

# Plastic Pushbuttons



HBS1 AY AF AJ

mounting hole :  $\Phi$  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
<b>Y</b> : round <b>F</b> : square <b>J</b> : rectangular <b>M</b> : mushroom <b>DF</b> : big square <b>DJ</b> : big rectangle	<b>11</b> : 1NO 1NC <b>22</b> : 2NO 2NC	<b>D</b> : indicator light <b>Z</b> : self-lock button <b>Y</b> : key button <b>X</b> : select button <b>TS</b> : push lock screw button The momentary type is without letter	<b>Indicate selector and Key-lock Position</b> <b>2</b> : two position <b>3</b> : three position --- <b>1</b> :maintained <b>2</b> : reset at right <b>3</b> :reset at left <b>4</b> : full reset	<b>R</b> Red <b>G</b> Green <b>Y</b> Yellow <b>O</b> Orange <b>B</b> Blue <b>W</b> White	<b>6</b> <b>12</b> <b>24</b> <b>110</b> <b>220</b>	<b>IP40</b> ( IP67 )* * Su richiesta * On demand

Description - Descrizione	Figura	
Diagramm each single contact Schema elettrico ( singolo contatto ) Se doppio, il contatto è ripetuto		
Symbol Simbolo		
<b>Nota :</b> 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.

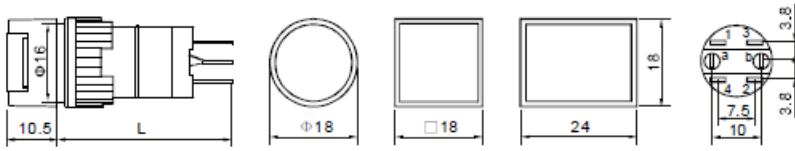
# Plastic Pushbuttons

*Parsic Italia*

HBS1 AY AF AJ

mounting hole :  $\Phi 16$

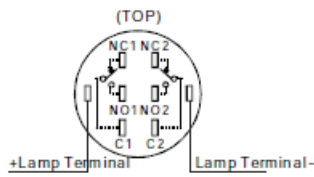
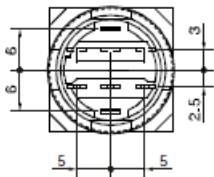
## Shape and Dimensions



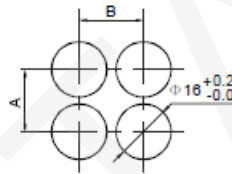
Type	L
Monopole(1NO, 1NC)	36mm
Dipole(2NO, 2NC)	44mm

## 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



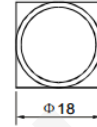
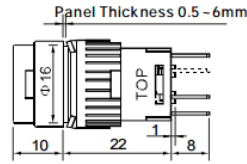
# Plastic Pushbuttons

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



HBS1AY ■ ▲ ▲

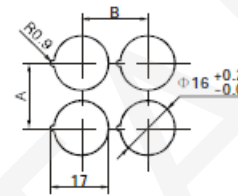
- Mounting hole size : 16mm
- Switch rating : 5A 250Vac1
- Contact configuration : 1 - 2 x NONC
- Operation type : Momentary - Latching
- The crust material : Plastic
- Protection degree : IP40
- Operating 2 Position



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

### 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

	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

# Plastic Pushbuttons

HBS1 AY AF AJ

mounting hole :  $\Phi$  16



HBS1AJ ■ ▲ ▲

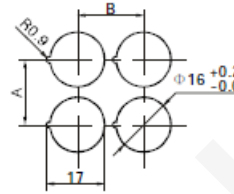


HBS1AY11TS ▲ ▲ Mushroom

- 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

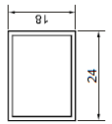
### Installation Dimensions



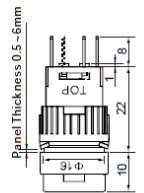
type	A	B
Round	≥ 18mm	≥ 18mm
Square	≥ 18mm	≥ 18mm
Rectangular	≥ 18mm	≥ 24mm
Mushroom	≥ 24mm	≥ 24mm
Big square	≥ 24mm	≥ 24mm
Big rectangular	≥ 18mm	≥ 24mm

■ = 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	<b>R G Y O B W</b>	



Shape and Dimensions



Material

Lamp Parameter

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



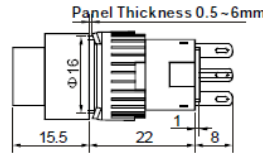
HBS1AY-X ◆ ■ ▲ ▲



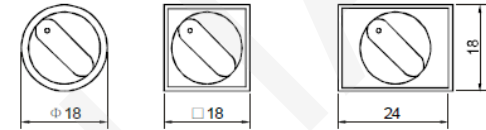
HBS1AY11XD2 ◆ ■ ▲ ▲

- 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 )
- 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 ( IP65 )
- Illuminated R/G/Y/O/B/W
- Operating 90° 2 Position



### Shape and Dimensions



◆ = 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 : $\Phi 16$



HBS1AF-X ◆◆▲▲▲

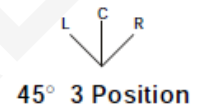
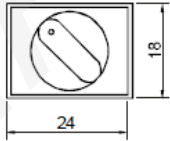
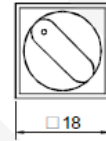
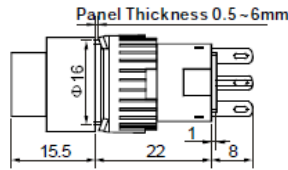
- Mounting hole size : 16mm
- Switch rating : 5A 250Vac1
- Contact configuration : 1 x NONC 2 x NONC
- Operation type : 2 – 3 Position Selector
- The crust material : Plastic
- Protection degree : IP40
- Operating 90° 2 Position



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
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

Material

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



HBS1AY-Y ◆ ■

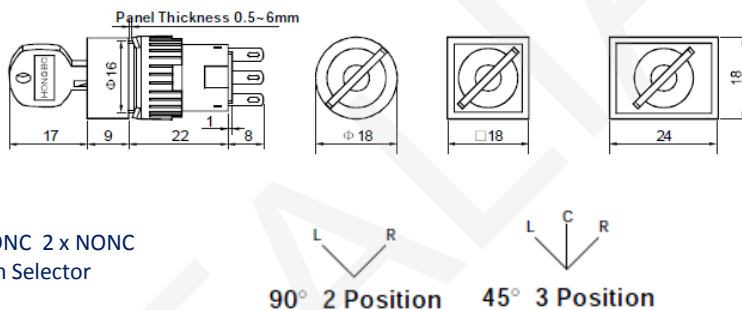
- Mounting hole size : 16mm
- Switch rating : 5A 250Vac1
- Contact configuration : 1 x NONC 2 x NONC
- Operation type : 2 – 3 Position Selector
- The crust material : Plastic
- Protection degree : IP40
- Operating 90° 2 Position



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

### Shape and Dimensions



<span style="color:red">◆</span> = Posizione <span style="color:blue">■</span> = contatti	HBS1AY11Y	HBS1AF11F	
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	<b>Material</b>
Button	Key lock - Selector	Key lock - Selector	
Case	Plastic	Plastic	
Base	PBT	PBT	
Rated Voltage (V)			

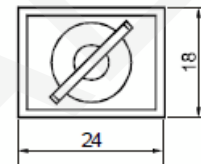
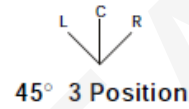
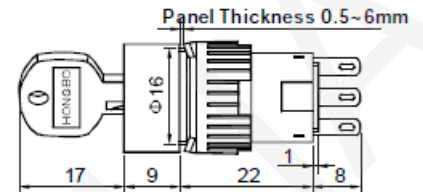
## HBS1-A Key Selector switch mounting hole : $\Phi 16$



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	<b>Material</b>
Button	Key lock - Selector	
Case	Plastic	
Base	PBT	
Rated Voltage (V)		