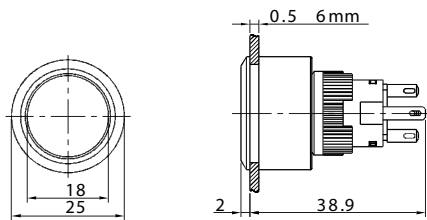
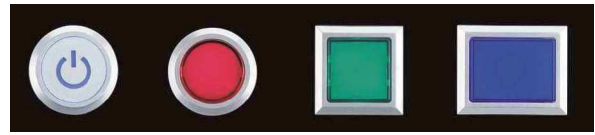


Pushbutton Switches

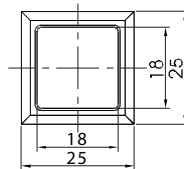
Illuminated Pushbutton Switches IP40/IP65

PB65 Series

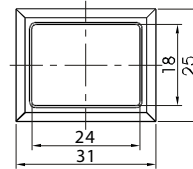
Standard Pushbutton Type



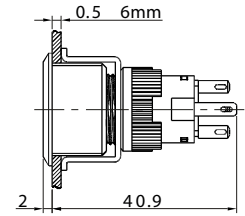
Round Type



Square Type



Rectangular Type



Round (Silvery Frame) (can be illuminated)



With Power Sign

Contact
-
1NO1NC
1NO1NC
2NO2NC
2NO2NC

Operating Type
Pilot Lamp
Momentary
Alternate
Momentary
Alternate

Part Number
PB65WYDT...
PB65WY11T...
PB65WY11ZT...
PB65WY22T...
PB65WY22ZT...

Round (Silvery Frame) (can be illuminated)



Contact
-
1NO1NC
1NO1NC
2NO2NC
2NO2NC

Operating Type
Pilot Lamp
Momentary
Alternate
Momentary
Alternate

Part Number
PB65WYD...
PB65WY11...
PB65WY11Z...
PB65WY22...
PB65WY22Z...

Square (Silvery Frame) (can be illuminated)



Contact
-
1NO1NC
1NO1NC
2NO2NC
2NO2NC

Operating Type
Pilot Lamp
Momentary
Alternate
Momentary
Alternate

Part Number
PB65WFD...
PB65WF11...
PB65WF11Z...
PB65WF22...
PB65WF22Z...

Rectangular (Silvery Frame) (can be illuminated)



Contact
-
1NO1NC
1NO1NC
2NO2NC
2NO2NC

Operating Type
Pilot Lamp
Momentary
Alternate
Momentary
Alternate

Part Number
PB65WJD...
PB65WJ11...
PB65WJ11Z...
PB65WJ22...
PB65WJ22Z...

How to order:

PB65

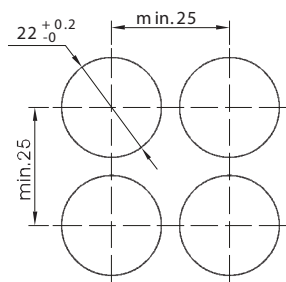
- | | | | | |
|--|--|--|---|--|
| <p>1 VARIETY:
P Black Frame
W Silvery Frame
blank TSB Emergency Type</p> <p>2 FRONT SHAPE:
Y Round (Ø25mm)
F Square (25x25mm)
J Rectangular (25x31mm)
blank TSB Emergency Type</p> <p>3 CONTACT STRUCTURE:
11 1NO 1NC
22 2NO 2NC
blank Pilot Lamp</p> | <p>4 DERIVATIVE CODE:
blank Momentary
D Pilot Lamp
Z Alternate Type
Y Key Lock Type
X Selector Type
TS Emergency Type
TSB Emergency Short Body Type</p> | <p>5 ILLUMINATED SYMBOL:
blank No Symbol
T Power Sign
(only for round silvery frame)</p> <p>6 OPERATING POSITION (for selector type & keylock type only):
21 2 Positions maintain
23 2 Positions return
31 3 Positions maintain
32 3 Positions right return
34 3 Positions left return
33 3 Positions return
blank Pushbutton & Emergency Switches</p> | <p>7 COLOR:
C Red
F Green
E Yellow
D Orange
G Blue
B White
A Black</p> | <p>8 LAMP RATINGS (see page 2):
free text 12V (for example)
N No Lamp</p> <p>9 IP PROTECTIVE DEGREE:
blank IP40
P IP65</p> |
|--|--|--|---|--|

Pushbutton Switches

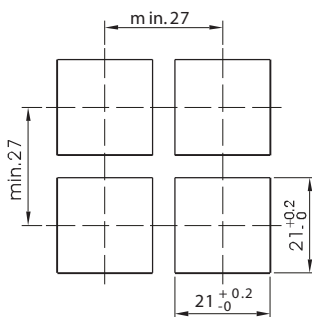
Illuminated Pushbutton Switches IP40/IP65

PB65 Series

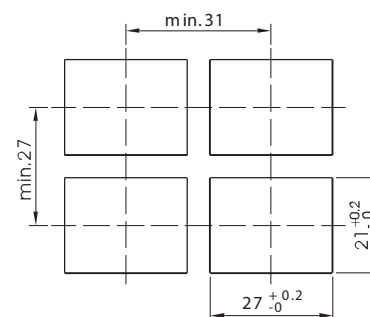
MOUNTING HOLE



Round Type



Square Type



Rectangular Type

SPECIFICATIONS

Switch Ratings

Rated Insulation Voltage Ui			250V			
Thermal Current I _{th}			5A			
Rated Voltage			12V	24V	110V	220V
Rated Current	Alternating Current 50/60Hz	Resistive load	-	-	1A	0.5A
		inductive load	-	-	0.7A	0.5A
	Direct Current	resistive load	1A	1A	0.2A	-
		inductive load	0.7A	0.7A	0.1A	-
Contact Material			Silver Alloy			

Minimum load: 3V AC/DC 5mA (reference) (range of use depend on operation environment and load type)

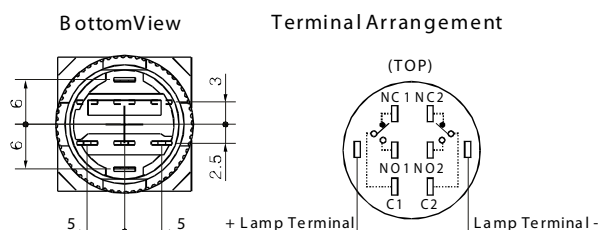
Switch Characteristics

- > Operating Temperature Range: -25°C to +55°C (no freezing)
- > Humidity: 45 to 85% RH (no condensation)
- > Contact Resistance: 50mΩ Max.
- > Insulation Resistance: 100MΩ Min.
- > Dielectric Strength: 2000VAC, 50Hz, 1 minute (between contact and lamp terminals)
1000VAC, 50Hz, 1 minute (between terminals of the same pole)
2000VAC, 50Hz, 1 minute (between terminals of the different poles)
- > Vibration Resistance: 50Hz, Amplitude 1.2 mmp-p
- > Shock Resistance: 10g Min.
- > Mechanical Life: 1,000,000 cycles (momentary type)
500,000 cycles (alternate and selector type)
200,000 cycles (key-lock and emergency type)
- > Electrical Life: 50,000 cycles Min.
- > Terminals: Diameter of welded wire: 2x0.8mm
Area of copper wire: 0.75mm² Max.
Connecting link: 2.8x0.5mm
- > Solder Heat Resistance: 230°C 3 seconds Max.
- > Operating Travel: 3mm (pushbuttons)

Lamp Ratings

Lamp Type	AC LED Lamp (Standard)			Neon Lamp		
Rated Voltage	AC/DC 6V	AC/DC 12V	AC/DC 24V	AC 110V	AC 220V	
	AC/DC 110V	AC/DC 220V				
Cover Color	Red	Green	Yellow	Orange	Blue	White
Life	About 40000 hours			About 20000 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.

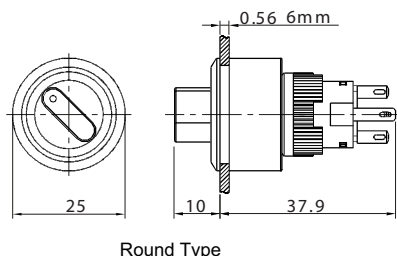


Pushbutton Switches

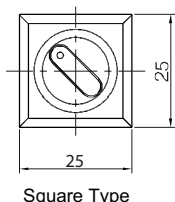
Illuminated Pushbutton Switches IP40/IP65

PB65 Series

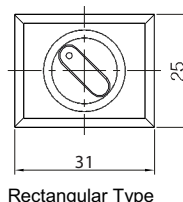
Selector Type



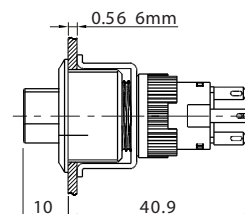
Round Type



Square Type



Rectangular Type



Selector and Key-Lock Switch Contact Operation

Position	Contact	Operating Position & Contact Operation		
		Left	Center	Right
90° 2 Position	1NO1NC			
	2NO2NC			
45° 3 Position	2NO2NC			

Round (Silvery Frame) (can be illuminated)



Operating Position	Contact	Part Number
2 Positions (90°) maintain	1NO1NC	PB65WY11X21...
2 Positions (90°) maintain	2NO2NC	PB65WY22X21...
2 Positions (90°) return	1NO1NC	PB65WY11X23...
2 Positions (90°) return	2NO2NC	PB65WY22X23...
3 Positions (45°) maintain	2NO2NC	PB65WY22X31...
3 Positions (45°) right return	2NO2NC	PB65WY22X32...
3 Positions (45°) left return	2NO2NC	PB65WY22X34...
3 Positions (45°) both return	2NO2NC	PB65WY22X33...

Operating Positions:

2 Positions:

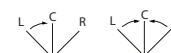


maintain return

3 Position:



maintain right return



left return both return

Square (Silvery Frame) (can be illuminated)



Operating Position	Contact	Part Number
2 Positions (90°) maintain	1NO1NC	PB65WF11X21...
2 Positions (90°) maintain	2NO2NC	PB65WF22X21...
2 Positions (90°) return	1NO1NC	PB65WF11X23...
2 Positions (90°) return	2NO2NC	PB65WF22X23...
3 Positions (45°) maintain	2NO2NC	PB65WF22X31...
3 Positions (45°) right return	2NO2NC	PB65WF22X32...
3 Positions (45°) left return	2NO2NC	PB65WF22X34...
3 Positions (45°) both return	2NO2NC	PB65WF22X33...

Rectangular (Silvery Frame) (can be illuminated)



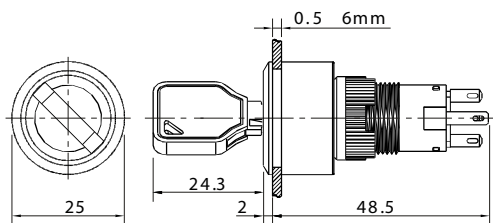
Operating Position	Contact	Part Number
2 Positions (90°) maintain	1NO1NC	PB65WJ11X21...
2 Positions (90°) maintain	2NO2NC	PB65WJ22X21...
2 Positions (90°) return	1NO1NC	PB65WJ11X23...
2 Positions (90°) return	2NO2NC	PB65WJ22X23...
3 Positions (45°) maintain	2NO2NC	PB65WJ22X31...
3 Positions (45°) right return	2NO2NC	PB65WJ22X32...
3 Positions (45°) left return	2NO2NC	PB65WJ22X34...
3 Positions (45°) both return	2NO2NC	PB65WJ22X33...

Pushbutton Switches

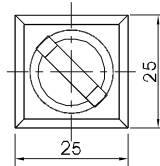
Illuminated Pushbutton Switches IP40/IP65

PB65 Series

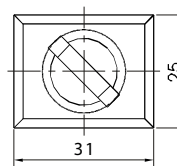
Key-Lock Type



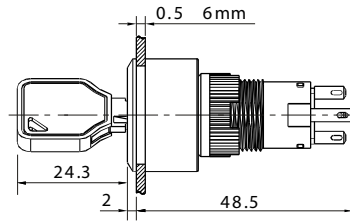
Round Type



Square Type



Rectangular Type



Round
(Silvery Frame)
(can be illuminated)



Operating Position

- 2 Positions (90°) maintain
- 2 Positions (90°) maintain
- 2 Positions (90°) maintain
- 2 Positions (90°) maintain
- 2 Positions (90°) maintain
- 2 Positions (90°) maintain
- 2 Positions (90°) return
- 2 Positions (90°) return
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) right return
- 3 Positions (45°) right return
- 3 Positions (45°) right return
- 3 Positions (45°) left return
- 3 Positions (45°) left return
- 3 Positions (45°) left return
- 3 Positions (45°) both return

Key retained

- Position
- none (A)
- none (A)
- right (B)
- right (B)
- right (B)
- left (C)
- left (C)
- left (C)
- left (C)
- none (A)
- right (B)
- left (C)
- left & right (D)
- center (E)
- center & right (G)
- center & left (H)
- right (B)
- left & right (D)
- center & right (G)
- left (C)
- left & right (D)
- center & left (H)
- left & right (D)

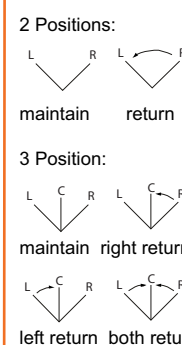
Contact

- 1NO1NC
- 2NO2NC
- 1NO1NC
- 2NO2NC
- 1NO1NC
- 2NO2NC
- 1NO1NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC

Part Number

- PB65WY11Y21A...
- PB65WY22Y21A...
- PB65WY11Y21B...
- PB65WY22Y21B...
- PB65WY11Y21C...
- PB65WY22Y21C...
- PB65WY11Y23C...
- PB65WY22Y23C...
- PB65WY22Y31A...
- PB65WY22Y31B...
- PB65WY22Y31C...
- PB65WY22Y31D...
- PB65WY22Y31E...
- PB65WY22Y31G...
- PB65WY22Y31H...
- PB65WY22Y32B...
- PB65WY22Y32D...
- PB65WY22Y32G...
- PB65WY22Y34C...
- PB65WY22Y34D...
- PB65WY22Y34H...
- PB65WY22Y33D...

Operating Positions:



Square
(Silvery Frame)
(can be illuminated)



Operating Position

- 2 Positions (90°) maintain
- 2 Positions (90°) maintain
- 2 Positions (90°) maintain
- 2 Positions (90°) maintain
- 2 Positions (90°) maintain
- 2 Positions (90°) maintain
- 2 Positions (90°) return
- 2 Positions (90°) return
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) right return
- 3 Positions (45°) right return
- 3 Positions (45°) right return
- 3 Positions (45°) left return
- 3 Positions (45°) left return
- 3 Positions (45°) left return
- 3 Positions (45°) both return

Key retained

- Position
- none (A)
- none (A)
- right (B)
- right (B)
- right (B)
- left (C)
- left (C)
- left (C)
- left (C)
- none (A)
- right (B)
- left (C)
- left & right (D)
- center (E)
- center & right (G)
- center & left (H)
- right (B)
- left & right (D)
- center & right (G)
- left (C)
- left & right (D)
- center & left (H)
- left & right (D)

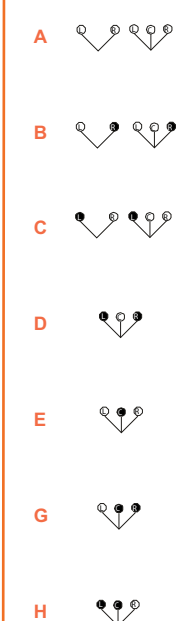
Contact

- 1NO1NC
- 2NO2NC
- 1NO1NC
- 2NO2NC
- 1NO1NC
- 2NO2NC
- 1NO1NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC

Part Number

- PB65WF11Y21A...
- PB65WF22Y21A...
- PB65WF11Y21B...
- PB65WF22Y21B...
- PB65WF11Y21C...
- PB65WF22Y21C...
- PB65WF11Y23C...
- PB65WF22Y23C...
- PB65WF22Y31A...
- PB65WF22Y31B...
- PB65WF22Y31C...
- PB65WF22Y31D...
- PB65WF22Y31E...
- PB65WF22Y31G...
- PB65WF22Y31H...
- PB65WF22Y32B...
- PB65WF22Y32D...
- PB65WF22Y32G...
- PB65WF22Y34C...
- PB65WF22Y34D...
- PB65WF22Y34H...
- PB65WF22Y33D...

Key retained Position:



Rectangular
(Silvery Frame)
(can be illuminated)



Operating Position

- 2 Positions (90°) maintain
- 2 Positions (90°) maintain
- 2 Positions (90°) maintain
- 2 Positions (90°) maintain
- 2 Positions (90°) maintain
- 2 Positions (90°) maintain
- 2 Positions (90°) return
- 2 Positions (90°) return
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) maintain
- 3 Positions (45°) right return
- 3 Positions (45°) right return
- 3 Positions (45°) right return
- 3 Positions (45°) left return
- 3 Positions (45°) left return
- 3 Positions (45°) left return
- 3 Positions (45°) both return

Key retained

- Position
- none (A)
- none (A)
- right (B)
- right (B)
- right (B)
- left (C)
- left (C)
- left (C)
- left (C)
- none (A)
- right (B)
- left (C)
- left & right (D)
- center (E)
- center & right (G)
- center & left (H)
- right (B)
- left & right (D)
- center & right (G)
- left (C)
- left & right (D)
- center & left (H)
- left & right (D)

Contact

- 1NO1NC
- 2NO2NC
- 1NO1NC
- 2NO2NC
- 1NO1NC
- 2NO2NC
- 1NO1NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
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- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC
- 2NO2NC

Part Number

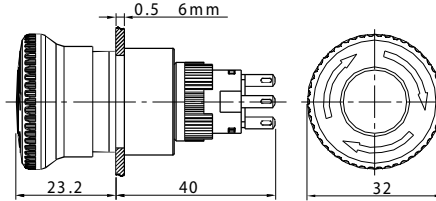
- PB65WJ11Y21A...
- PB65WJ22Y21A...
- PB65WJ11Y21B...
- PB65WJ22Y21B...
- PB65WJ11Y21C...
- PB65WJ22Y21C...
- PB65WJ11Y23C...
- PB65WJ22Y23C...
- PB65WJ22Y31A...
- PB65WJ22Y31B...
- PB65WJ22Y31C...
- PB65WJ22Y31D...
- PB65WJ22Y31E...
- PB65WJ22Y31G...
- PB65WJ22Y31H...
- PB65WJ22Y32B...
- PB65WJ22Y32D...
- PB65WJ22Y32G...
- PB65WJ22Y34C...
- PB65WJ22Y34D...
- PB65WJ22Y34H...
- PB65WJ22Y33D...

Pushbutton Switches

Illuminated Pushbutton Switches IP40/IP65

PB65 Series

Emergency Type



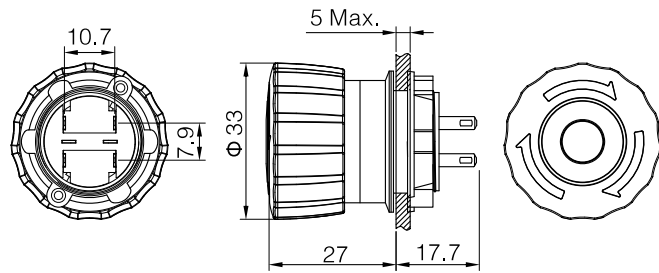
Contact
1NO1NC
2NO2NC

Part Number
PB65PY11TSCN...
PB65PY22TSCN...



Non-Illuminated

Illuminated (red)



Contact
1NC
2NC
1NO1NC

Part Number
PB6501TSBC_P
PB6502TSBC_P
PB6511TSBC_P