

# HPB5 Series

## momentary Push button

### HPB5 Series Push button

#### Product Overview

HPB5 series are suitable to industrial control circuit with AC 50Hz or 60Hz, 0~380V rated voltage and 0~220V DC operating voltage, used for the control of magnetic starter, contactor, relay and other electric circuit.

#### Specs

The product has two types: normal type and economical type, containing pilot lamp, pushbuttons, illuminated pushbuttons, mushroom push button, emergency pushbuttons, selector switches, key-lock switches, mushroom key-lock switches, double head switches, The installation hole is  $\Phi 22\text{mm}$ . It used in wide area.

#### Performance

Using high quality inflammable retard ing materials. Switch unit is separated independently, the insulating performance and antivibration is very well. The product meets standards of IEC60947-5-1, GB14048.5 etc.

#### Structure

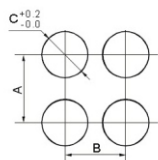
The switch unit is slow-break and self-cleaning. It uses modular combination mode and you can combine from one to eight switch units optional, so can make the product meet their requirement of many special control circuits. It can be connected more safely and installed firmly. Economical plastic type can be used in acid environment.

#### Protective Degree

The standard is IP40 and some types can reach IP67 with the seal cover.

#### Installation Dimensions

Panel thickness is 0.5~5mm



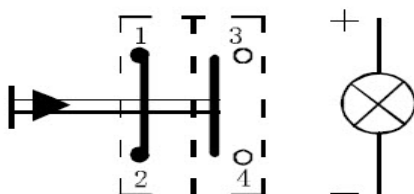
#### Specifications

Operating Temperature	- 25 ° C ~ +55 ° C (no freezing)	
Operating Humidity	45 Operating Humidity ~ 85%RH (no condensation)	
Operating Altitude	Installation on site can't be over 2000m above sea level.	
Contact Material	-silver -silver alloy -gold-clad silver, cladding thickness is 3 $\mu\text{m}$	
Contact Resistance	$\leq 50\text{m}$	
Insulation Resistance	$\geq 100\text{M}$	
Dielectric Strength	3000V, Alternating Current 50Hz	
Vibration Resistance	50Hz, Amplitude 1.0mm p-p	
Shock Resistance	$\geq 10\text{g}$	
Life	Mechanical	Momentary : $\geq 1,000,000$ times; alternate, selector : $\geq 500,000$ times; key-lock, emergency : $\geq 200,000$ times
	Electrical	50000 times $\geq$
Terminal	Screw terminal, connecting ability: Min : $1 \times 0.5\text{mm}$ , 2 Max : $2 \times 1.5\text{mm}$ or $1 \times 2.5\text{mm}$ 2 2 (with or without connecting link)	
Operation	Operation strength: 800gf ~ 2200gf, according to the quantity of switch units Operation travel : About 5.5mm (For push button type)	
Pollution Degree	3 degrees	

#### Switch Ratings

Rated Insulation Voltage	Ui: 660V					
Thermal Current	Ith: 10A					
Rated Voltage	24V	48V	110V	220V	380V	500V
Direct Current	10A	5A	2.2A	1.1A		
Alternating Current P.F=0.7			10A	6A	4A	2A

#### Switch Ratings



Switch code: 11  
1, 2 are normal closed;  
3, 4 are normal opened.

Type	A	B	C	Remarks
Normal,Key-lock	≥50mm	≥40mm	Φ22	1.Canbeusedin25mminstallationhole-withadiameterchangingcircle. 2.AandBareboththeminimumdimensions..
Lever	≥55mm	≥40mm		
Mushroom	≥50mm	≥50mm		
BigMushroom	≥70mm	≥70mm		

## Lamp Ratings

LampType	ACLEDLamp		
Rated Voltage	AC/DC6V	AC/DC12V	AC/DC24V
	AC110V	AC220V	AC380V
LampLife	40,000hours		
LampColor	<span style="color:red">R</span> <span style="color:green">G</span> <span style="color:yellow">Y</span> <span style="color:orange">O</span> <span style="color:blue">B</span> <span style="border:1px solid black; padding:0 2px;">W</span>		


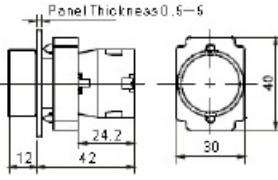

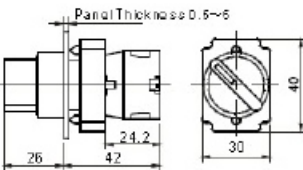
Note:1.The lamp contains current-limiting resistor inside and doesn't need connect outside..

2.The standard is using AC/DC LED lamp, DC LED lamp, dual-color LED lamp and other voltages can be customized if you need.

## Implication of Type

HPB5	☆	★	—	□	■	/	◇	◆	/	△	/	▲	/	◎
Code of series	Structure type: E plastic type E1 simple type No letter means metal head.	The front shape: J double head type: flat head with flat head. S double head type: flat head with big head. No letter means round	Contact Structure: 01 1NC 10 1NO 11 1NO1NC 22 2NO2NC Can be freely combined according to your needs.	Operating type: D pilot lamp Z alternate type X selector type XB lever type Y key-lock type M mushroom type TS emergency type No letter means momentary	◇ expresses selector and key-lock operating position: 2 two position 3 three position ◆ expresses operating type: 1 maintain 2 half return 3 self return	Color: R red G green Y yellow O orange B blue W white N black	Lamp Voltage (Please check the lamp rating)	Protective Degree: P IP65 FP IP67 No letter means IP40						

## Cutline of Normal Type

Shape	Operating Type	Type Number	Dimensions	Remarks
Flat Head 	latching style	HPB5 - □/△/◎		<span style="color:red">R</span> <span style="color:green">G</span> <span style="color:yellow">Y</span> <span style="color:orange">O</span> <span style="border:1px solid black; padding:0 2px;">B</span> <span style="border:1px solid black; padding:0 2px;">W</span> <span style="border:1px solid black; padding:0 2px;">N</span> ◎ Can't be used with lamp. ◎ Protective Degree: IP40/IP65, IP67 IP67 should be installed with seal cover.
Selector Switch 	L 90° position maintain L 90°2 position return L 45°3 position maintain L 45°3 position half return L 45°3 position self return	HPB5 - □X/21/◎ HPB5 - □X/23/◎ HPB5 - □X/31/◎ HPB5 - □X/32/◎ HPB5 - □X/33/◎		<span style="border:1px solid black; padding:0 2px;">N</span> ◎ Can't be used with lamp. ◎ Protective Degree: IP40, IP65