Illuminated Pushbutton Switches IP40/IP65/IP67   PB72 Series

Characteristics:

- The installation hole's diameter of the series pushbutton: Φ16mm.
- Every pushbutton can possess from one to four switch units.
- Use the gold-clad silver contact or silver contact.
- The front shape: Round (Φ18mm) Square (18x18mm) Rectangular (18x24mm)
- Many types are available: pilot lamp, pushbutton, illuminated pushbutton, selector switch, and keylock switch.
- IP Protective Degree: IP40, IP65, IP67

Specifications:

Operating Temperature	-25℃ to +55℃(no freezing)
Operating Humidity	45 to 85%RH (no condensation)
Contact material	—— silver —— silver CdO —— gold-clad silver
Contact pressure	≈0.3N (30g)
Contact Resistance	≤50mΩ
Insulation Resistance	≥100MΩ
Rated insulation voltage	250V, AC/DC
Dielectric Strength — Between contact and lamp terminals	2000V, AC 50Hz, 1min
Dielectric Strength — Between terminals of the same pole	1000V, AC 50Hz, 1min
Dielectric Strength — Between terminals of different pole	2000V, AC 50Hz, 1min
Vibration Resistance	50Hz, Amplitude 1.2mm p-p
Shock Resistance	≥10g in all three planes
Soldering Information	Less than 3s at 230℃
Life — Mechanical	1,000,000 times
Life — Electrical	≥50,000 times
Terminal	Diameter of welded wire: 2x 0.8mm max Area of copper wire: 0.75mm^2 max
Operating force	200gf~500gf (according to the quantity of switch units)
Operating travel	≈3mm (pushbutton)
IP Protective Degree	IP40, IP65, IP67

Switch Ratings :

Thermal Current (I_{th})	5A		
Rated Voltage	24V	125V（110V）	250V（220V）
Direct Current (DC)	2A	0.2A	0.1A
Alternating current (AC) P.F=1		5 A	3A
Alternating current (AC) P.F=0.7		3A	2A

Lamp Ratings :

Lamp Type	AC LED Lamp (Standard)			Neon Lamp	
Rated Voltage	AC/DC6V	AC/DC12V	AC/DC24V	AC110V	AC220V
	AC/DC110V	AC/DC220V			
Base Color	red, green, yellow, orange, blue, white			red, green	
Life	About 40000 hours			About 20000 hours	

Note: The lamp contains current-limiting resistor inside and doesn't need extenal connection.
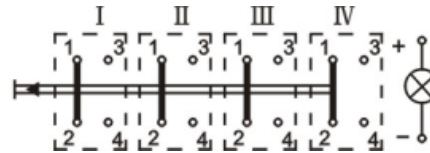DC LED lamp, dual-color LED lamp and other voltages can be customized.

Circuit Diagram :

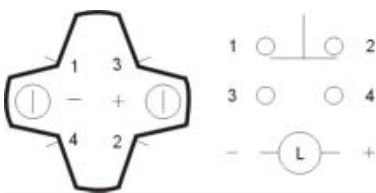Every pushbuttons can possess four switch units at most.
Specifications:
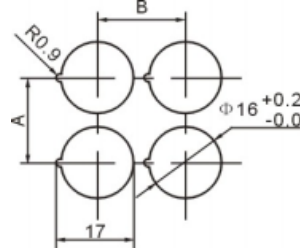Self-clear away dirt, quick-break switch system and can be used as DPDT switch.
Every switch unit also possesses a pair of NO contacts and a pair of NC contacts. Here is the circuit:

Bottom Preview

Installation Dimensions

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

How to order:

PB72 [1] [2] [3] [4] [5] [6] [7] [8]

[1] FRONT SHAPE:
- Y Round
- F Square
- J Rectangular
- M Mushroom
- DF Big Square
- DJ Big Rectangular

[2] CONTACT STRUCTURE:
- 11 1NO 1NC
- 22 2NO 2NC
- 33 3NO 3NC
- 44 4NO 4NC

[3] DERIVATIVE CODE:
- blank Momentary
- D Pilot Lamp
- Z Alternate Type
- Y Key Lock Type
- X Selector Type

[4] POSITION (for selector type & keylock type only):
- 2 Two Positions
- 3 Three Positions

[5] COLOR:
- C Red
- F Green
- E Yellow
- D Orange
- G Blue
- B White
- A Black

[6] LAMP RATINGS (see table above):
- free LED AC 12V (for example)
- text The specific rating of the lamp with illuminated button is included in the illuminated unit ratings form.

[7] TERMINATION:
- blank Weld Type
- JC Quick Connect Type

[8] IP PROTECTIVE DEGREE:
- blank IP40
- IP65 IP65
- IP67 IP67

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PB72 Pilot lamp

Product Cutline

Model number	PB72Y_D_	PB72F_D_	PB72J_D_
Shape	ROUND	SQUARE	RECTANGULAR
Remark	C Red F Green E Yellow D Orange G Blue B White A Black		

PB72 Pushbuttons, Illuminated Pushbuttons

Product Cutline

Shape	Contact Configuration	Operation Type	Type No.	Remarks
ROUND	1NO 1NC	Momentary	PB72Y11_	C Red F Green E Yellow D Orange G Blue B White A Black • Can be used with lamp • The black cover can't be used with the illuminated pushbuttons. • IP40,IP65,IP67 is allowable
		Alternate	PB72Y11Z_	
	2NO 2NC	Momentary	PB72Y22_	
		Alternate	PB72Y22Z_	
	3NO 3NC	Momentary	PB72Y33_	
		Alternate	PB72Y33Z_	
	4NO 4NC	Momentary	PB72Y44_	
		Alternate	PB72Y44Z_	
SQUARE	1NO 1NC	Momentary	PB72F11_	
		Alternate	PB72F11Z_	
	2NO 2NC	Momentary	PB72F22_	
		Alternate	PB72F22Z_	
	3NO 3NC	Momentary	PB72F33_	
		Alternate	PB72F33Z_	
	4NO 4NC	Momentary	PB72F44_	
		Alternate	PB72F44Z_	
RECTANGULAR	1NO 1NC	Momentary	PB72J11_	
		Alternate	PB72J11Z_	
	2NO 2NC	Momentary	PB72J22_	
		Alternate	PB72J22Z_	
	3NO 3NC	Momentary	PB72J33_	
		Alternate	PB72J33Z_	
	4NO 4NC	Momentary	PB72J44_	
		Alternate	PB72J44Z_	
MUSHROOM	1NO 1NC	Momentary	PB72M11_	C Red F Green E Yellow D Orange G Blue B White A Black • Can be used with lamp • The black cover can't be used with the illuminated pushbuttons. • IP40,IP65 is allowable
		Alternate	PB72M11Z_	
	2NO 2NC	Momentary	PB72M22_	
		Alternate	PB72M22Z_	
	3NO 3NC	Momentary	PB72M33_	
		Alternate	PB72M33Z_	
	4NO 4NC	Momentary	PB72M44_	
		Alternate	PB72M44Z_	

Illuminated Pushbutton Switches IP40/IP65/IP67   PB72 Series

BIG SQUARE	1NO 1NC	Momentary	PB72DF11_	**C** Red
		Alternate	PB72DF11Z_	**F** Green
	2NO 2NC	Momentary	PB72DF22_	**E** Yellow
		Alternate	PB72DF22Z_	**D** Orange
	3NO 3NC	Momentary	PB72DF33_	**G** Blue
		Alternate	PB72DF33Z_	**B** White
	4NO 4NC	Momentary	PB72DF44_	**A** Black
		Alternate	PB72DF44Z_	• Can be used with lamp
BIG RECTANGULAR	1NO 1NC	Momentary	PB72DJ11_	• The black cover can't be used with the illuminated pushbuttons.
		Alternate	PB72DJ11Z_	• IP40,IP65 is allowable
	2NO 2NC	Momentary	PB72DJ22_	
		Alternate	PB72DJ22Z_	
	3NO 3NC	Momentary	PB72DJ33_	
		Alternate	PB72DJ33Z_	
	4NO 4NC	Momentary	PB72DJ44_	
		Alternate	PB72DJ44Z_	

Shape & Dimensions
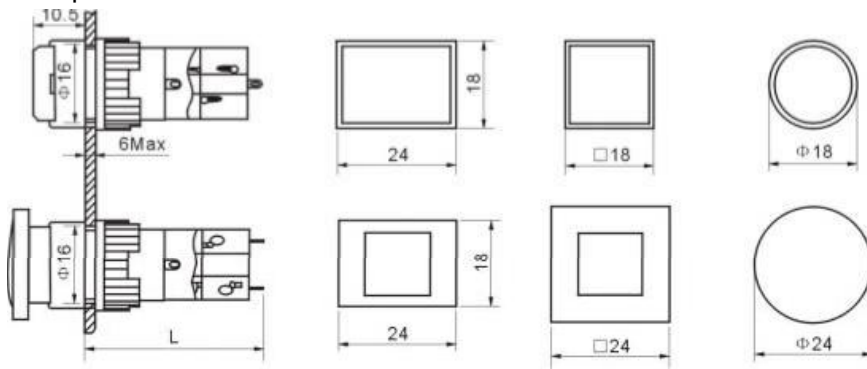
Category	L
Indicator	20mm
1NO, 1NC	29mm
2NO, 2NC	36.5mm
3NO, 3NC	44mm
4NO, 4NC	51.5mm

PB72 Selector Switches:
Product Cutline

Shape	Contact Configuration	Type No.	Remarks
ROUND	1NO 1NC	PB72Y11X2_	
	2NO 2NC	PB72Y22X2	
	3NO 3NC	PB72Y33X2	
	4NO 4NC	PB72Y44X2	
SQUARE	1NO 1NC	PB72F11X2_	**C** Red **F** Green **A** Black
	2NO 2NC	PB72F22X2	• Can be used with lamp
	3NO 3NC	PB72F33X2	• IP40 is allowable
	4NO 4NC	PB72F44X2	• The black cover can't be used with the illuminated
RECTANGULAR	1NO 1NC	PB72J11X2_	
	2NO 2NC	PB72J22X2	90° 2 Position Maintained.
	3NO 3NC	PB72J33X2	
	4NO 4NC	PB72J44X2	

Shape & Dimensions

Type	L
1NO, 1NC	29mm
2NO, 2NC	36.5mm
3NO, 3NC	44mm
4NO, 4NC	51.5mm

PB72 Key Lock Switches

Product Cutline

Shape	Contact Configuration	Type No.	Remarks
ROUND	1NO 1NC	PB72Y11Y2_	
	2NO 2NC	PB72Y22Y2	
	3NO 3NC	PB72Y33Y2	
	4NO 4NC	PB72Y44Y2	
SQUARE	1NO 1NC	PB72F11Y2_	90° 2 Position Maintained. • Two keys are supplied, the keys can be out in both position. • IP40 is allowable
	2NO 2NC	PB72F22Y2	
	3NO 3NC	PB72F33Y2	
	4NO 4NC	PB72F44Y2	
RECT ANGULAR	1NO 1NC	PB72J11Y2_	
	2NO 2NC	PB72J22Y2	
	3NO 3NC	PB72J33Y2	
	4NO 4NC	PB72J44Y2	

Shape & Dimensions

Type	L
1NO, 1NC	29mm
2NO, 2NC	36.5mm
3NO, 3NC	44mm
4NO, 4NC	51.5mm
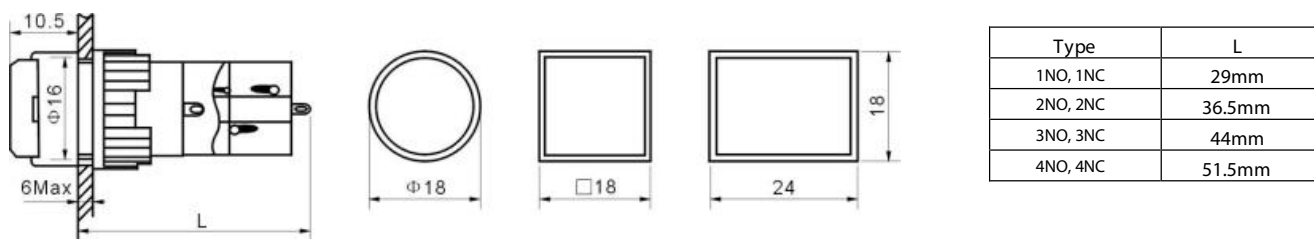
Pushbutton Switches

Illuminated Pushbutton Switches IP40/IP65/IP67　PB72 Series

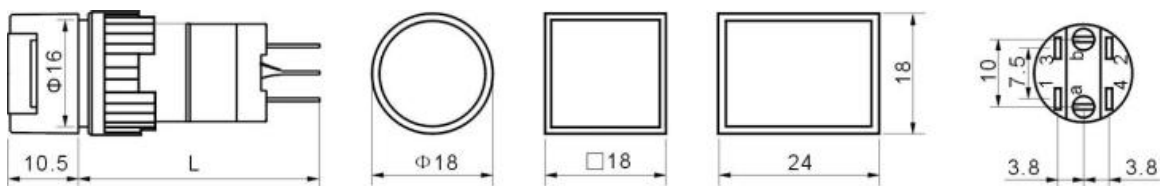### PB72 Pilot lamp, Pushbuttons and Illuminated Pushbuttons (JC: Quick Connect Type)

Product Cutline

Shape	Contact Configuration	Operation Type	Type No.	Remarks
ROUND	--	Pilot Lamp	PB72Y_D_JC_	
	1NO 1NC	Momentary	PB72Y11_JC	
		Alternate	PB72Y11Z_JC	
	2NO 2NC	Momentary	PB72Y22_JC	
		Alternate	PB72Y22Z_JC	
SQUARE	--	Pilot Lamp	PB72F_D_JC	**C** Red
	1NO 1NC	Momentary	PB72F11_JC	**F** Green
		Alternate	PB72F11Z_JC	**E** Yellow
	2NO 2NC	Momentary	PB72F22_JC	**D** Orange
		Alternate	PB72F22Z_JC	**G** Blue
RECTANGULAR	--	Pilot Lamp	PB72J_D_JC	**B** White
	1NO 1NC	Momentary	PB72J11_JC	**A** Black
		Alternate	PB72J11Z_JC	• Can be used with lamp
	2NO 2NC	Momentary	OB72J22_JC	• The black cover can't be used with the illuminated pushbuttons.
		Alternate	PB72J22Z_JC	• IP40,IP65,IP67 is allowable

Shape & Dimensions

Type	L
1NO, 1NC	36mm
2NO, 2NC	44mm