectangle ▲ ▲

■ = op. contatti ▲ = colore ▲ = V Led ■ = conf. contatti

HBS1-BJ-11DZR12



- Mounting hole size : 16mm
- Switch rating : 5A 230Vac
- Contact configuration : 1 x NONC 2 x NONC 3 x NONC ■
- Operation type : Latching ■
- The crust material : Plastic
- Protection degree : IP40 - IP65 (special made)
- Front Head Shape Rectangle ▲ ▲

| ■ ▲ ▲ ■ | | HBS1-BJ-11DR12 (HBS1-BJ ■ ■ ▲ ▲ ▲) | HBS1-BJ-11DZR12 (HBS1-BJ ■ ■ ▲ ▲ ▲) |
|--------------------------------------|-------------------|---|--|
| Terminal Type | | Pin terminal | Pin terminal |
| Switch Type | | Momentary 11NO1NC/2NO2NC | Latching 11NO1NC/2NO2NC |
| Switch Specifications | | Ith : 5A/250VAC | Ith : 5A/250VAC |
| Contact Resistance (m Ω) | | ≤ 50 | ≤ 50 |
| Insulation Resistance (M Ω) | | ≥ 100 | ≥ 100 |
| Dielectric Strength (VAC) | | 2000 | 2000 |
| Operating Temperature | | -25°C +55°C | -25°C +55°C |
| Mechanical Life (times) | | > 1.000.000 | > 1.000.000 |
| Torque /Nm) | | 5-14 | 5-14 |
| Operating Pressure (N) | | About 2,5 | About 2,5 |
| Operating Stroke (mm) | | About 3 | About 3 |
| Protection Degree | | IP40 - IP67 (special made) | IP40- IP67 (special made) |
| Material | Contact | Silver Alloy | Silver Alloy |
| | Button | Plastic | Plastic |
| | Case | Plastic | Plastic |
| | Base | PBT | PBT |
| Lamp | Type | AC Led 40.000 hours | AC Led 40.000 hours |
| | Rated Voltage (V) | AC/DC 6/12/24/36/110/220 | AC/DC 6/12/24/36/110/220 |
| | Color | R G Y O B W | R G Y O B W |

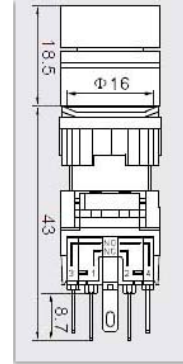
HBS1-BY SERIES mounting hole : Φ 16mm

HBS1-BY-xx/2



- Mounting hole size : 16mm
- Switch rating : 5A 230Vac
- Contact configuration : 1 x NONC 2 x NONC 3 x NONC ■
- Operation type : selector switch 2 position ◆
- The crust material : Plastic
- Protection degree : IP40 – IP65 (special made)
- Front Head Shape **Round**

◆ = posizioni ■ = conf. contatti



HBS1-BY-xx/3



- Mounting hole size : 16mm
- Switch rating : 5A 230Vac
- Contact configuration : 1 x NONC 2 x NONC 3 x NONC ■■
- Operation type : selector switch 3 position ◆
- The crust material : Plastic
- Protection degree : IP40 – IP65 (special made)
- Front Head Shape **Round**



| | | | |
|------------------------------|---------|-------------------------------------|-------------------------------------|
| ■ ◆ | | HBS1-BY-11/2 (HBS1-BYxx/2 ■ ◆) | HBS1-BY-11/3 (HBS1-BYxx/3 ■ ◆) |
| Terminal Type | | Pin terminal | Pin terminal |
| Switch Type | | Selector 11NO1NC/2NO2NC/3NO3NC | Selector 11NO1NC/2NO2NC/3NO3NC |
| Switch Specifications | | Ith : 5A/250VAC | Ith : 5A/250VAC |
| Contact Resistance (mΩ) | | ≤ 50 | ≤ 50 |
| Insulation Resistance (MΩ) | | ≥ 100 | ≥ 100 |
| Dielectric Strength (VAC) | | 2000 | 2000 |
| Operating Temperature | | -25°C +55°C | -25°C +55°C |
| Mechanical Life (times) | | > 1.000.000 | > 1.000.000 |
| Protection Degree | | IP40 - IP67 (special made) | IP40- IP67 (special made) |
| Material | Contact | Silver Alloy | Silver Alloy |
| | Button | Plastic | Plastic |
| | Case | Plastic | Plastic |
| | Base | PBT | PBT |
| Lamp | | | |
| | | | |
| | | | |

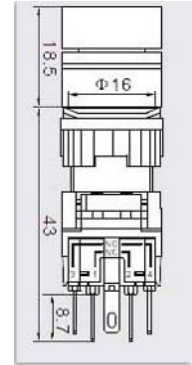
HBS1-BF SERIES mounting hole : Φ 16mm

HBS1-BF-xx/2



- Mounting hole size : 16mm
- Switch rating : 5A 230Vac
- Contact configuration : 1 x NONC 2 x NONC 3 x NONC ■
- Operation type : selector switch 2 position ◆
- The crust material : Plastic
- Protection degree : IP40 – IP65 (special made)
- Front Head Shape **Square**

◆ = posizioni ■ = conf. contatti



HBS1-BF-xx/3



- Mounting hole size : 16mm
- Switch rating : 5A 230Vac
- Contact configuration : 1 x NONC 2 x NONC 3 x NONC ■■
- Operation type : selector switch 3 position ◆
- The crust material : Plastic
- Protection degree : IP40 – IP65 (special made)
- Front Head Shape **Square**



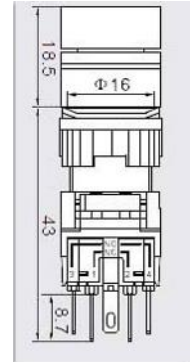
| ■ ◆ | | HBS1-BF-11/2 (HBS1-BFxx/2 ■ ◆) | HBS1-BF-11/3 (HBS1-BFxx/3 ■ ◆) |
|------------------------------|---------|-------------------------------------|-------------------------------------|
| Terminal Type | | Pin terminal | Pin terminal |
| Switch Type | | Selector 11NO1NC/2NO2NC/3NO3NC | Selector 11NO1NC/2NO2NC/3NO3NC |
| Switch Specifications | | Ith : 5A/250VAC | Ith : 5A/250VAC |
| Contact Resistance (mΩ) | | ≤ 50 | ≤ 50 |
| Insulation Resistance (MΩ) | | ≥ 100 | ≥ 100 |
| Dielectric Strength (VAC) | | 2000 | 2000 |
| Operating Temperature | | -25°C +55°C | -25°C +55°C |
| Mechanical Life (times) | | > 1.000.000 | > 1.000.000 |
| Protection Degree | | IP40 - IP67 (special made) | IP40- IP67 (special made) |
| Material | Contact | Silver Alloy | Silver Alloy |
| | Button | Plastic | Plastic |
| | Case | Plastic | Plastic |
| | Base | PBT | PBT |
| Lamp | | | |
| | | | |
| | | | |

HBS1-BJ SERIES mounting hole : Φ 16mm

HBS1-BJ-xx/2



- Mounting hole size : 16mm
- Switch rating : 5A 230Vac
- Contact configuration : 1 x NONC 2 x NONC 3 x NONC ■
- Operation type : selector switch 2 position ◆
- The crust material : Plastic
- Protection degree : IP40 – IP65 (special made)
- Front Head Shape **Rectangle**



◆ = posizioni ■ = conf. contatti

HBS1-BJ-xx/3



- Mounting hole size : 16mm
- Switch rating : 5A 230Vac
- Contact configuration : 1 x NONC 2 x NONC 3 x NONC ■
- Operation type : selector switch 3 position ◆
- The crust material : Plastic
- Protection degree : IP40 – IP65 (special made)
- Front Head Shape **Rectangle**



| ■ ◆ | | HBS1-BJ-11/2 (HBS1-BJxx/2 ■ ◆) | HBS1-BJ-11/3 (HBS1-BJxx/3 ■ ◆) |
|------------------------------|---------|-------------------------------------|-------------------------------------|
| Terminal Type | | Pin terminal | Pin terminal |
| Switch Type | | Selector 11NO1NC/2NO2NC/3NO3NC | Selector 11NO1NC/2NO2NC/3NO3NC |
| Switch Specifications | | Ith : 5A/250VAC | Ith : 5A/250VAC |
| Contact Resistance (mΩ) | | ≤ 50 | ≤ 50 |
| Insulation Resistance (MΩ) | | ≥ 100 | ≥ 100 |
| Dielectric Strength (VAC) | | 2000 | 2000 |
| Operating Temperature | | -25°C +55°C | -25°C +55°C |
| Mechanical Life (times) | | > 1.000.000 | > 1.000.000 |
| Protection Degree | | IP40 - IP67 (special made) | IP40- IP67 (special made) |
| Material | Contact | Silver Alloy | Silver Alloy |
| | Button | Plastic | Plastic |
| | Case | Plastic | Plastic |
| | Base | PBT | PBT |
| Lamp | | | |
| | | | |
| | | | |