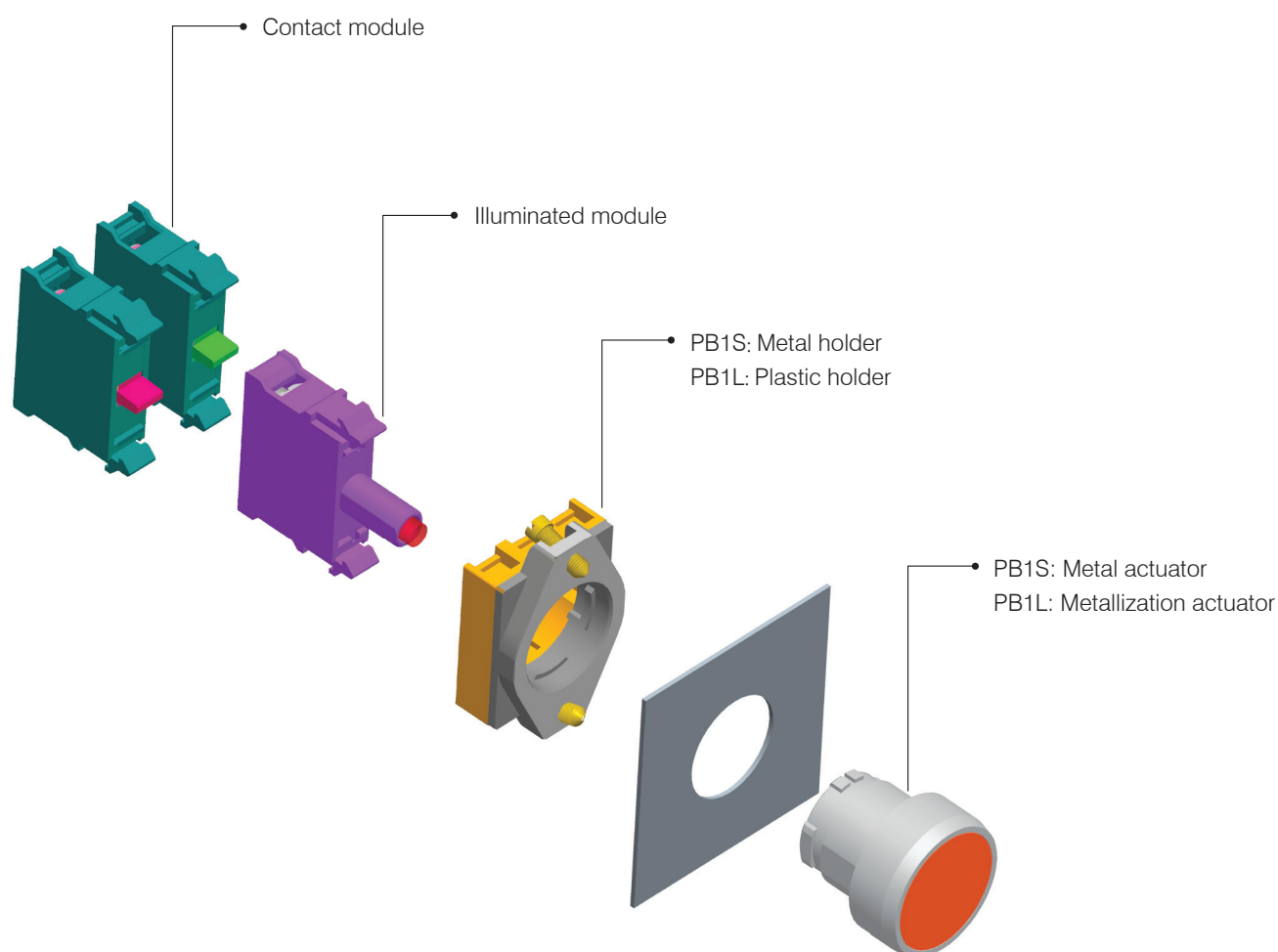


## PB1L Mushroom Push Button Siemens APT

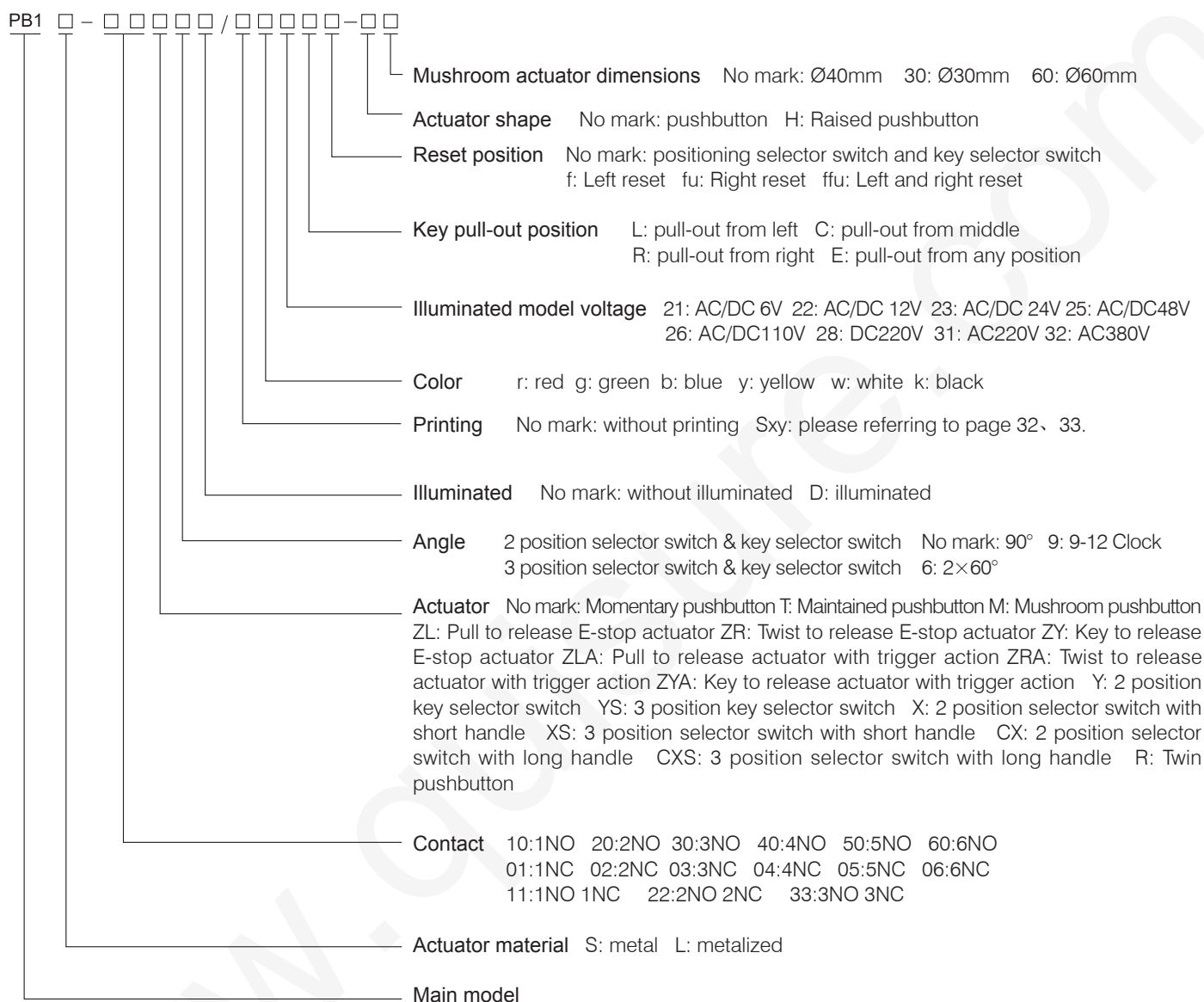
### PB1 introduction

- RoHS material.
- Modularized design with easy installation.
- Protection class: IP65.



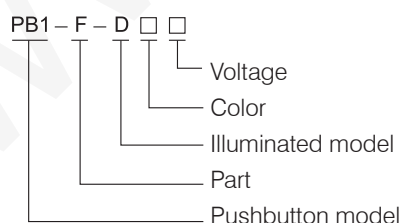
## Part model & Model

### Model definition

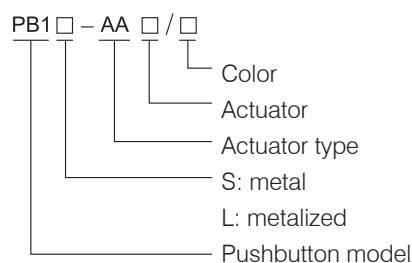


### Part model

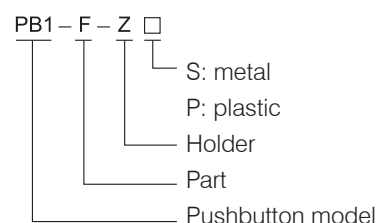
#### Illuminated model



#### Actuator



#### Holder



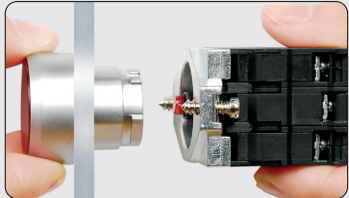
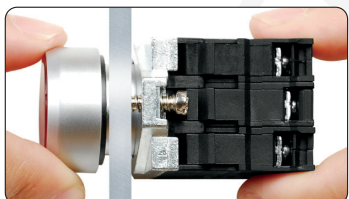
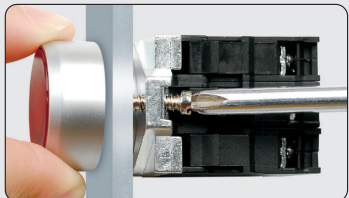
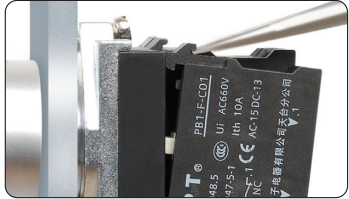
## Technical Data

### Technical data

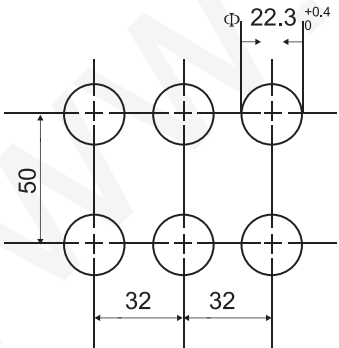
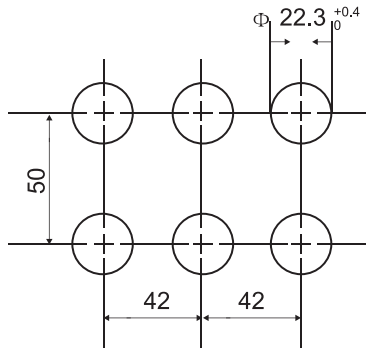
Standards:	IEC60947 Part1, IEC60947 Part 5-1, IEC60947 Part 5-5 GB14048.5, GB14048.1 GB14048.14 ISO13850									
Rated Insulation Voltage Ui:	AC 600V, 50Hz illumination module: AC440V, 50Hz; DC250V									
Rated Impulse Withstand Voltage Uimp:	AC 1890V 50Hz.1min									
Conventional Thermal Current Ith:	10A									
Rated Load:	Load type Rated operation voltage Ue				24V	48V	110V	220V	380V	440V
	AC-12	Rated operation current Ie	10A	-	10A	10A	10A	10A		
	DC-12		10A	8A	3.5A	1A	-	-		
	AC-15		6A	-	6A	6A	4A	4A		
	DC-13		6A	4A	1.2A	0.4A	-	-		
Illuminated data:	Voltage number 21 22 23 25 26 28 31 32									
	Voltage(V)AC/DC6VAC/DC12VAC/DC24V C/DC48V AC/DC110VDC220VAC220V AC380V									
	Current (mA) 18 17 16 11 18 5 19 12									
Pollution Class:	3									
Mechanical Endurance:	Pushbutton &Illuminated pushbutton& Mushroom pushbutton: 3×10 <sup>6</sup> times Selector switch & Compact pushbutton & Twin pushbutton &Maintained pushbutton: 3×10 <sup>5</sup> times Key selector switch & E-stop actuator: 5 X10 <sup>4</sup> times Contact model: 3X10 <sup>6</sup> times									
Operating Frequency:	1200 times/1hour									
Electrical Endurance:	5 X10 <sup>5</sup> times Ie / AC-15 at 6A/220V/230V Min. load: DC24V 5mA									
Operation Temperature:	Operation -25℃ -70℃ Storage -40℃ -80℃									
Protection Class:	IP65 Key selector switch IP54 Contact model and illuminated model IP20									
Shock Amplitude:	≤15g (IEC60068 2-27)									
Impact Amplitude:	≤5g 10-500Hz (IEC60068 2-6)									
Contact Resistance:	<50mΩ									
Contact Material:	AgNi10/Cu									

## Installation Mounting-hole Dimensions

### How to install?

1. Installing the actuator into the mounting-hole.	
2. Installing the holder.	
3. Tighten the screws on holder.	
4. Dismantle the switching element or the lighting element: for simply demounting the installed element, hold up the buckle of lock-type installation system with a straight screwdriver.	


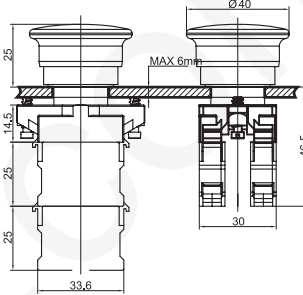

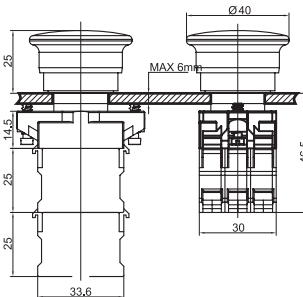
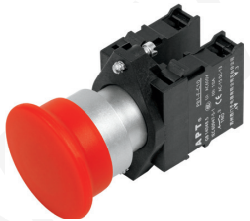
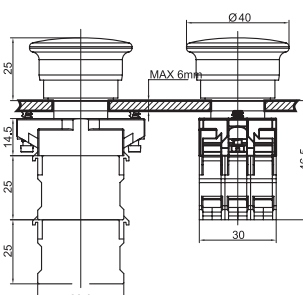
### Mounting-hole Size

Pushbutton	E-stop pushbutton, Mushroom pushbutton, Select switch with long-handle
	

### Notes:

- The tightening torque of wiring screw for switching element is 0.8-1.2Nm.
- The screw tightening torque of metal installation middle seat is no larger than 1Nm, and that of metalized installation middle seat is no larger than 0.8Nm.
- After installing the switching element or the lighting element, check whether the buckle is clipped in completely.

## Mushroom pushbutton model










Name	Type	Status	Model	Color	Rated voltage of illumination module	Dimensions
Mushroom pushbutton		Momentary	PB1L-■M/▲	red-r green-g yellow-y blue-b white-w black-k		
Illuminated Mushroom pushbutton		Momentary	PB1L-■MD/▲★	red-r green-g yellow-y blue-b white-w	21-AC/DC 6V 22-AC/DC 12V 23-AC/DC 24V 25-AC/DC48V 26-AC/DC110V 28-DC220V 31-AC220V 32-AC380V	
Pull to release mushroom pushbutton	  The diameter of actuator: Φ40mm and Φ60mm	Latching	PB1L-■ML/▲	red-r green-g yellow-y blue-b white-w black-k		

## Notes:

1. ■ : The type of contact module.
2. ▲ : The color of handle.
3. ★ : Rated voltage of illumination module.
4. Diameter of mushroom actuator: No mark: Ø40mm, 30: Ø30mm, 60: Ø60mm.


## Accessories

## Accessories

Name	Type	Model			Description	Function
Mushroom pushbutton		30mm	Momentary	PB1S-AAM/▲-30 PB1L-AAM/▲-30	▲: color r-red   g-green b-blue   y-yellow w-white   k-black	Actuator
		40mm	Momentary	PB1S-AAM/▲ PB1L-AAM/▲		
		60mm	Momentary	PB1S-AAM/▲-60 PB1L-AAM/▲-60		
Illuminated mushroom pushbutton (Momentary)		30mm	PB1S-AAMD/▲-30 PB1L-AAMD/▲-30		▲: color r-red   g-green b-blue   y-yellow w-white	
		40mm	PB1S-AAMD/▲ PB1L-AAMD/▲			
		60mm	PB1S-AAMD/▲-60 PB1L-AAMD/▲-60			
Pull to release mushroom pushbutton (Latching)		40mm	PB1S-AAML/▲ PB1L-AAML/▲		▲: color r-red   g-green b-blue   y-yellow w-white   k-black	
		60mm	PB1S-AAML/▲-60 PB1L-AAML/▲-60			
Pull to release E-stop pushbutton		40mm	PB1S-AAZL/r PB1L-AAZL/r		red	
Pull to release E-stop pushbutton with trigger action		40mm	PB1S-AAZLA/r PB1L-AAZLA/r		red	
Twist to release E-stop pushbutton		30mm	PB1S-AAZR/r-30 PB1L-AAZR/r-30		red	
		40mm	PB1S-AAZR/r PB1L-AAZR/r			
Twist to release E-stop pushbutton with trigger action		40mm	PB1S-AAZRA/r PB1L-AAZRA/r		red	
Key to release E-stop pushbutton		30mm	PB1S-AAZY/r-30 PB1L-AAZY/r-30		red	
		40mm	PB1S-AAZY/r PB1L-AAZY/r			
Key to release E-stop pushbutton with trigger action		40mm	PB1S-AAZYA/r PB1L-AAZYA/r		red	

## Accessories

### Accessories

Name	Type	Model	Description	Function
Contact module		PB1-F-C10	1NO	Contact module
		PB1-F-C01	1NC	
Illuminated module		PB1-F-D/▲★	▲ : Color ★ : Rated voltage	Illuminated module
Holder		PB1-F-ZS	S: metal	Holder
		PB1-F-ZP	P: Plastic	
Seal cover		PB1-F-M1	Only PB1S use	Select and use
		PB1-F-M2	Only PB1L use	
Protecting cover		F1	IP65	Select and use
		F2	Metal	Select and use

## Accessories

### Accessories

Name	Type	Model		Description	Function
Protective cap		F3-1		Plastic	
		F3-2		Plastic	
		F3-3		Plastic	
Installing ring		F7		Φ30mm	Select and use
Label holder		PB1-F-B11-10 书写面积25×10mm PB1-F-B11-18 书写面积25×18mm		Φ22.5mm	
Label panel		PB1-F-B12		Φ22.5mm	
Yellow name plate		F13-60 F13-90	Φ60 Φ90	Φ22.5mm	Used for emergency-stop pushbutton
		F14a-40 F14a-60	Φ40 Φ60		
		F14b-60 F14b-90	Φ60 Φ90		

## Accessories

### Accessories

Name	Type	Model		Description	Function
E- stop pushbutton protective cover		PB1-F-PC-a60		Φ22.5mm	Used for emergency-stop pushbutton
		PB1-F-PC-b60 PB1-F-PC-b90		Φ22.5mm	
Indicator light installing ring		F15-25 F15-30	Φ25 Φ30	Special for indicator light	Select and use
Indicator light insert label		F-18	POM	Printing	
Blanking plugs		F19	Φ22	Injection molding	