

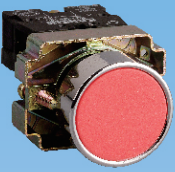
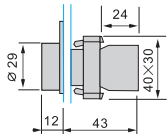
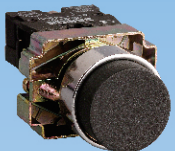
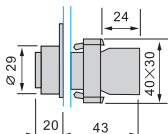
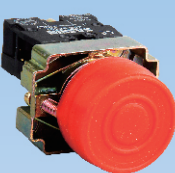
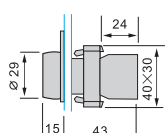
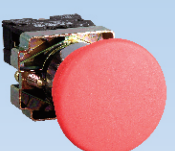
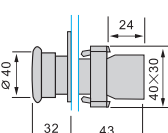

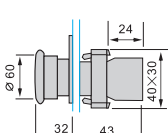


## 6




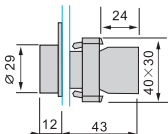

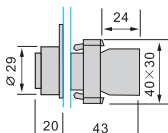
3SA8	Pushbutton Switch	1~4
3SA28	Pushbutton Switch	5
3SA5	Pushbutton Switch	6~10
3SA18	Pushbutton Switch	11~13
AD22C	Signal lamps	14
AD22 LED	Signal lamps	14~18
3SA16	Pushbutton & Indicators	19~24
3SA17	Pushbutton Switch	25
3SA10	Control Stations	26~29
	Pushbutton Switch & Indicators	30~32
3SP	Pushbutton	33~34

## Pushbutton Switch

### ◆ Pushbutton spring return




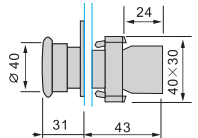

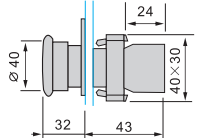

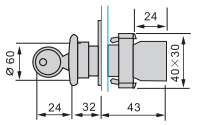
	Description	Color	Contact type		Type	Overall dimensions
						
	flush pushbuttons			N/O	3SA8-BA11	
		●		N/O	3SA8-BA21	
		●		N/O	3SA8-BA31	
		●		N/O	3SA8-BA51	
		●		N/O	3SA8-BA61	
		●		N/C	3SA8-BA22	
	projecting pushbuttons	●		N/O	3SA8-BL21	
		●		N/O	3SA8-BL31	
		●		N/O	3SA8-BL51	
		●		N/O	3SA8-BL61	
		●		N/C	3SA8-BL22	
		●		N/C	3SA8-BL42	
	booted pushbuttons	●		N/O	3SA8-BP21	
		●		N/O	3SA8-BP31	
		●		N/O	3SA8-BP51	
		●		N/O	3SA8-BP61	
		●		N/C	3SA8-BP42	
	mushroom head pushbuttons 40mm	●		N/O	3SA8-BC21	
		●		N/O	3SA8-BC31	
		●		N/O	3SA8-BC51	
		●		N/O	3SA8-BC61	
		●		N/C	3SA8-BC42	
	mushroom head pushbuttons 60mm	●		N/O	3SA8-BR21	
		●		N/C	3SA8-BR42	

### ◆ Spring return with function symbols on button



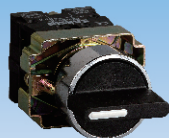




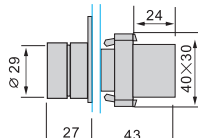







	Description	Color	Contact type		Type	Overall dimensions
						
	flush pushbuttons	●		N/O	3SA8-BA3311	
		↑		N/O	3SA8-BA3341	
		↑		N/O	3SA8-BA3351	
		●		N/C	3SA8-BA4322	
		●		N/C	3SA8-BA4342	
	projecting pushbuttons	●		N/C	3SA8-BL4322	
		●		N/C	3SA8-BL4342	

## Pushbutton Switch

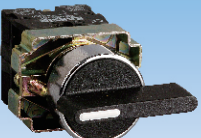

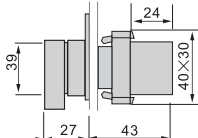







### ◆ Mushroom head Emergency stop pushbutton

	Description	Contact type		Type	Overall dimensions
					
	push-pull red	Φ40	N/C	3SA8-BT42	
		Φ60	N/C	3SA8-BX42	
	turn to release-red	Φ30	N/C	3SA8-BS442	
		Φ40	N/C	3SA8-BS542	
		Φ60	N/C	3SA8-BS642	
	(Ronisn 455) Key release (keyn 455) red	Φ30	N/C	3SA8-BS742	
		Φ40	N/C	3SA8-BS142	
		Φ60	N/C	3SA8-BS242	

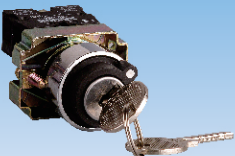

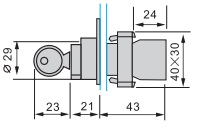








### ◆ Selector Switches

	Description	Position	Contact type		Type	Overall dimensions
						
	Description:  Locked  spring reset  keyout	2positions		N/O	3SA8-BD21	
				N/C	3SA8-BD25	
				N/O	3SA8-BD41	
				N/C	3SA8-BD45	
		3 positions		2N/O	3SA8-BD33	
				2N/O	3SA8-BD53	
				2N/O	3SA8-BD73	
				2N/O	3SA8-BD83	

#### Long handle

	2positions		N/O	3SA8-BJ21	
			N/O	3SA8-BJ25	
			N/O	3SA8-BJ41	
			N/O	3SA8-BJ45	
	3 positions		2N/O	3SA8-BJ33	
			2N/O	3SA8-BJ53	
			2N/O	3SA8-BJ73	
			2N/O	3SA8-BJ83	

### ◆ Ronis n 455 Key switches key n° 455

	2positions		N/o	3SA8-BG21	
			N/o	3SA8-BG25	
			N/o	3SA8-BG41	
			N/o	3SA8-BG45	
	3 positions		N/o	3SA8-BG61	
			N/o	3SA8-BG65	
			2N/o	3SA8-BG33	
			2N/o	3SA8-BG53	
			2N/o	3SA8-BG03	
			2N/o	3SA8-BG73	

## Pushbutton Switch

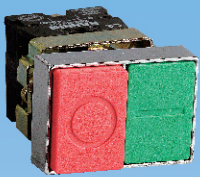
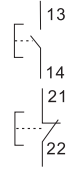

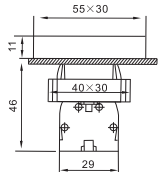



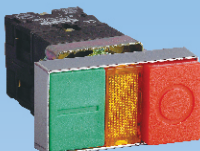
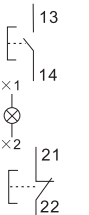

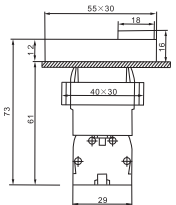


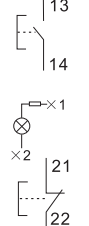

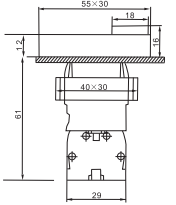

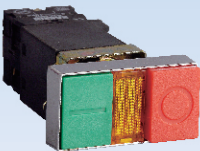
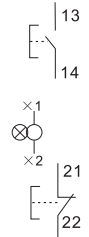

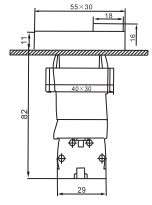

### ◆ Pilot light with BA 9s base

	Description	Supply Voltage	Circuit	Color	Type	Overall dimensions
	Direct bulb including BA9a base fitting	≤380V 220/240V 50/60Hz			3SA8-BV61	
					3SA8-BV63	
					3SA8-BV64	
					3SA8-BV65	
					3SA8-BV66	
	Via integral resistor BA 9s, LED24V bulb supplied	220/240V 50/60Hz			3SA8-BV71	
					3SA8-BV73	
					3SA8-BV74	
					3SA8-BV75	
					3SA8-BV76	
	Via integral transformer 1.2VA BA 9s, 6V bulb supplied	110V/50Hz 110-120V/60Hz			3SA8-BV31	
					3SA8-BV33	
					3SA8-BV34	
					3SA8-BV35	
					3SA8-BV36	
	Via integral transformer 1.2VA BA 9s, 6V bulb supplied	220V/50Hz			3SA8-BV41	
					3SA8-BV43	
					3SA8-BV44	
					3SA8-BV45	
					3SA8-BV46	
	Via integral transformer 1.2VA BA 9s, 6V bulb supplied	240V/50Hz			3SA8-BV941	
					3SA8-BV943	
					3SA8-BV944	
					3SA8-BV945	
					3SA8-BV946	
	Via integral transformer 1.2VA BA 9s, 6V bulb supplied	380V/50Hz 415V/50Hz			3SA8-BV53	
					3SA8-BV54	
					3SA8-BV55	
					3SA8-BV933	
					3SA8-BV934	
					3SA8-BV935	

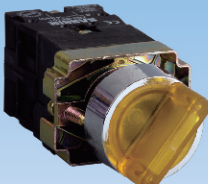
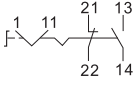
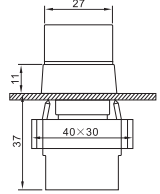
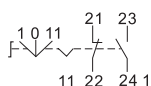
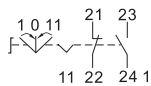


## Pushbutton Switch

### ◆ Double pushbuttons

Description	Circuit	Color	Contact type	Type	Overall dimensions
 Without pilot light 1 flush green pushbutton 1 projecting red pushbutton			N/O N/C IP40	3SA8-BL8325	
			N/O N/C IP65	3SA8-BL9325	
			N/O N/C IP40	3SA8-BL8425	
			N/O N/C IP65	3SA8-BL9425	
 Without pilot light 1 flush green pushbutton 1 pilot light with Yellow lens Direct supply $\leq 380V$ 1 projecting red pushbutton			N/O N/C	3SA8-BW8365	
			N/O N/C	3SA8-BW8465	
 1 flush green pushbutton 1 pilot light with Yellow lens 220/250V supply direct through resistor BA 9s, 130V bold including 1 projecting red pushbutton			N/O N/C	3SA8-BW8375	
			N/O N/C	3SA8-BW8475	
 1 flush green pushbutton 1 pilot light with Yellow lens 1.2VA-220V direct supply via integral transformer BA 9s 6V, bulb including 1 projecting red pushbutton			N/O N/C	3SA8-BW8345	
			N/O N/C	3SA8-BW8445	

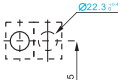
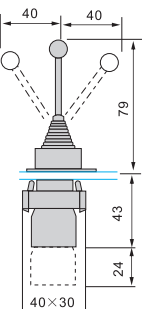

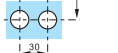
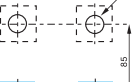


### ◆ Selector switches with pilot light

Description	Circuit	Contact type	Type	Overall dimensions
 2 positions stay put		N/O N/C	3SA8-BK2365	
		N/O N/C	3SA8-BK2465	
		N/O N/C	3SA8-BK2565	
		N/O N/C	3SA8-BK2665	
		N/O N/C	3SA8-BK2765	
3 positions stay put		N/O N/C	3SA8-BK3365	
		N/O N/C	3SA8-BK3465	
		N/O N/C	3SA8-BK3565	
		N/O N/C	3SA8-BK3665	
		N/O N/C	3SA8-BK3765	
		N/O N/C	3SA8-BK5365	
		N/O N/C	3SA8-BK5465	
		N/O N/C	3SA8-BK5565	
		N/O N/C	3SA8-BK5665	
		N/O N/C	3SA8-BK5765	

## Pushbutton Switch

### ◆ Selector switches





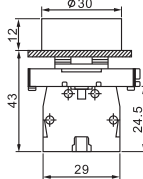








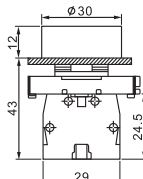

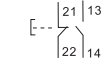


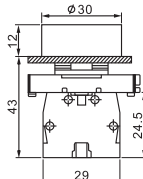








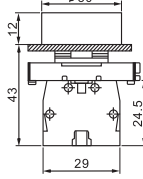








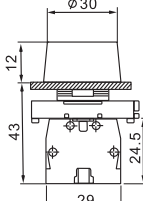




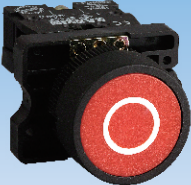



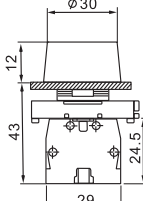







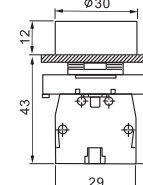









Description	Mounting hole diagram of Selector switch	Contact type		Type	Overall dimensions
Mounting panel thickness: 1~6mm					
2 positions		Locked	2N/O 2N/C	3SXD2PA12	
		spring reset	2N/O 2N/C	3SXD2PA22	
4 positions		Locked	4N/O 4N/C	3SXD2PA14	
		spring reset	4N/O 4N/C	3SXD2PA24	





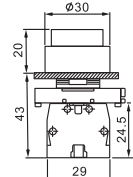





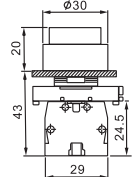


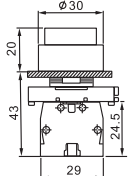




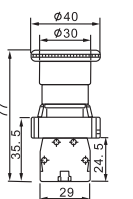





Description	Voltage	Position	Color	Contact type	Type
spring return			Black	N/O	3SA28-EA21
			Green	N/O	3SA28-EA31
			Red	N/C	3SA28-EA41
			Black	N/O	3SA28-EA25
			Green	N/C	3SA28-EA35
			Red		3SA28-EA45
			Black	N/O	3SA28-EH21
			Green		3SA28-EH31
			Red	N/O	3SA28-EH25
			Green	N/C	3SA28-EH35
standard handle		2 position √		N/O	3SA28-ED21
		2 position √		N/O N/C	3SA28-ED25
		2 position √		2N/O	3SA28-ED33
For use with incandescent bulb included Ba9s base fitting ≤230			White		3SA28-EV61
			Green		3SA28-EV63
			Red		3SA28-EV64
			Yellow		3SA28-EV65
			Blue		3SA28-EV66
			Clear		3SA28-EV67
			White		3SA28-EV41
BA9S			Green		3SA28-EV43
			Red		3SA28-EV44
			Yellow		3SA28-EV45
			Blue		3SA28-EV46
			Clear		3SA28-EV47



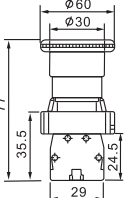



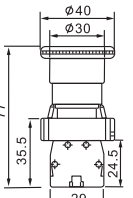


## Pushbutton Switch

	Description	Circuit	Color		Contact Type	Type	Overall dimensions
	Even button spring return		 N/O			3SA5-BA11	
			 N/O			3SA5-BA21	
			 N/O			3SA5-BA31	
			 N/O			3SA5-BA51	
			 N/O			3SA5-BA61	
	Even button spring return		 N/C			3SA5-BA42	
	Even button spring return		 N/O	N/C		3SA5-BA15	
			 N/O	N/C		3SA5-BA25	
			 N/O	N/C		3SA5-BA35	
			 N/O	N/C		3SA5-BA55	
			 N/O	N/C		3SA5-BA65	
	With protection spring return		 N/O			3SA5-BU21	
			 N/O			3SA5-BU31	
			 N/O			3SA5-BU51	
			 N/O			3SA5-BU61	
			 N/C			3SA5-BU42	
	Even button (transparent silica gel cover) unmarked Ip65		 N/O			3SA5-BP11	
			 N/O			3SA5-BP21	
			 N/O			3SA5-BP31	
			 N/O			3SA5-BP51	
			 N/O			3SA5-BP61	
			 N/O			3SA5-BP11	
			 N/O			3SA5-BP21	
			 N/O			3SA5-BP31	
			 N/O			3SA5-BP51	
			 N/O			3SA5-BP61	
			 N/C			3SA5-BP42	
			 N/O			3SA5-BA3311	
			 N/O			3SA5-BA3361	
			 N/O			3SA5-BA3341	
			 N/O			3SA5-BA3351	
			 N/C			3SA5-BA4322	
			 N/C			3SA5-BA4342	
			 N/O			3SA5-BA5331	
			 N/O			3SA5-BA5321	





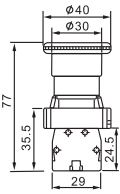



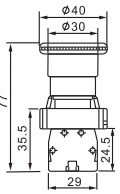


## Pushbutton Switch

	Description	Color	Contact Type		Type	Overall dimensions
						
			N/O		3SA5-BL21	
			N/O		3SA5-BL31	
			N/O		3SA5-BL51	
			N/O		3SA5-BL61	
			N/C		3SA5-BL42	
			N/O		3SA5-BL3311	
			N/O		3SA5-BL3361	
			N/O		3SA5-BL3351	
			N/O		3SA5-BL3341	
			N/C		3SA5-BL4322	
			N/C		3SA5-BL4342	
			φ 40	N/O	3SA5-BC21	
			φ 40	N/O	3SA5-BC31	
			φ 30	N/C	3SA5-BC42	
			φ 40	N/C	3SA5-BC42	





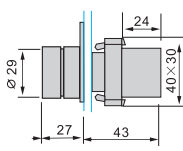



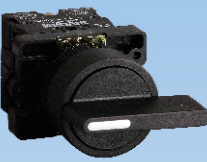

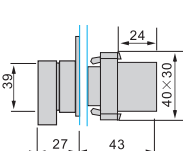

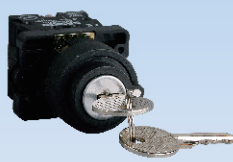

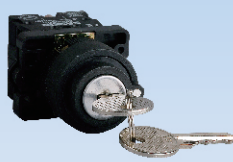

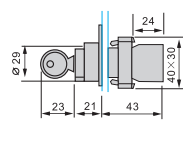



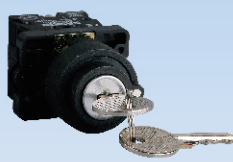




### ◆ Pushbutton spring return

	Mushroom head		φ 60	N/O	3SA5-BR21	
			φ 60	N/O	3SA5-BR31	
			φ 60	N/C	3SA5-BR42	
	Turn to release		φ 30	N/C	3SA5-BS442	
			φ 40	N/C	3SA5-BS542	
			φ 60	N/C	3SA5-BS642	

## Pushbutton Switch

	Description		Color	Contact Type		Type	Overall dimensions
							
	Push-pull Red	φ40		N/C		3SA5-BT42	
		φ60		N/C		3SA5-BX42	
	Turn to release Red release (Key n° 445)	φ30		N/C		3SA5-BS742	
		φ40		N/C		3SA5-BS142	
		φ60		N/C		3SA5-BS242	

## ◆ Selector Switches

Description		Position	Contact Type		Type	Overall dimensions	
							
	2 positions			N/O	3SA5-BD21		
				N/O N/C	3SA5-BD25		
				N/O	3SA5-BD41		
				N/O N/C	3SA5-BD45		
	3 positions			2N/O	3SA5-BD33		
				2N/O	3SA5-BD53		
				2N/O	3SA5-BD73		
				2N/O	3SA5-BD83		
	2 positions			N/O	3SA5-BJ21		
				N/O N/C	3SA5-BJ25		
				N/O	3SA5-BJ41		
				N/O N/C	3SA5-BJ45		
	3 positions			2N/O	3SA5-BJ33		
				2N/O	3SA5-BJ53		
				2N/O	3SA5-BJ73		
				2N/O	3SA5-BJ83		
	2 positions			N/o	3SA5-BG21		
				N/o N/c	3SA5-BG25		
				N/o	3SA5-BG41		
				N/o N/c	3SA5-BG45		
	3 positions			N/o	3SA5-BG61		
				N/o N/c	3SA5-BG65		
				2N/o	3SA5-BG33		
				2N/o	3SA5-BG53		
		3 positions			2N/o		3SA5-BG03
					2N/o		3SA5-BG73
	Description:		 Locked	 spring reset	 keyout		

## Pushbutton Switch

### ◆ Double pushbuttons




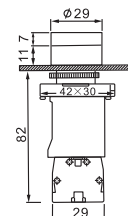
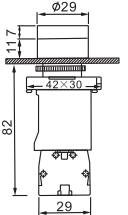
Description	Degree of protection	Color	Contact type		Type	Overall dimensions
1 flush green pushbutton 1 flush red pushbutton Unmarked	IP40		N/O	N/C	3SA5-BL8325	
Without pilot light 1 flush green pushbutton 1 flush red pushbutton Unmarked	IP40		N/O	N/C	3SA5-BL8425	
Without pilot light 1 flush green pushbutton 1 flush red pushbutton (transparent silica gel cover) Unmarked Ip65	IP65		N/O	N/C	3SA5-BL9325	
Without pilot light 1 flush green pushbutton 1 flush red pushbutton (transparent silica gel cover) Unmarked Ip65	IP65		N/O	N/C	3SA5-BL9425	

### ◆ Pushbutton illuminated



Description	Supply Voltage	Color	Contact type		Type	Overall dimensions
Direct bulb supplied	220-240V		N/O		3SA5-BW3161	
					3SA5-BW3361	
					3SA5-BW3561	
			N/C		3SA5-BW3661	
					3SA5-BW3462	
Via integral resistor BA9s, LED24V bulb supplied	220V 250V		N/O		3SA5-BW3171	
					3SA5-BW3371	
					3SA5-BW3571	
					3SA5-BW3671	
			N/C		3SA5-BW3472	
Via integral transformer 1.2VA BA9s, 6V bulb supplied	110V/50HZ 110-120V 60HZ		N/O		3SA5-BW3131	
					3SA5-BW3331	
					3SA5-BW3531	
					3SA5-BW3631	
			N/C		3SA5-BW3432	

## Pushbutton Switch

Description	Supply Voltage	Color	Contact type	Type	Overall dimensions
 <p>Via integral transformer 1.2VA BA9s, 6V bulb supplied</p>	220V/50HZ	○	N/O	3SA5-BW3141	
		●		3SA5-BW3341	
		●		3SA5-BW3541	
		●	N/C	3SA5-BW3442	
		●		3SA5-BW34942	
	240V/50HZ	○		3SA5-BW31941	
		●	N/O	3SA5-BW33941	
		●		3SA5-BW35941	
		●	N/C	3SA5-BW34932	
		●		3SA5-BW34932	
<p>Via integral transformer 1.2VA BA9s, 6V bulb supplied</p>	380V/50HZ	○	N/O	3SA5-BW3151	
		●		3SA5-BW3351	
		●		3SA5-BW3551	
		●	N/C	3SA5-BW3452	
		●		3SA5-BW34932	
	415V/50HZ	○		3SA5-BW31931	
		●	N/O	3SA5-BW33931	
		●		3SA5-BW35931	
		●	N/C	3SA5-BW3452	
		●		3SA5-BW34932	



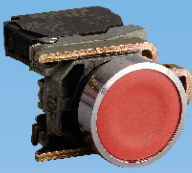








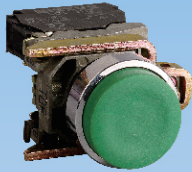





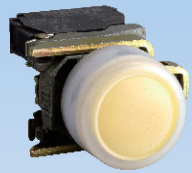





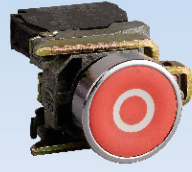




### ◆ Pilot light

Description	voltage	Circuit	Color	Type	Overall dimensions
 <p>Direct bulb included BA9s base fitting</p>	220/240V 50/60HZ		○	3SA5-BV61	
			●	3SA5-BV63	
			●	3SA5-BV64	
			●	3SA5-BV65	
			●	3SA5-BV66	
<p>Via integral transformer 1.2VA BA9s, 6V bulb supplied</p>	110V/50HZ 110-120V 60HZ		○	3SA5-BV31	
			●	3SA5-BV33	
			●	3SA5-BV34	
			●	3SA5-BV35	
			●	3SA5-BV36	
<p>Via integral transformer 1.2VA BA9s, 6V bulb supplied</p>	240V/50HZ		○	3SA5-BV941	
			●	3SA5-BV943	
			●	3SA5-BV944	
			●	3SA5-BV945	
			●	3SA5-BV946	
<p>Via integral resistor LED24V Ba9s</p>	220/240V 50/60HZ		○	3SA5-BV71	
			●	3SA5-BV73	
			●	3SA5-BV74	
			●	3SA5-BV75	
			●	3SA5-BV76	





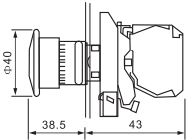







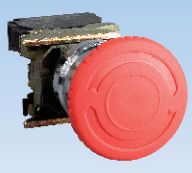

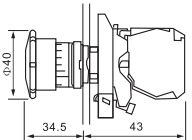




## Pushbutton Switch

### ◆ Pushbutton spring return with chromium plated metal bezel



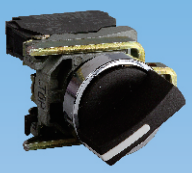
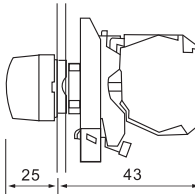
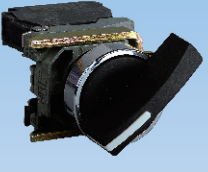
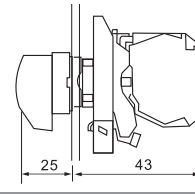
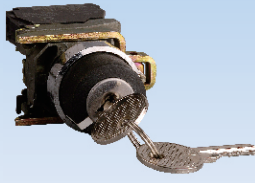
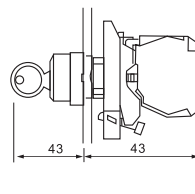



	Description	Color	Contact type		Type	Overall dimensions
						
	Flush button		N/O		3SA18-BA21	
			N/O		3SA18-BA31	
			N/O		3SA18-BA42	
			N/O		3SA18-BA51	
			N/O		3SA18-BA61	
			N/O	N/C	3SA18-BA25	
			N/O	N/C	3SA18-BA35	
			N/O	N/C	3SA18-BA45	
	Projecting button		N/O		3SA18-BL21	
			N/O		3SA18-BL31	
				N/C	3SA18-BL42	
			N/O		3SA18-BL51	
			N/O		3SA18-BL61	
	Booted flush degree of protection IP66		N/O		3SA18-BP21	
			N/O		3SA18-BP31	
				N/C	3SA18-BP42	
			N/O		3SA18-BP51	
			N/O		3SA18-BP61	
	Flush, with marking		N/O		3SA18-BA3311	
			N/O		3SA18-BA3341	
			N/O		3SA18-BA3351	
				N/C	3SA18-BA4322	

### ◆ Pushbuttons



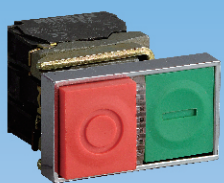

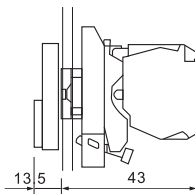



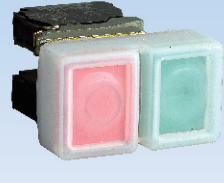
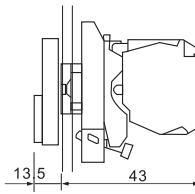


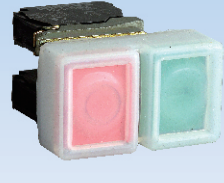
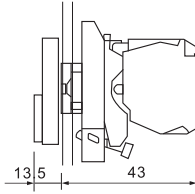


	Description	Color	Contact type		Type	Overall dimensions
						
	Spring return Bc $\Phi 40$ BR $\Phi 60$		N/O		3SA18-BC21	
			N/O		3SA18-BC31	
				N/C	3SA18-BC42	
			N/O		3SA18-BC51	
			N/O		3SA18-BR21	
			N/O		3SA18-BR31	
				N/C	3SA18-BR42	
			N/O		3SA18-BR51	
	Mushroom head self-lock			N/C $\Phi 30$	3SA18-BS442	
				N/C $\Phi 40$	3SA18-BS542	
				N/C $\Phi 60$	3SA18-BS642	

## Pushbutton Switch

### ◆ Selector switches & key switches

	Description	Color	Contact type		Type	Overall dimensions
						
	Standard handle black					
	2-position locked		N/O		3SA18-BD21	
	2-position locked		N/O	N/C	3SA18-BD25	
	3-position locked		2N/O		3SA18-BD33	
	2-position reset		N/O		3SA18-BD41	
	2-position reset		N/O	N/C	3SA18-BD45	
	3-position reset		2N/O		3SA18-BD53	
	long handle, black					
	2-position locked		N/O		3SA18-BJ21	
	2-position locked		N/O	N/C	3SA18-BJ25	
	3-position locked		2N/O		3SA18-BJ33	
	2-position reset		N/O		3SA18-BJ41	
	2-position reset		N/O	N/C	3SA18-BJ45	
	3-position reset		2N/O		3SA18-BJ53	
	Key switch					
	2-position locked		N/O		3SA18-BG21	
	2-position locked		N/O	N/C	3SA18-BG25	
	2-position locked		2N/O		3SA18-BG33	
	3-position locked		N/O		3SA18-BG41	
	2-position reset		N/O		3SA18-BG61	
	2-position reset		2N/O		3SA18-BG73	
Description:			 Locked	 spring reset	 keyout	




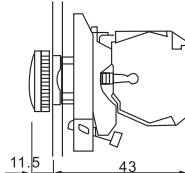



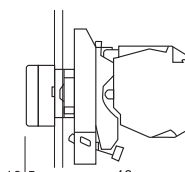

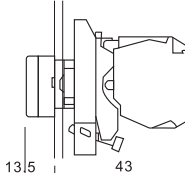



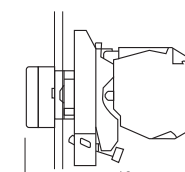






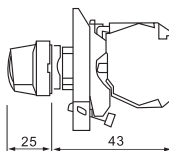






























### ◆ Double pushbutton

	Description	Color	Contact type		Type	Overall dimensions
						
	Double end button		N/O	N/C	3SA18-BL8325	
	Flush flush		N/O	N/C	3SA18-BL8312	
	Projecting flush		N/O	N/C	3SA18-BL8425	
	Projecting flush		N/O	N/C	3SA18-BL8412	
	Double end button					
	Flush + flush		N/O	N/C	3SA18-BW8365	
	Projecting flush		N/O	N/C	3SA18-BW8465	
	LED lamp socket LED					
	flush Projecting					
	Projecting flush		N/O	N/C	3SA18-BL9312	
	Degree of protection IP66		N/O	N/C	3SA18-BL9434	

## Pushbutton Switch

### ◆ Pilot light, illuminated pushbutton, selector switch



Description	Supply Voltage	Color	Contact type	Type	Overall dimensions
			 		
Pilot light				3SA18-BV63	
BA9s Lamp socket	≤250V			3SA18-BV64	
LED				3SA18-BV65	
BA9s bulb and				3SA18-BV66	
neon lamp		Clear		3SA18-BV67	
Pilot light	24V			3SA18-BVB□	
Integral LED	~48...120V			3SA18-BVG□	
	~230...240V			3SA18-BVM□	
Illuminated pushbutton	≤250V		N/O N/C	3SA18-BW3365	
BA9S bulb and			N/O N/C	3SA18-BW3465	
neon lamp			N/O N/C	3SA18-BW3565	
			N/O N/C	3SA18-BW3665	
		Clear	N/O N/C	3SA18-BW3765	
Illuminated pushbutton	24V		N/O N/C	3SA18-BW3□B5	
BA9s Lamp socket	~48...120V		N/O N/C	3SA18-BW3□G5	
LED	~230...240V		N/O N/C	3SA18-BW3□M5	
Selector switch, illuminated, standard handle	24V	     		3SA18-BK133B5 3SA18-BK134B5 3SA18-BK135B5	
	~48...120V	     		3SA18-BK133G5 3SA18-BK134G5 3SA18-BK135G5	
		     		3SA18-BK133M5 3SA18-BK134M5 3SA18-BK135M5	
	~230...240V	     		3SA18-BK133M5 3SA18-BK134M5 3SA18-BK135M5	
		     		3SA18-BK133M5 3SA18-BK134M5 3SA18-BK135M5	
		     		3SA18-BK133M5 3SA18-BK134M5 3SA18-BK135M5	

## AD22C series indicator lamps



Type	Color	Voltage	Shape	Electric principle
AD22C-Φ6	<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	6~220V		
AD22C-Φ8	<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	6~220V		
AD22C-Φ10	<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	6~220V		
AD22C-Φ12	<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	6~220V		
AD22C-Φ14	<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	6~220V		
AD22C-Φ16	<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	6~220V		
AD22C-Φ9	<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	6~220V		
AD22B-Φ8	<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	6~220V		

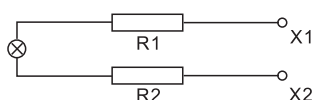
## AD22 LED series indicator lamps

### ◆ Environment condition

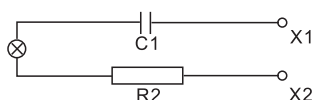
- (1) Ambient temperature:  $-25^{\circ}\text{C} \pm 55^{\circ}\text{C}$
- (2) Relative humidity: 98%
- (3) Working under vibration frequency 2-80Hz, acceleration at 0.7g
- (4) Pollution: class III installation: type III
- (5) "TH" mark can be used in wet and heat conditions

### ◆ Diagram

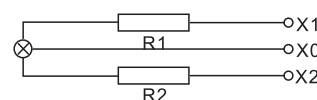
AC,DC indicator (DC, AC 6V-DC, AC 220V)



AC indicator (AC220V-AC380V)


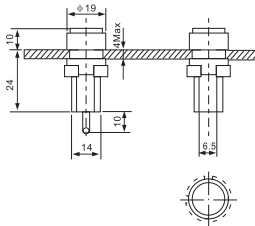

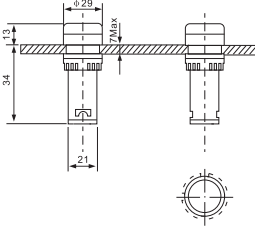

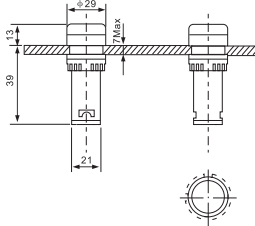

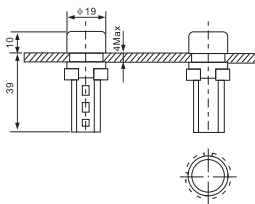


Double colour indicator (DC AC 110- DC , AC 220V)


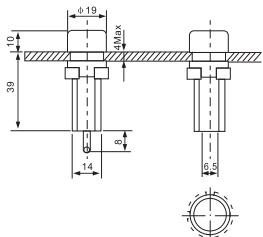
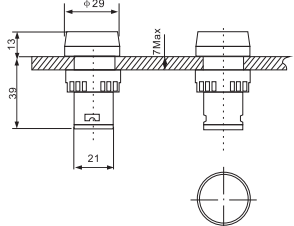
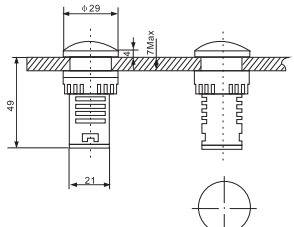
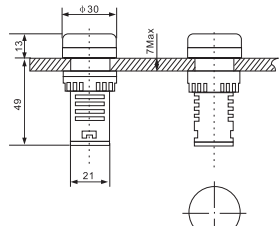
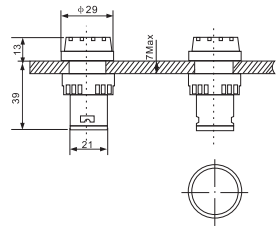
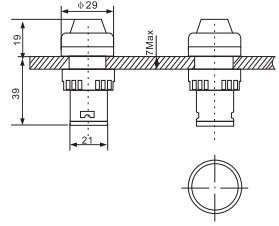

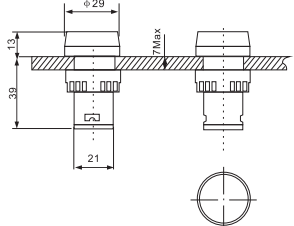

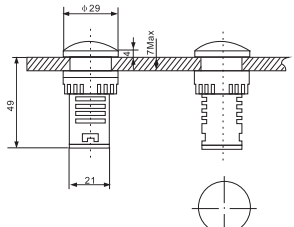

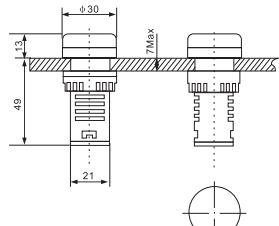

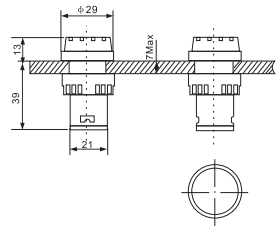

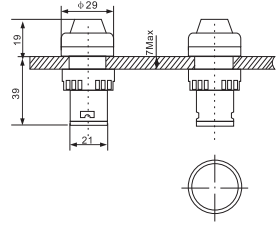


Note: pay attention to rotation when heat is too high for DC 110V, 220V, 380V;

Note: connecting X0,X1, lighting green;  
Connecting X0 X2,lighting red.

	Type	Voltage	Color	Overall dimensions
 <b>Φ16 indicator lamp</b>	AD22-16AS	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> <li>● Red</li> <li>● Green</li> <li>● Yellow</li> <li>○ White</li> <li>● Blue</li> </ul>	
 <b>Φ16 indicator lamp</b>	AD22-16DCS	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> <li>● Red</li> <li>● Green</li> <li>● Yellow</li> <li>○ White</li> <li>● Blue</li> </ul>	
 <b>Φ16 indicator lamp</b>	AD22-16DC	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> <li>● Red</li> <li>● Green</li> <li>● Yellow</li> <li>○ White</li> <li>● Blue</li> </ul>	
 <b>Φ16BC indicator lamp</b>	AD22-16BC	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> <li>● Red</li> <li>● Green</li> <li>● Yellow</li> <li>○ White</li> <li>● Blue</li> </ul>	

## AD22 LED series indicator lamps

	Type	Voltage	Color	Overall dimensions
 Φ16 indicator lamp	AD22-16B	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red ● Green ● Yellow ○ White ● Blue	
		21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red ● Green ● Yellow ○ White ● Blue	
		21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red ● Green ● Yellow ○ White ● Blue	
		21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red ● Green ● Yellow ○ White ● Blue	
		21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red ● Green ● Yellow ○ White ● Blue	
		21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red ● Green ● Yellow ○ White ● Blue	
 Φ22/22BS indicator lamp	AD22-22BS	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red ● Green ● Yellow ○ White ● Blue	
 Φ22/22CS indicator lamp	AD22-22CS	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red ● Green ● Yellow ○ White ● Blue	
 Φ22/22DS indicator lamp	AD22-22DS	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red ● Green ● Yellow ○ White ● Blue	
 Φ22/22ES indicator lamp	AD22/22ES	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red ● Green ● Yellow ○ White ● Blue	
 Φ22/22HS indicator lamp	AD22/22HS	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red ● Green ● Yellow ○ White ● Blue	



## Type

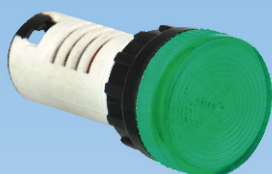
Voltage

Color

Overall dimensions



Φ22/22B indicator lamp



Φ22/22C indicator lamp



Φ22/22D indicator lamp

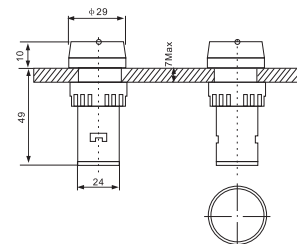


Φ22/22E indicator lamp

AD22-22B

21-DC.AC6V  
22-DC.AC12V  
23-DC.AC24V  
24-DC.AC36V  
25-DC.AC48V  
26-DC.AC110V  
27-DC.AC127V  
28-DC220V  
29-FD380V  
31-AC220V  
32-AC380V

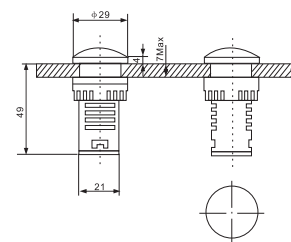
- Red
- Green
- Yellow
- White
- Blue



AD22-22C

21-DC.AC6V  
22-DC.AC12V  
23-DC.AC24V  
24-DC.AC36V  
25-DC.AC48V  
26-DC.AC110V  
27-DC.AC127V  
28-DC220V  
29-FD380V  
31-AC220V  
32-AC380V

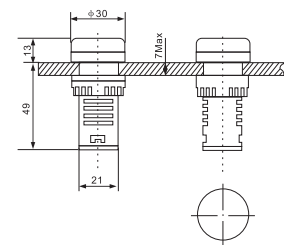
- Red
- Green
- Yellow
- White
- Blue



AD22-22D

21-DC.AC6V  
22-DC.AC12V  
23-DC.AC24V  
24-DC.AC36V  
25-DC.AC48V  
26-DC.AC110V  
27-DC.AC127V  
31-AC220V  
32-AC380V

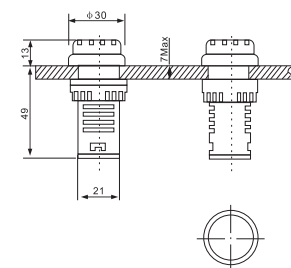
- Red
- Green
- Yellow
- White
- Blue



AD22-22E

21-DC.AC6V  
22-DC.AC12V  
23-DC.AC24V  
24-DC.AC36V  
25-DC.AC48V  
26-DC.AC110V  
27-DC.AC127V  
31-AC220V  
32-AC380V

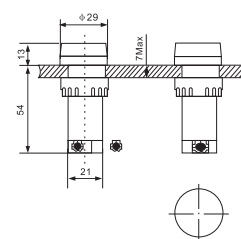
- Red
- Green
- Yellow
- White
- Blue



## AD22-22Drg

23-DC.AC24V  
24-DC.AC36V  
25-DC.AC48V  
26-DC.AC110V  
27-DC.AC127V  
28-DC.AC220V  
31-AC220V  
32-AC380V


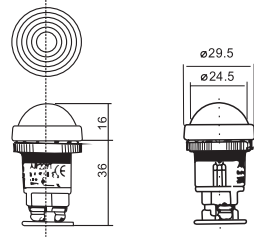

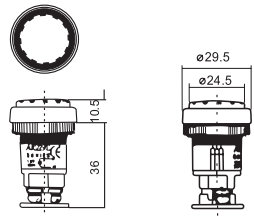

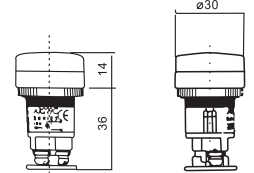

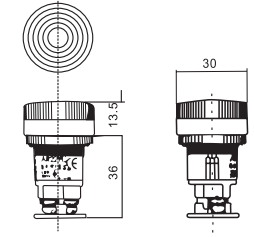

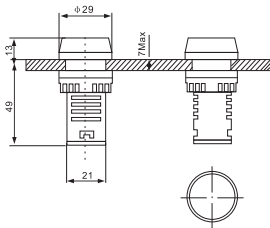

- Red ● Green  
● Red ● Yellow



Φ22/22Drg round double-color lamp



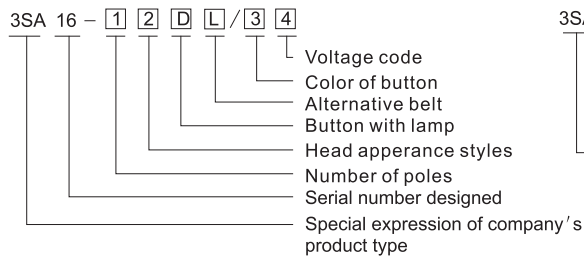
## AD22 LED series indicator lamps

	Type	Voltage	Color	Overall dimensions
 LED Integrated	AR229C □ □	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red ● Green ● Yellow ○ White ● Blue	
 LED Integrated	AR229T □ □	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red ● Green ● Yellow ○ White ● Blue	
 LED Integrated	AR229E □ □	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red ● Green ● Yellow ○ White ● Blue	
 LED Integrated	AR229H □ □	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red ● Green ● Yellow ○ White ● Blue	
◆ Buzzer				
 Buzzer	AD22-22M/K	23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Black	  The buzzer's voice interrupted flashlight volume is 10cm/80Decibel , electric current is 15~20mA
 Flash buzzer	AD22-22M/r	23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red	

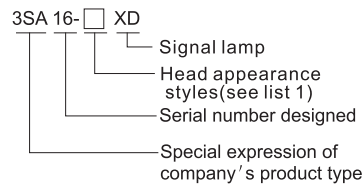
## Pushbutton & Indicator

### Type and meaning

Button



Signal lamp



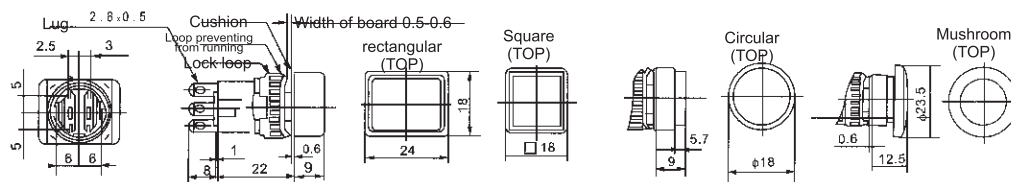
### Using condition

- (1) Air temperature  $-25^{\circ}\text{C} \sim +50^{\circ}\text{C}$
- (2) Relative humidity:  $\leq 85\%$
- (3) Altitude height:  $\leq 2,000\text{m}$
- (4) Pollution grade: 3
- (5) Installation type: III
- (6) Protection grade: IP40 / IP55
- (7) Environmental condition: no medium causing explosion, gas or dust of electric conduction

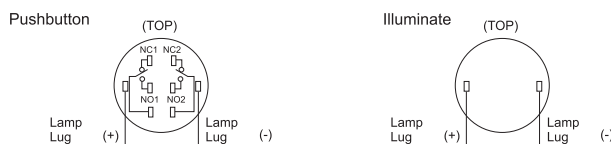
### List 1:

Letter	Meaning	Letter	Meaning	Letter	Meaning
AXD	Round indicator	AL	Round flat button of alternative type	XA	Round revolving handle button
FXD	Square indicator	FL	Square button of alternative type	XF	Square revolving handle button
CFXD	Rectangular indicator	CFL	Rectangular button of alternative type	XCF	Rectangular revolving handle button
MXD	Mushroom indicator	A	Round flat button(Instant moving type)	L	Alternative belt(In the type of self-lock and set free)
AD	Round light button	F	Square button (Instant moving type)	ML	Mushroom button
FD	Square light button	CF	Rectangular button(Instant moving type)	ADL	Round belt light button alternative
CFD	Rectangular light button	M	Mushroom button(Instant moving type)	FDL	Square belt light button alternative
MD	Mushroom light button	ZS	Emergency button(alternative moving type)	CFDL	Rectangular belt light button alternative
YA	Round key button	YF	Square key button	YCF	Rectangular key button
FG	With protecting box				

### Size



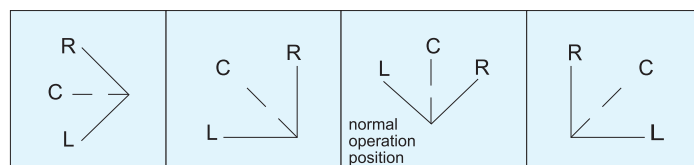
### Terminals wiring diagram



### SDL16 Selector switch

It is possible to change position of operating system.

It is possible to change position of operating system by running front cover and locker. Every other  $45^{\circ}$ , front cover can be locked to avoid it automatically running when it is installed on the plate.



Change position of operating system.

Get rid of lock before pulling out, run front cover, push it in every other  $45^{\circ}$  and then lock front cover.

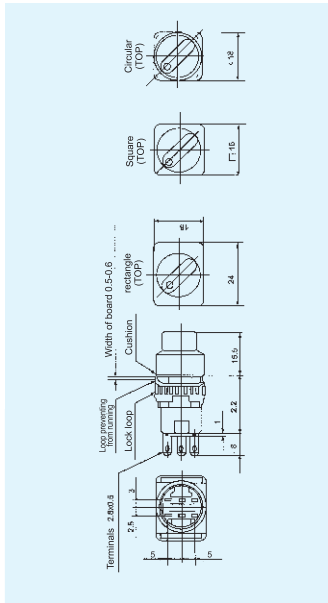
### Contact type work

Position	Contact type	Working type		
		Left	Middle	Right
 90°2 Position	Single-pole double throws			
	Double-pole double throws			
 45°3 Position	Double-pole double throws			

Note: Running "connection point" working drawing is accordant with one with key.

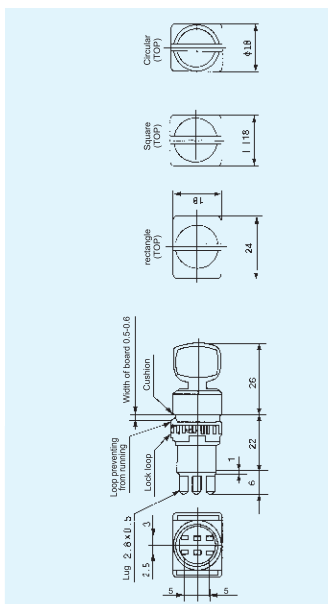
## Pushbutton & Indicator

### Size



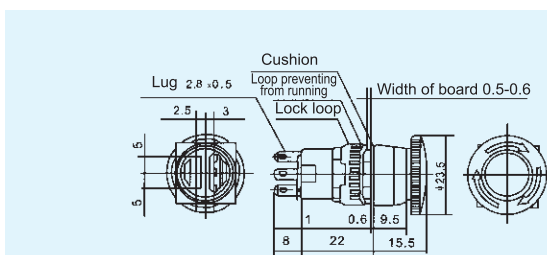
Position	Contact type	Reference	Remark
90°2 Position	L R 1NO+1NC	3SA16-11XA-2	-2 means 2 positions -3 means 3 positions
	2NO+2NC	3SA16-22XA-2	
45°3 Position	L C R 2NO+2NC	3SA16-22XA-3	
90°2 Position	L R 1NO+1NC	3SA16-11XF-2	
	2NO+2NC	3SA16-22XF-2	
45°3 Position	L C R 2NO+2NC	3SA16-22XF-3	
90°2 Position	L R 1NO+1NC	3SA16-11XCF-2	
	2NO+2NC	3SA16-22XCF-2	
45°3 Position	L C R 2NO+2NC	3SA16-22XCF-3	

### Size




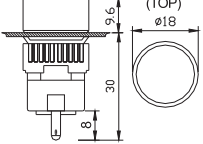
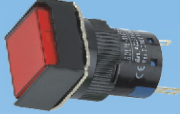
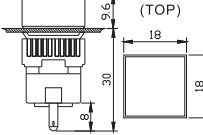

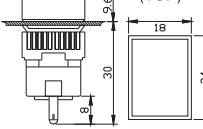

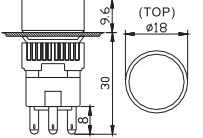

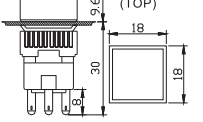
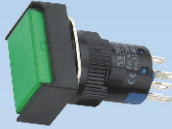
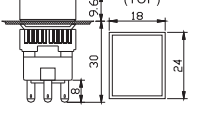

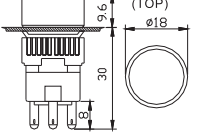

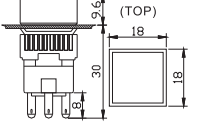
Position	Contact type	Reference	Remark
90°2 Position	L R 1NO+1NC	3SA16-11YA-2	-2 means 2 positions -3 means 3 positions
	2NO+2NC	3SA16-22YA-2	
45°3 Position	L C R 2NO+2NC	3SA16-22YA-3	
90°2 Position	L R 1NO+1NC	3SA16-11YF-2	
	2NO+2NC	3SA16-22YF-2	
45°3 Position	L C R 2NO+2NC	3SA16-22YF-3	
90°2 Position	L R 1NO+1NC	3SA16-11YCF-2	
	2NO+2NC	3SA16-22YCF-2	
45°3 Position	L C R 2NO+2NC	3SA16-22YCF-3	

### Size

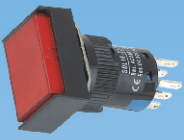
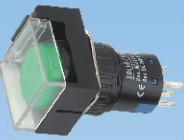
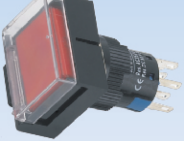
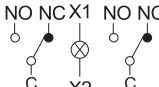
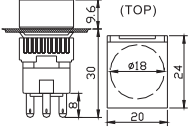
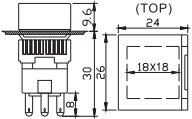

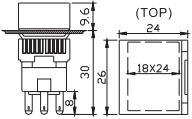
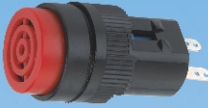



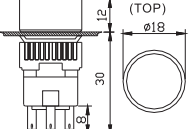

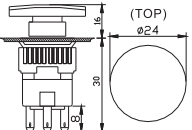

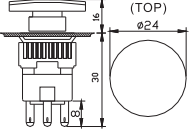


Working type	Contact type	Reference	Remark
Press lock to replace	1NO+1NC	3SA16-11ZS	Red
	2NO+2NC	3SA16-22ZS	

## Pushbutton & Indicator

	Description	Contact	Circuit	Color	Type	Contour
 3SA16-AXD	Installed light circular	LED 24V/AC/DC Neon 220V/AC	X1 X2	<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	3SA16-AXD	
 3SA16-FXD	Installed light square	LED 24V/AC/DC Neon 220V/AC	X1 X2	<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	3SA16-FXD	
 3SA16-CFXD	Installed light rectangular	LED 24V/AC/DC Neon 220V/AC	X1 X2	<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	3SA16-CFXD	
 3SA16-11AD	Pushbutton signal pole LED 24V/AC/DC Neon 220V/AC	N/O+N/C	X1 NO X2 NC	<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	3SA16-11AD 3SA16-11ADL	
 3SA16-11FD	Pushbutton signal pole LED 24V/AC/DC Neon 220V/AC	NO+NC	X1 NO X2 NC	<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	3SA16-11FD 3SA16-11FDL	
 3SA16-11CFD	Pushbutton double pole LED 24V/AC/DC Neon 220V/AC	NO+NC	X1 NO X2 NC	<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	3SA16-11CFD 3SA16-11CFDL	
 3SA16-22AD	Installed light circular double pole LED 24V/AC/DC Neon 220V/AC	2NO+2NC	NO NC X1 C X2 C	<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	3SA16-22AD 3SA16-22ADL	
 3SA16-22FD	Installed light square double pole LED 24V/AC/DC Neon 220V/AC	2NO+2NC	NO NC X1 C X2 C	<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	3SA16-22FD 3SA16-22FDL	

## Pushbutton & Indicator

	Description	Contact	Circuit	Color	Type	Contour
 3SA16-22CFD   3SA16-11ADFG   3SA16-11FDFG   3SA16-11CFDFG	Installed light rectangular double pole LED 24V/AC/DC Neon 220V/AC	2NO+2NC		<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	3SA16-22CFD 3SA16-22CFDL	
	Installed light circular single pole LED 24V/AC/DC Neon 220V/AC with protection cover Ip40	NO+NC		<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	3SA16-11ADFG 3SA16-11ADFGL	
	Installed light square single pole LED 24V/AC/DC Neon 220V/AC with protection cover Ip40	NO+NC		<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	3SA16-11FDFG 3SA16-11FDFGL	
	Installed light rectangular single pole LED 24V/AC/DC Neon 220V/AC with protection cover Ip40	NO+NC		<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	3SA16-11CFDFG 3SA16-11CFDFGL	
	Description	Contact	Circuit	Color	Type	Contour
 3SA16-MF   3SA16-11MD   3SA16-22MD	Indicator Buzzer			<ul style="list-style-type: none"> <li>Red</li> <li>Black</li> </ul>	3SA16-MF	
	Installed light Mushroom button signal pole LED 24V/AC/DC Neon 220V/AC	NO+NC		<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	3SA16-11MD 3SA16-11MDL	
	Installed light Mushroom button signal pole LED 24V/AC/DC Neon 220V/AC double pole	2NO+2NC		<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	3SA16-22MD 3SA16-22MDL	

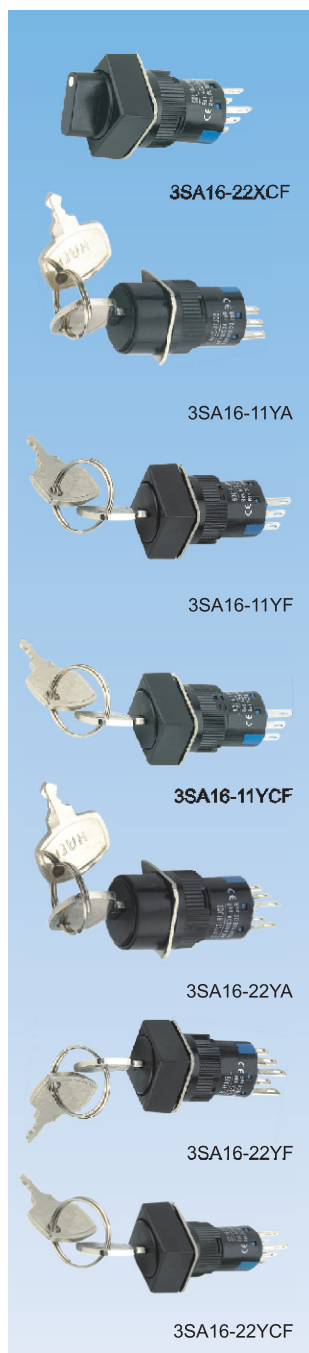
## Pushbutton & Indicator



Description	Contact	Circuit	Color	Type	Contour
Mushroom button signal pole circular	NO+NC		<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	3SA16-11M	
	2NO+2NC			3SA16-11ML	
				3SA16-22M	
				3SA16-22ML	
Emergency push button push locking in clockwise direction, move reset signal pole	NO+NC		<ul style="list-style-type: none"> <li>Red</li> <li>Green</li> <li>Yellow</li> <li>White</li> <li>Blue</li> </ul>	3SA16-11ZS	
	2NO+2NC			3SA16-22ZS	
90° 2 Position	NO+NC		<ul style="list-style-type: none"> <li>Black</li> </ul>	3SA16-11XA-2P 3SA16-11XA-3P	
90° 2 Position	NO+NC		<ul style="list-style-type: none"> <li>Black</li> </ul>	3SA16-11XF-2P 3SA16-11XF-3P	
90° 2 Position	NO+NC		<ul style="list-style-type: none"> <li>Black</li> </ul>	3SA16-11XCF-2P 3SA16-11XCF-3P	
45° 3 Position	2NO+2NC		<ul style="list-style-type: none"> <li>Black</li> </ul>	3SA16-22XA-2P 3SA16-22XA-3P	
45° 3 Position	2NO+2NC		<ul style="list-style-type: none"> <li>Black</li> </ul>	3SA16-22XF-2P 3SA16-22XF-3P	



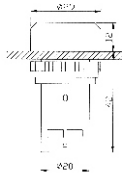



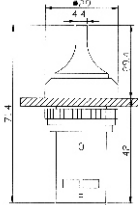
## Pushbutton & Indicator



Description	Contact	Circuit	Color	Type	Contour
45° 3 Position 3SA16-22XCF	2NO+2NC		● Black	3SA16-22XCF-2P 3SA16-22XCF-3P	
90° 2 Position 3SA16-11YA	NO+NC		○ Null	3SA16-11YA-2P 3SA16-11YA-3P	
90° 2 Position 3SA16-11YF	NO+NC		○ Null	3SA16-11YF-2P 3SA16-11YF-3P	
90° 2 Position 3SA16-11YCF	NO+NC		○ Null	3SA16-11YCF-2P 3SA16-11YCF-3P	
45° 3 Position 3SA16-22YA	2NO+2NC		○ Null	3SA16-22YA-2P 3SA16-22YA-3P	
45° 3 Position 3SA16-22YF	2NO+2NC		○ Null	3SA16-22YF-2P 3SA16-22YF-3P	
45° 3 Position 3SA16-22YCF	2NO+2NC		○ Null	3SA16-22YCF-2P 3SA16-22YCF-3P	






## Pushbutton Switch



	Description	Contact	Circuit	Color	Type	Contour
	Flush pushbutton	NO+NC		○ White	3SA17-CA15	
				● Black	3SA17-CA25	
				● Green	3SA17-CA35	
				● Red	3SA17-CA45	
				● Yellow	3SA17-CA55	
				● Blue	3SA17-CA65	
	Flush pushbutton with lamp	NO+NC		○ White	3SA17-CW3165	
				● Green	3SA17-CW3365	
				● Red	3SA17-CW3465	
				● Yellow	3SA17-CW3565	
				● Blue	3SA17-CW3665	
	Mushroom pushbutton with lamp	NO+NC		● Green	3SA17-CM35	
				● Red	3SA17-CM45	
	Emergency push button push-locking and push-reset	NO+NC		● Red	3SA17-CS545	
	Selector switch standard handle two positions	NO+NC		● Black	3SA17-CD25	
		NO+NO		● Black	3SA17-CD33	
	Selector switch standard handle two positions with lamp	NO+NC		● Green	3SA17-CK2365	
				● Red	3SA17-CK2465	
				● Yellow	3SA17-CK2565	

## Control Stations



### Start-Stop functions(Light grey lid with dark grey base )

Description	Scheme	Marking on legend	Marking on button	Reference	Weight kg
1 green flush pushbutton spring return	N/O	Start	—	3SA10-B101H29	0.120
	+ 	—	I	3SA10-B102	0.120
	N/C	—	Start	3SA10-B103	0.120
1 red flush pushbutton spring return	N/O 	Stop	—	3SA10-B111H29	0.120
		—	Stop	3SA10-B114	0.120
		—	O	3SA10-B112	0.120
1 red mushroom head pushbutton, $\phi$ 40 mm spring return	N/C	Emergency stop	—	3SA10-B164H29	0.120
1 red flush pushbutton spring return	N/C 	—	Stop	3SA10-B116	0.120

### Emergency stop functions(yellow lid with dark grey base )

Description	Scheme	Marking on legend	Marking on button	Reference	Weight kg
1 red mushroom head pushbutton, $\phi$ 40 mm, latching Turn to release	N/C 	Unmarked		3SA10-J174	0.14
1 red mushroom head pushbutton, $\phi$ 40 mm, latching Key release(key n° 445)	N/C 	Unmarked		3SA10-J184	0.17

### Emergency stop functions with (yellow lid with dark grey base )

Description	Scheme	Marking on legend	Marking on button	Reference	Weight kg
1 red mushroom head pushbutton, $\phi$ 40 mm, latching Turn to release		Unmarked		3SA10-J178	0.14
1 red mushroom head pushbutton, $\phi$ 40 mm, latching Key release(key n° 445)		Unmarked		3SA10-J188	0.17

#### Other versions

Use adaptable sub-assemblies:  
empty enclosures, contact blocks, signalling units, operators, legend plates(see pages 5/28 to 5/31).



## Control Stations



3SA10-B211H29



3SA10-B213



3SA10-B132H29



3SA10-B142H29



3SA10-B361H29



3SA10-B373

### Start-Stop functions(Light grey lid with dark grey base )

Description	Scheme	Marking on legend	Marking on button	Reference	Weight kg
2 spring return pushbutton	N/O	Start	—	3SA10-B211H29	0.165
1 flush green	+	—	I	3SA10-B213	0.165
1 flush red	N/C	—	O	3SA10-B215	0.165
1 selector switch	N/O	Start	—	3SA10-B132H29	0.125
2 position stay put standard black handle		Stop	—		
		O	—	3SA10-B134	0.125
		I	—		
1 selector switch key operated(key n° 455)	N/C	Start	—	3SA10-B142H29	0.150
2 position stay put key withdrawal from LH position		Stop	—		
		O	—	3SA10-B144	0.150
		I	—		

### Start-Stop functions with pilot light(Light grey lid with dark grey base )

Description	Scheme	Marking on legend	Marking on button	Reference	Weight kg
1 red pilot light	X1	Start	—	3SA10-B361H29	0.200
Direct supply ≤ 130V	N/O	Stop	—		
Bulb not included(1)	+	—	I	3SA10-B363	0.200
2 spring return pushbuttons	N/C	—	O		
1 flush green		—	Start	3SA10-B366	0.200
1 flush red		—	Stop		
1 red pilot light, 230V	X1	Start	—	3SA10-B371H29	0.205
Supply direct through resistor	N/O	Stop	—		
Bulb with BA 9s base fitting-130V(included)	+	—	I	3SA10-B373	0.205
2 spring return pushbuttons	N/C	—	O		
1 flush green		—	Start	3SA10-B376	0.205
1 flush red		—	Stop		

(1)Bulb types for use with direct supply:

-incandescent bulb, BA 9s base fitting:  $U \leq 130V$ , maximum power 2.6W, maximum length: 28 mm,

-neon bulb, BA 9s base fitting:  $110V \leq U \leq 380V$ .

Please consult our local representatives or agents.








### Other versions

Use adaptable sub-assemblies:


empty enclosures, contact blocks, signaling units, operators, legend plates (see pages 5/28 to 5/31).

## Control Stations



Description	Color	Contact type		Marking on button	Type
					
Flush pushbuttons		N/O		I	3SA10-D102
		N/O		OFF	3SA10-D104
		N/O		Start	3SA10-D103
		N/O	N/C	I	3SA10-D102E
			N/C	O	3SA10-D112
				NO	3SA10-D117
				Stop	3SA10-D114
		N/O	N/C	O	3SA10-D112E
Projecting red			N/C	Stop	3SA10-D114E
			N/C	O	3SA10-D115
				NO	3SA10-D118
				Stop	3SA10-D116
Flush pushbuttons		N/O		OFF	3SA10-D101
				Start	3SA10-D101H29
		N/C		O	3SA10-D111
				Stop	3SA10-D111H29
Mushroom red		N/C			3SA10-D164
		N/C			3SA10-K174
Turn to release $\phi 40$		N/O	N/C		3SA10-K174E
		N/O	2N/C		3SA10-K178G
		N/C			3SA10-K184
Key release (keyn° 455)red		N/O	N/C		3SA10-K184E
		N/O	2N/C		3SA10-K188G

## Control Stations

Description	Color	Contact type		Marking on button	Type	
						
2Flush pushbutton	1Green 1Red	N/O		Start	3SA10-D211	
		N/C				
				Stop	3SA10-D211H29	
		N/O			3SA10-D241	
2Flush pushbutton	1Green 1Red	N/O		I	3SA10-D213	
		N/C			O	
				Start	3SA10-D224	
				Stop	3SA10-D215	
		N/O	N/C	I		
		N/O	N/C	O	3SA10-D213E	
		N/O		I		
			N/C	O	3SA10-D214	
				Start	3SA10-D225	
1Selection standard handle		N/O		O—I	3SA10-D134	
					3SA10-D132	
				Start		
				Stop	3SA10-D144	
		N/O	N/C	I		
		N/O		O	3SA10-D142	
		N/O		O—I	3SA10-D144E	
					3SA10-D144	
		N/O		N/C		
		N/O		N/C	3SA10-D142	
2Flush pushbutton 1Red lamp					3SA10-D144E	
		N/O		I	≈ 24	3SA10-D363B
		N/C				O
					≈ 230	3SA10-D363M
		N/O				
		N/C			≈ 24	3SA10-D361B
			≈ 230	3SA10-D361M		

## Indicators



PL-15-1  
Φ 16



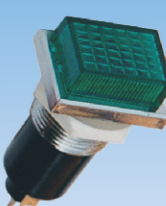
PH-16-MTH  
Φ 16



3SA1-22  
Φ 22



XD1  
Φ 16



XD1  
Φ 16



YL242-01  
Φ 16



YL235 Φ 10



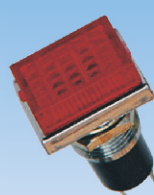
YL240 Φ 10



YL240-01 YL240-02 YL240-03 YL240-04 YL240-05 YL240-06  
Φ 10



YL238-03 YL238-04 YL238-05 YL238-06  
Φ 8



XD02-1



XD02-2



XD02-3



XD02-4

Φ 10



YL23-1



YL23-2

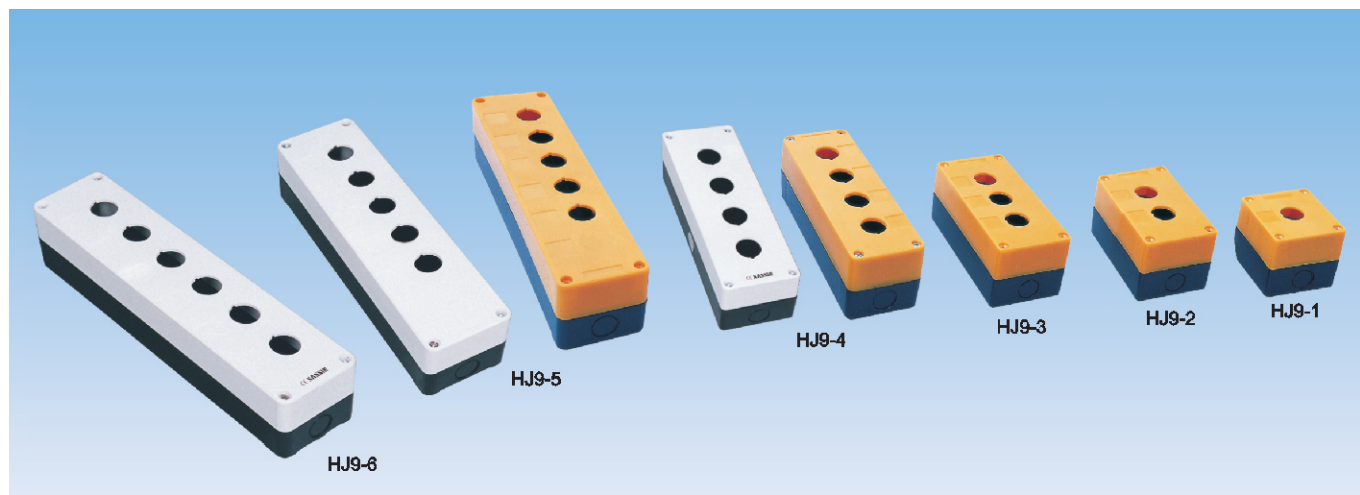


YL23-3

Φ 16



## Pushbutton Switch Box



## Indicators



## Pushbutton





## BS Power push button switch



### ■ Application

BS power push button switch is applicable to the motor of the voltage up 500V and the capacity up to 3KW for directly starting run and breaking, also for infrequently turning on and off load current. It's characteristic of accurate on-off, safe and reliable, high intensity of machinery and widely used in machine tools, textile machinery, etc. The switch is the best choice for machinery power.

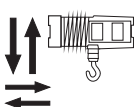




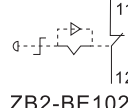

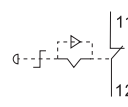
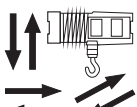




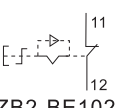

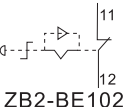
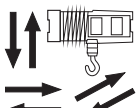




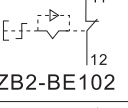

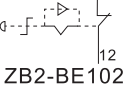
### ■ Application

Type	No.of phases	Rated voltage (v)	Applicable motor capacity KW (HP)	Resistance load (A)	Weight (kg)	Dimensions L×B×H
BS-211	2, 3	600	0.75(1)at 220V	7.5(100)	0.13	90×44×49
BS216	2, 3	600	2.2(3)at 220V	15(20)	0.18	93×53×54
BS230	2, 3	600	220V	(30)	0.22	112×62×56

## Pushbutton

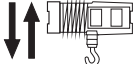



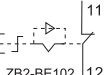
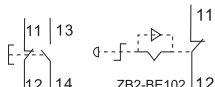

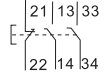
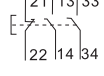
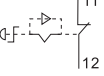

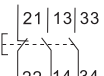
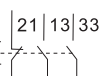
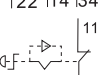

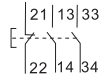

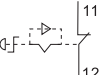

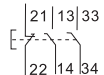
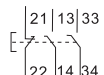
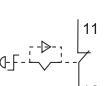
### For control of single-speed motors



Functions	Number of operators	Contact blocks and scheme per direction for "Emergency stop"	Reference
	4 mechanically interlocked between pairs	ZB2-BE101 	3SP-471
		ZB2-BE102 + ZB2-BE101 	3SP-481
	4 mechanically interlocked between pairs + 1 trigger action latching "Emergency stop" Φ40 mm operator ZA2-BS54	ZB2-BE101  ZB2-BE102 	3SP-4713
		ZB2-BE102 + ZB2-BE101  ZB2-BE102 	3SP-4813
	6 mechanically interlocked between pairs	ZB2-BE101 	3SP-671
		ZB2-BE102 + ZB2-BE101 	3SP-681
	6 mechanically interlocked between pairs + 1 trigger action latching "Emergency stop" Φ40 mm operator ZA2-BS44	ZB2-BE101  ZB2-BE102 	3SP-6713
		ZB2-BE102 + ZB2-BE101  ZB2-BE102 	3SP-6813
	6 mechanically interlocked between pairs	ZB2-BE101 	3SP-871
		ZB2-BE102 + ZB2-BE101 	3SP-881
	6 mechanically interlocked between pairs + 1 trigger action latching "Emergency stop" Φ40 mm operator ZA2-BS44	ZB2-BE101  ZB2-BE102 	3SP-8713
		ZB2-BE102 + ZB2-BE101  ZB2-BE102 	3SP-8813

## Pushbutton

### For control of 2-speed motors

Functions	Number of operators	Contact blocks and scheme per direction for "Emergency stop"	Reference
	2 mechanically interlocked	ZB2-BE101 	3SP-271
		ZB2-BE102 + ZB2-BE101 	3SP-281
	2 mechanically interlocked +1 trigger action latching "Emergency stop" $\Phi 30$ mm operator ZA2-BS44	ZB2-BE101  ZB2-BE102 	3SP-2713
		ZB2-BE102 + ZB2-BE101 	3SP-2813
	2 mechanically interlocked	1N/C+NO+NO staggered XEN-G1191 	3SP-291
	2 mechanically interlocked +1 trigger action latching "Emergency stop" $\Phi 30$ mm operator ZA2-BS44	1N/C+NO+NO staggered XEN-G1191  1N/C ZB2-BE102 	3SP-2913
	4 mechanically interlocked between pairs	1N/C+NO+NO staggered XEN-G1191 	3SP-491
	4 mechanically interlocked between pairs +1 trigger action latching "Emergency stop" $\Phi 40$ mm operator ZA2-BS44	1N/C+NO+NO staggered XEN-G1191  1N/C ZB2-BE102 	3SP-4913
	4 mechanically interlocked between pairs +1 trigger action latching "Emergency stop" $\Phi 40$ mm operator ZA2-BS44	1N/C+NO+NO staggered(a) XEN-G1191 	3SP-4923
		1N/C102(b) 	
	1N/C ZB2-BE102 		
	6 mechanically interlocked	1N/C+NO+NO staggered XEN-G1191 	3SP-691
	6 mechanically interlocked +1 trigger action latching "Emergency stop" $\Phi 30$ mm operator ZA2-BS44	1N/C+NO+NO staggered XEN-G1191  1N/C ZB2-BE102 	3SP-6913