

产品简介 Introduction of product

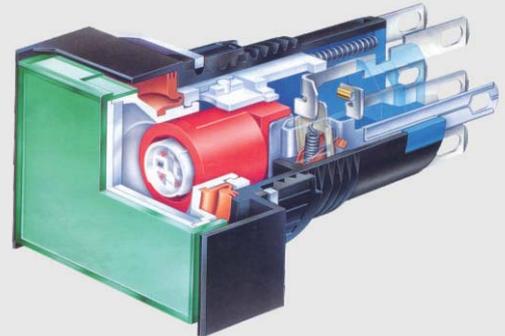
LAY50-8A、12A、16A微型按钮是上海双科电气有限公司继LAY50-22(A、B、C)系列按钮之后推出的又一系列产品。

LAY50-8A、12A、16A微型按钮以独特的精美操作机构为特点，其开关操作瞬动柔和，短体操作开关使用可靠的镀金银触点，使用寿命长。

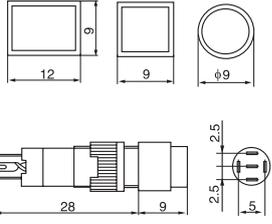
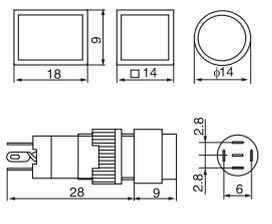
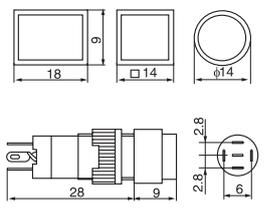
产品适用于数控机床、机械、电力、电讯、自动化设备、仪器等电气控制电路中作控制信号联锁等使用。

LAY50-8A、12A、16A mini button is a new series product succeeding series. LAY50-22(A,B,C) button pushed by Shanghai Shuangke Electric Co., Ltd. Because the LAY50-8A、12A、16A mini button has the characteristics of the unique and fine operation mechanism, the instantaneous release of switch operation is soft. For the short-body operation switch uses reliable vermeil as contact, the service life is long.

The product is suitable for controlling the interlocking of indicating light and in the electric controlling circuit such as numerically-controlled machine tool, mechanism, power, telecommunication, automated equipment, instrument and so on.



带灯按钮、按钮、指示灯 Push button with light, Push button, pilot light(φ8、φ12)

	功能 Function	型号 Model	灯电压 Light voltage	颜色 Color	
 圆形 Circular	信号灯 Pilot light	LAY50-8AY-D/□ LAY50-8AY-11/□ LAY50-8AY-11T/□ LAY50-8AY-11D/□ LAY50-8AY-11TD/□	DC.AC 6V DC.AC 12V DC.AC 24V	● 红-R ● 绿-G ● 黄-Y ● 蓝-B ○ 白-W	
	自复位 Self-reset	LAY50-8AF-D/□ LAY50-8AF-11/□ LAY50-8AF-11T/□ LAY50-8AF-11D/□ LAY50-8AF-11TD/□			
	自锁式 Self-locking type	LAY50-8AJ-D/□ LAY50-8AJ-11/□ LAY50-8AJ-11T/□ LAY50-8AJ-11D/□ LAY50-8AJ-11TD/□			
 方形 Square	信号灯 Pilot light	LAY50-12AY-D/□ LAY50-12AY-□/□ LAY50-12AY-□T/□ LAY50-12AY-□D/□ LAY50-12AY-□TD/□	DC.AC 6V DC.AC 12V DC.AC 24V	● 红-R ● 绿-G ● 黄-Y ● 蓝-B ○ 白-W	
	自复位 Self-reset	LAY50-12AF-D/□ LAY50-12AF-□/□ LAY50-12AF-□T/□ LAY50-12AF-□D/□ LAY50-12AF-□TD/□			
	自锁式 Self-locking type	LAY50-12AJ-D/□ LAY50-12AJ-□/□ LAY50-12AJ-□T/□ LAY50-12AJ-□D/□ LAY50-12AJ-□TD/□			
 矩形 Rectangular	信号灯 Pilot light	LAY50-12AY-D/□ LAY50-12AY-□/□ LAY50-12AY-□T/□ LAY50-12AY-□D/□ LAY50-12AY-□TD/□	DC.AC 6V DC.AC 12V DC.AC 24V	● 红-R ● 绿-G ● 黄-Y ● 蓝-B ○ 白-W	
	自复位 Self-reset	LAY50-12AF-D/□ LAY50-12AF-□/□ LAY50-12AF-□T/□ LAY50-12AF-□D/□ LAY50-12AF-□TD/□			
	自锁式 Self-locking type	LAY50-12AJ-D/□ LAY50-12AJ-□/□ LAY50-12AJ-□T/□ LAY50-12AJ-□D/□ LAY50-12AJ-□TD/□			

斜线前的□填写常开，常闭的触点数，斜线后的□填写颜色。
Filling in normal open and close number in front of □, color in back of □.

型号及含义 Model and implication

LAY50 -- 1 2 3 -- 4 5 6 / 7 8 9 TH

表示常闭触头数 Indicates normally closed contact quantity

表示常开触头数 Indicates normally open contact quantity

对 ϕ 22/25、30系列按钮，表示触点方式，“Q”表示弹片快动式，“P”表示平压慢动式。
 ϕ 22 /25、30 series of push button indicates contact “Q” is shrapnel quick type “P” is flat crushing slow type.

分别填A、B、C、D、SKB表示LAY50系列的七种外观结构风格

A、B、C、D、SKB can be separately indicate five kinds of appearance styles of series LAY50

注：A型头部和联络件可根据不同的要求随意组合，详见安装结构图。

The head for A type and connection are in any combination ways according the special request. Details refer installation structure block.

表示颈部尺寸，用22/25、30表示，单位mm

Indicates neck dimension, indicated by 22/25、30, unit mm.

按钮型号(由上海电器科学研究所发放，上海斯普威尔电气有限公司专用)

Type (approved by Shanghai Electrical Appliance Scientific Research Institution, monopoly for Shanghai Saipwell Electrical Co., Ltd.)

按钮功能 Function of push button

字母 Letter	含义 Implication	字母 Letter	含义 Implication
	一般按钮 Push button	Z	紧急按钮 Emergency push button
D	带灯按钮 Push button with light	Y	二位置钥匙按钮 Two-position key push button
H	高位按钮 High button	YS	三位置钥匙按钮 Three-position key push button
S□	符号按钮，内填符号序号 Sign push button, is filled with symbol order number	ZY	钥匙紧急按钮 Key emergency push button
T	自锁按钮 Mushroom push button	XD	二位置带灯按钮 Two-position turn button with light
X	短柄二位置按钮 Short-handle two-position turn button	XDS	三位置带灯按钮 Three-position turn button with light
XS	短柄三位置按钮 Short-handle three-position turn button	R	双位按钮 Double position push button
CX	长柄二位置按钮 Long-handle two-position turn button	RD	双位带灯按钮 Double position push button
CXS	长柄三位置按钮 Long-handle three-position turn button	J	经济型按钮 Economize push button
M	蘑菇按钮 Self-locking mushroom push button	JX	两位置经济型按钮 Two Economize turn button
MT	蘑菇自锁按钮 Self-locking mushroom push button	JXS	三位置经济型按钮 Three Economize turn button

表示钮片颜色 Indicates colors of the push-button pieces

R	G	Y	O	B	W	K	T
红 Red	绿 Green	黄 Yellow	橙 Orange	蓝 Blue	白 White	黑 Black	透明 Transparent

技术性能参数 Technical performance parameter

使用条件 Service conditions	工作温度 Operation temperature	使用类别 Operation category	污染等级 Pollution class	安装高程 Installation Height	抗振动 Vibration Durability		
	+55℃~ -25℃	AC15 DC13	3	2000m	10~200Hz 1mn.10g		
控制能力 Control ability	交流 AC		直流 DC				
	额定工作电压Ue Rated operation voltage	额定工作电流Ie Rated operation current		额定工作电压Ue Rated operation voltage		额定工作电流Ie Rated operation current	
		弹片式	平压式	平压式	弹片式	平压式	弹片式
	500V	2	2.3	110V	1A	1.2	
380V	4	4.5	48V	3A	3.6		
220V	5.5	6.5	24V	6A	7.2		
额定值 Rated value	额定绝缘电压 Ui Rated insulation voltage AC 660V50Hz 约定发热电流 Ith Conventional heating current 10A						
使用寿命 Operation life	机械寿命 Mechanical life			电寿命 Electrical life			
	一般钮 Common push button	3 × 10 ⁶			交流电寿命 120 × 10 ⁴ 次 AC electrical life 120 × 10 ⁴ times		
	旋钮 Turn button	30 × 10 ⁴			直流电寿命 60 × 10 ⁴ 次 DC electrical life 60 × 10 ⁴ times		
	钥匙钮 Key push button	5 × 10 ⁴					
紧急钮 Emergency push button	5 × 10 ⁴						
接触电阻 Contact resistance	≤50mΩ						
前部防护等级 Protective class	IP40 (A.B.C型 加防水罩可达IP67)			IP65 (D型)			

开关元件触点状态 Contact state of the switch element



状态 State					
触点代码 Contact code	01	10	02	20	11
	一闭 One close	一开 One open	二闭 Two close	二开 Two open	一开一闭 One open One close

平压式触点是我厂新推出的一种产品，相对于弹片式触点能够承受更大的电流。
Slow action contact is new product in our company, which can burden stronger current when comparing with snop action contact.

旋钮钥匙动作位置及钥匙拔出位置

Operation position of the key of turn push button and pulling out position of the key of turn push button

F	Fu	ffu	a	ao	au
左边自复位 Self reset on the left	右边自复位 Self reset on the right	左右自复位 Selfreset on the left and right	左边拔出 Pulling out on the left	中间拔出 Pulling out in the middle	右边拔出 Pulling out on the right

带灯钮指示灯规格 Specification of Indicator push button with light



光源 Light source	发光二极管 Luminous diode LED										
代码 Code	21	22	23	24	25	26	27	28	31	32	
电源 Power supply	AC/DC							DC	AC		
电压 (V) Voltage	6	12	24	36	48	110	127	220	220	380	

TH 表示湿热型 Indicates tender-heat type

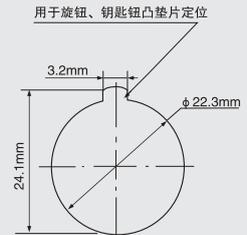
特点

- 1.LAY50-(AA₁、AB₁、AC₁):外观轮廓鲜明,线条优美。采用斜式螺钉固定安装,继承瑞士EAO设计风格,符合欧美严谨、坚固可靠的工程设计理念。
- 2.LAY50-(AA₂、AB₂、AC₂):外观层次分明,高强度PBT塑制作与直式螺钉相组合固定,既继承了AA₁、AB₁、AC₁稳重坚固的特点,又兼顾了制造成本,是AA₁、AB₁、AC₁的简约形式,使用户又多多种经济选择方案。
- 3.LAY50-(AA₃、AB₃、AC₃):采用螺帽紧固方式,朴实简洁,降低安装难度,减轻用户工作强度。受环境温度影响会降低安装可靠性,建议使用旋钮、钥匙钮等带旋转工作状态时不宜采用此安装模式。选择AC₃时不能使用旋钮,AA₃、AB₃选择使用旋钮需加挡圈,开孔形状如右图。

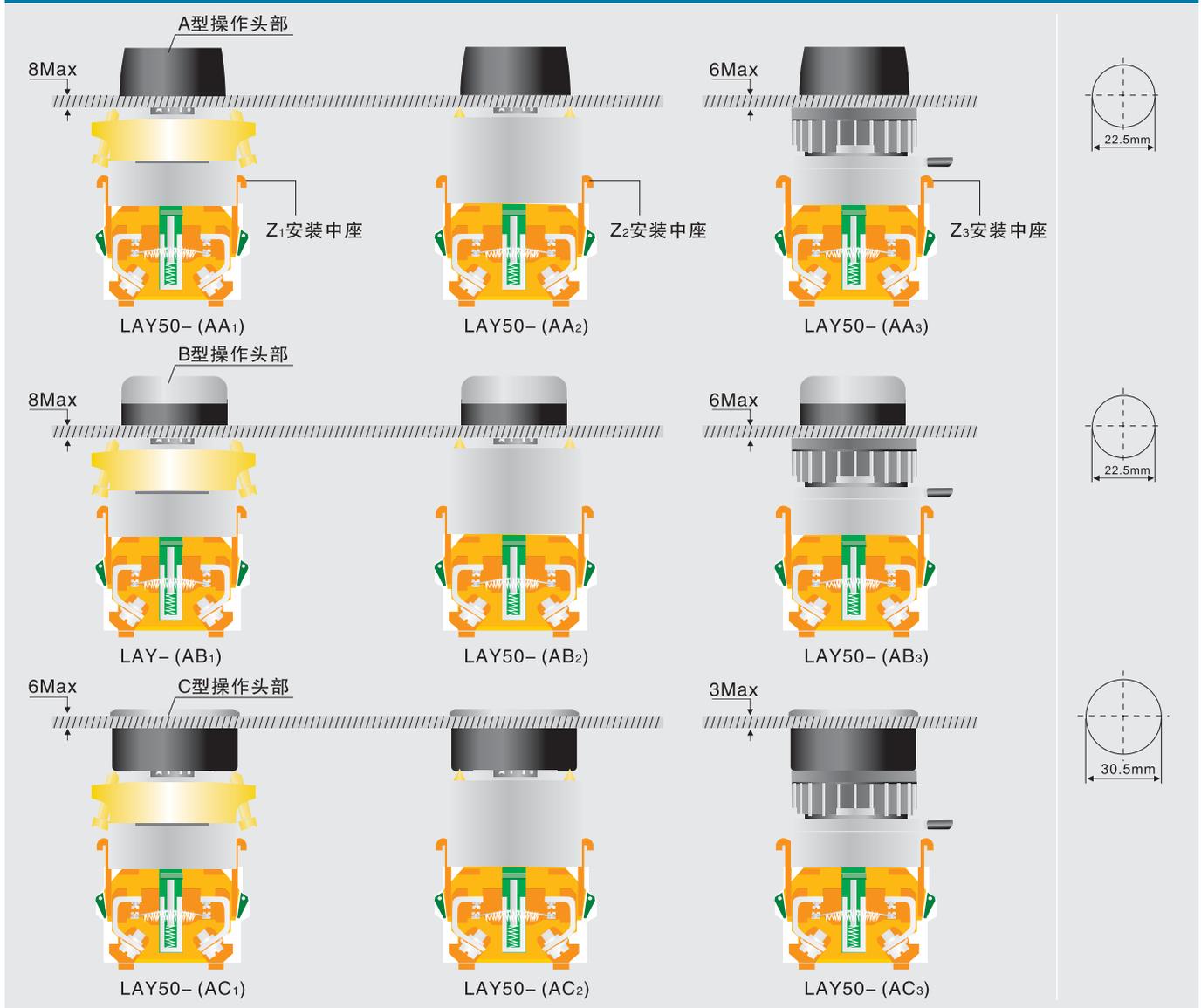
1.LAY50-(AA₁、AB₁、AC₁): Outline clear-cut appearance, graceful lines. Install and Fix by inclined-screw, Succeed to design description for EAO Switzerland, accord to accident strict and soundness of the engineering design concept.

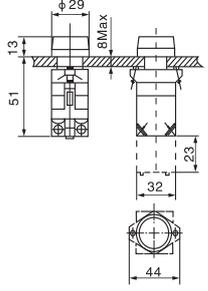
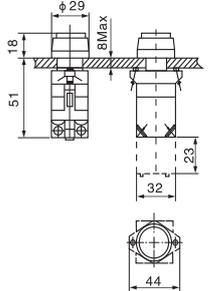
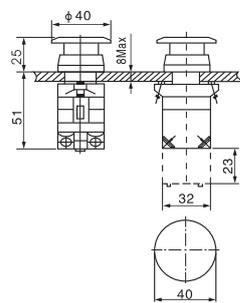
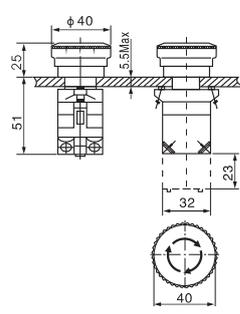
2.LAY50-(AA₂、AB₂、AC₂): Well-bedded appearance, Fixed by high-strength plastic PBT production and Straight screw combination, not only inherited the AA₁, AB₁, AC₁ stable characteristics of a solid, but also take into account the cost of manufacturing, it is AA₁, AB₁, AC₁ simple form, it is a economic options for consumer.

3.LAY50-(AA₃、AB₃、AC₃): The use of nut fastening the way, simple and concise, reducing installation difficulty, reduce the intensity of work. But it will reduce the reliability of the installation by environmental temperature, To suggest that should not be used this install mode when the use turn button and key button of work with rotating state. it can not choice AC₃ when use turn button, To use AA₃, AB₃ turn button will be add the option of using ring, such as the right shape hole.



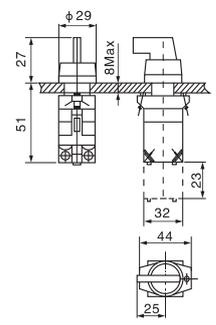
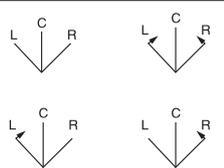
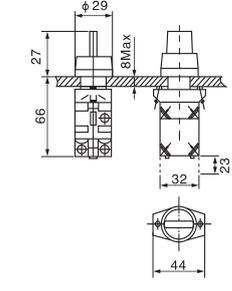
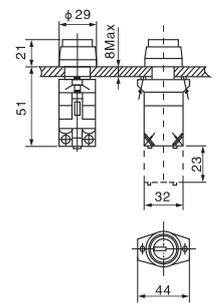
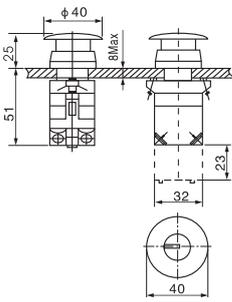
安装结构图



外形图	功能 Function	型号 Model	颜色 Color	灯电压 Light vantage	外形尺寸 Overall dimension
 <p>一般按钮 Push Button</p>	瞬动 Lntantaneous type 自锁 Self-locking type	LAY50-AA ₁ -□/□ LAY50-AA ₁ -□T/□	● 红-R ● 绿-G ● 黄-Y ○ 白-W ● 蓝-B ● 黑-K		
 <p>高位按钮 High Button</p>	瞬动 Lntantaneous type 自锁 Self-locking type	LAY50-AA ₁ -□H/□ LAY50-AA ₁ -□HT/□	● 红-R ● 绿-G ● 黄-Y ○ 白-W ● 蓝-B ● 黑-K	有 Yes 21-DC.AC 6V 22-DC.AC 12V 23-DC.AC 24V 24-DC.AC 36V 25-DC.AC 48V 26-DC.AC 110V 27-DC.AC 127V 28-DC 220V 31-AC 220V 32-AC 380V	
 <p>蘑菇按钮 Mushroom push button</p>	瞬动 Lntantaneous type 自锁 Self-locking type	LAY50-AA ₁ -□M/□ LAY50-AA ₁ -□MT/□	● 红-R ● 绿-G ● 黄-Y		
 <p>紧急按钮 Emergency push button</p>	按压锁定, 顺时针复位 Push locking in clockwise direction move reset	LAY50-AA ₁ -□Z	● 红-R ● 绿-G	无 No	

说明 Remarks

- 斜线前的□填写常开常闭的触头数。
- 斜线后的□填写颜色。
- 带灯按钮的光源均采用高亮或纯色的LED。
- 订货时如需Z₂、Z₃中座时，即可把型号中的A₁改为A₂或A₃。选用C₃中座时安装板厚度要求变化较大，应注意。
- Filling in normal open and colose number in front of□.
- Filling in color in back of□.
- All swith with light use pure light illuminant LED light source.
- To charge A₁ to A₂ or A₃ when order if need,connection Z₂、Z₃, please note the larger chornges for the thickness of installation.

外形图	功能 Function	型号 Model	颜色 Color	手柄位置 Handle position	外形尺寸 Overall dimension
 <p>旋钮 Turn Button</p>	二位置 Two-position	LAY50-AA ₁ -□X/ LAY50-AA ₁ -□CX LAY50-AA ₁ -□X/fu LAY50-AA ₁ -□CX/fu	● 黑-K ● 红-R ● 绿-G ● 黄-Y		
	三位置 Three-position	LAY50-AA ₁ -□XS LAY50-AA ₁ -□CXS LAY50-AA ₁ -□XS/fu LAY50-AA ₁ -□CXS/fu			
 <p>带灯旋钮 Turn Button with Light</p>	二位置 Two-position	LAY50-AA ₁ -□XD LAY50-AA ₁ -□XD/fu	● 红-R ● 绿-G ● 黄-Y	灯电压 同 一般 按钮	
	三位置 Three-position	LAY50-AA ₁ -□XDS LAY50-AA ₁ -□XDS/fu			
 <p>钥匙钮 Key Push Button</p>	二位置 Two-position	LAY50-AA ₁ -□Y			
	三位置 Three-position	LAY50-AA ₁ -□YS			
 <p>带钥匙紧急钮 Key Emergency button</p>	按压锁定, 钥 匙顺时针转复位 Push locking in clockwise direction move reset key	LAY50-AA ₁ -□ZY	● 红-R		

说明 Remarks

- 1.斜线前的□填写常开常闭的触头数。
- 2.无特殊说明旋钮将提供黑色,斜线后的□填写颜色。
- 3.带灯钮的光源均为高亮纯色的LED。
- 4.订货时如需B₂、C₃中座时,即可把型号中的A₁改为A₂或A₃。

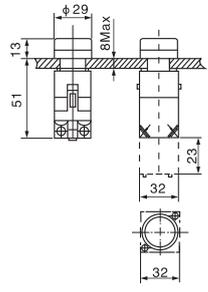
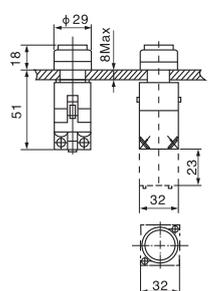
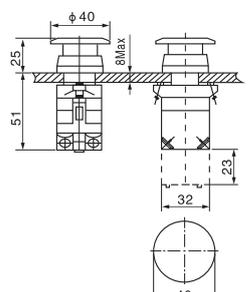
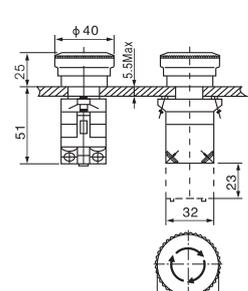
注:如需φ60的蘑菇头请在型号后加“-60”,φ40的不加标注。

1.Filling in normal open and colose number in front of□. 2.Filling in color in back of ture button is black if not specialreqst.Filling in color in back of□.

3.All swith with light use pure light illuminant LED light source.

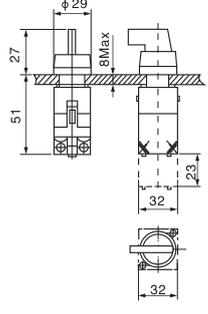
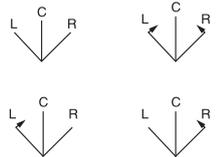
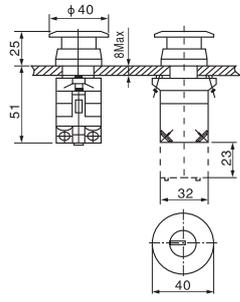
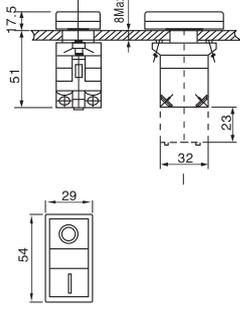
4.To charge A₁ to A₂ or A₃ when order if need,connection B₂、C₃, please note the larger chornges for the thickness of installation.

Note:Please add “-60” in back of type when orider φ 60 mushroom push botton. ● To suggest that Emergency push button use slow action contact black.

外形图	功能 Function	型号 Model	颜色 Color	灯电压 Light valtage	外形尺寸 Overall dimension
 <p>一般钮 Push Button</p>	<p>瞬动 Lntantaneous type</p> <p>自锁 Self-locking type</p>	<p>LAY50-AB₂-□/□</p> <p>LAY50-AB₂-□T/□</p>	<p>● 红-R</p> <p>● 绿-G</p> <p>● 黄-Y</p> <p>○ 白-W</p> <p>● 蓝-B</p> <p>● 黑-K</p>		
 <p>高位按钮 High Button</p>	<p>瞬动 Lntantaneous type</p> <p>自锁 Self-locking type</p>	<p>LAY50-AB₂-□H/□</p> <p>LAY50-AB₂-□HT/□</p>	<p>● 红-R</p> <p>● 绿-G</p> <p>● 黄-Y</p> <p>○ 白-W</p> <p>● 蓝-B</p> <p>● 黑-K</p>	<p>有 Yes</p> <p>21-DC.AC 6V</p> <p>22-DC.AC 12V</p> <p>23-DC.AC 24V</p> <p>24-DC.AC 36V</p> <p>25-DC.AC 48V</p> <p>26-DC.AC 110V</p> <p>27-DC.AC 127V</p> <p>28-DC 220V</p> <p>31-AC 220V</p> <p>32-AC 380V</p>	
 <p>蘑菇钮 Mushroom push button</p>	<p>瞬动 Lntantaneous type</p> <p>自锁 Self-locking type</p>	<p>LAY50-AB₂-□M/□</p> <p>LAY50-AB₂-□MT/□</p>	<p>● 红-R</p> <p>● 绿-G</p> <p>● 黄-Y</p>		
 <p>紧急钮 Emergency push button</p>	<p>按压锁定， 顺时针复位 Push locking in clockwise direction move reset</p>	<p>LAY50-AB₂-□Z</p>	<p>● 红-R</p> <p>● 绿-G</p>	<p>无 No</p>	

说明 Remarks

- 斜线前的□填写常开常闭的触头数。
- 斜线后的□填写颜色。
- 带灯按钮的光源均采用高亮或纯色的LED。
- 订货时如需B₁、C₃中座时，即可把型号中的B₂改为B₁或B₃。
- Filling in normal open and colose number in front of□.
- Filling in color in back of□.
- All swith with light use pure light illuminant LED light source.
- To charge B₂ to B₁ or B₃ when order if need,connection A₁、C₃, please note the larger chornges for the thickness of installation.

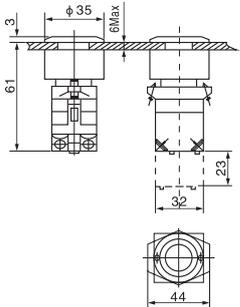
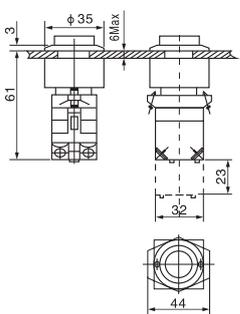
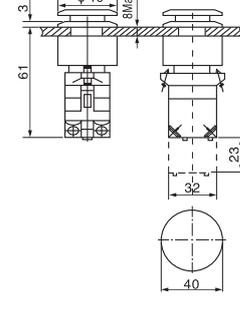
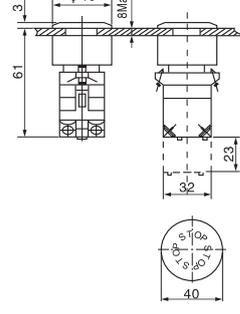
外形图	功能 Function	型号 Model	颜色 Color	手柄位置 Handle position	外形尺寸 Overall dimension
 <p>旋钮 Turn Button</p>	二位置 Two-position	LAY50-AB ₂ -□X/ LAY50-AB ₂ -□CX LAY50-AB ₂ -□X/fu LAY50-AB ₂ -□CX/fu	● 黑-K ● 红-R ● 绿-G ● 黄-Y		
	三位置 Three-position	LAY50-AB ₂ -□XS LAY50-AB ₂ -□CXS LAY50-AB ₂ -□XS/fu LAY50-AB ₂ -□CXS/fu			
 <p>带钥匙紧急钮 Key Emergency button</p>	按压锁定, 钥匙 顺时针转复位 Push locking in clockwise direction move reset key	LAY50-AB ₂ -□ZY	● 红-R	 <p>ao 特殊要求可订制 每个位置拔出</p>	
 <p>双位钮 Double push button</p>	不带灯 双位钮 Double push button without light	LAY50-AB ₂ -□R	红/绿 R/G ●/●	灯电压 light valtage LED光源 light source 21-DC.AC 6V 22-DC.AC 12V 23-DC.AC 24V 24-DC.AC 36V 25-DC.AC 48V 26-DC.AC 110V 27-DC.AC 127V 28-DC 220V 31-AC 220V 32-AC 380V	
	带灯双位钮 (灯珠为黄色 或纯白色) Double push button with light (light ball is yellow or pure white)	LAY50-AB ₂ -□RD			

说明 Remarks

- 斜线前的□填写常开常闭的触头数。
 - 斜线后的□填写颜色。
 - 带灯钮的光源均为高亮纯色的LED。
 - 订货时需A、C₂中座时, 即可把型号中的B₂改为B₁或B₃。
- 注: 如需φ60的蘑菇头请在型号后加“-60”, φ40的不加标注。

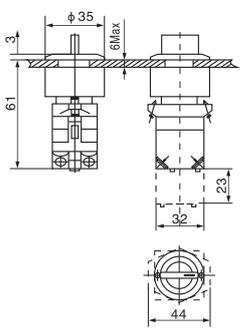
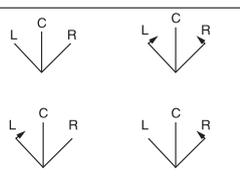
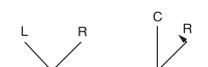
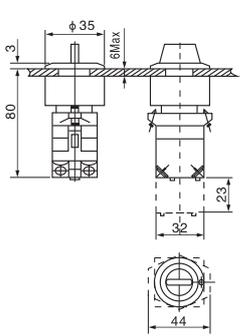
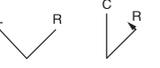
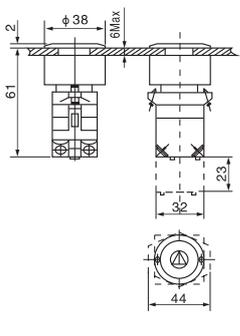
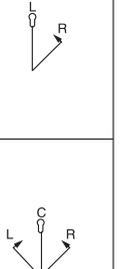
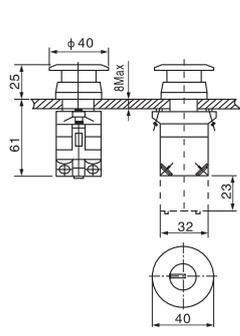
- Filling in normal open and colose number in front of□.
- Filling in color in back of ture button is black if not specialrequist.Filling in color in back of□.
- All swith with light use pure light illuminant LED light source.
- To charge B₂ to B₁ or B₃ when order if need,connection A、C₂, please note the larger chornges for the thickness of installation.

Note:Please add "-60" in back of type when orider φ 60 mushroom push botton. ● To suggest that Emergency push button use slow action contact black.

外形图	功能 Function	型号 Model	颜色 Color	灯电压 Light voltage	外形尺寸 Overall dimension
 <p>一般按钮 Push Button</p>	瞬动 Instantaneous type 自锁 Self-locking type	LAY50-AC ₃ -□/□ LAY50-AC ₃ -□T/□	● 红-R ● 绿-G ● 黄-Y ○ 白-W ● 蓝-B ● 黑-K		
 <p>高位按钮 High Button</p>	瞬动 Instantaneous type 自锁 Self-locking type	LAY50-AC ₃ -□H/□ LAY50-AC ₃ -□HT/□	● 红-R ● 绿-G ● 黄-Y ○ 白-W ● 蓝-B ● 黑-K	有 Yes 21-DC.AC 6V 22-DC.AC 12V 23-DC.AC 24V 24-DC.AC 36V 25-DC.AC 48V 26-DC.AC 110V 27-DC.AC 127V 28-DC 220V 31-AC 220V 32-AC 380V	
 <p>蘑菇按钮 Mushroom push button</p>	瞬动 Instantaneous type 自锁 Self-locking type	LAY50-AC ₃ -□M/□ LAY50-AC ₃ -□MT/□	不透明 ● 红-R ● 绿-G ● 黄-Y		
 <p>紧急按钮 Emergency push button</p>	按压锁定， 顺时针转复位 Push locking in clockwise direction move reset	LAY50-AC ₃ -□Z	不透明 ● 红-R ● 绿-G	无 No	

说明 Remarks

- 斜线前的□填写常开常闭的触头数。
- 斜线后的□填写颜色。
- 带灯按钮的光源均采用高亮或纯色的LED。
- 订货时如需A1、B2中座时，即可把型号中的C3改为C1或C2。
- Filling in normal open and colose number in front of□.
- Filling in color in back of□.
- All switch with light use pure light illuminant LED light source.
- To change C₃ to C₁ or C₂ when order if need, connection A₁、B₂, please note the larger chornges for the thickness of installation.

外形图	功能 Function	型号 Model	颜色 Color	手柄位置 Handle position	外形尺寸 Overall dimension
 <p>旋钮 Turn Button</p>	二位置 Two-position	LAY50-AC ₃ -□X/ LAY50-AC ₃ -□CX LAY50-AC ₃ -□X/fu LAY50-AC ₃ -□CX/fu	● 黑-K ● 红-R ● 绿-G ● 黄-Y		
	三位置 Three-position	LAY50-AC ₃ -□XS LAY50-AC ₃ -□CXS LAY50-AC ₃ -□XS/fu LAY50-AC ₃ -□CXS/fu			
 <p>带灯旋钮 Turn Button with Light</p>	二位置 Two-position	LAY50-AC ₃ -□XD LAY50-AC ₃ -□XD/fu	● 红-R ● 绿-G ● 黄-Y	灯电压同一般按钮 	
	三位置 Three-position	LAY50-AC ₃ -□XDS LAY50-AC ₃ -□XDS/fu			
 <p>钥匙钮 Key Push Button</p>	二位置 Two-position	LAY50-AC ₃ -□Y LAY50-AC ₃ -□Y/fu			采用专用三角钥匙 
	三位置 Three-position	LAY50-AC ₃ -□YS			
 <p>带钥匙紧急钮 Key Emergency button</p>	按压锁定, 钥匙顺时针复位 Push locking in clockwise direction to reset key	LAY50-AC ₃ -□ZY	● 红-R		ao 特殊要求可订制每个位置拔出 

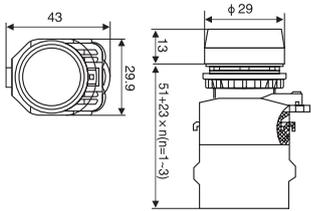
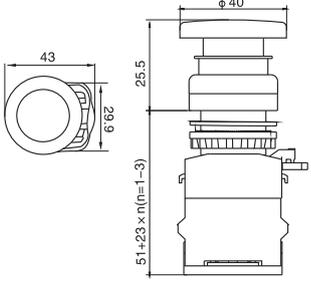
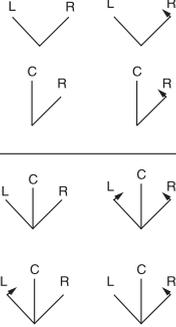
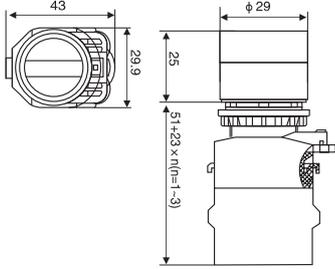
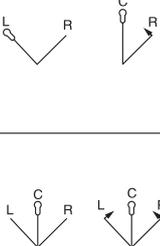
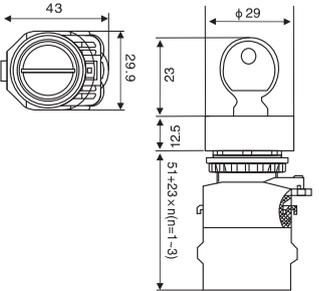
说明 Remarks

- 1.斜线前的□填写常开常闭的触头数。
 - 2.斜线后的□填写颜色, □填写带灯的电压等级。
 - 3.带灯钮的光源均为高亮纯色的LED。
 - 4.订货时需A1、B2中座时, 即可把型号中的C3改为C1或C2。
- 注: 如需φ60的蘑菇头请在型号后加“-60”, φ40的不加标注。 ● 紧急停止按钮建议采用慢动型底座。

1. Filling in normal open and close number in front of □.
2. Filling in color in back of turn button is black if not special request. Filling in color in back of □.
3. All switch with light use pure light illuminant LED light source.
4. To charge C₃ to C₁ or C₂ when order if need, connection A₁、B₂, please note the larger changes for the thickness of installation.

Note: Please add "φ60" in back of type when order φ60 mushroom push button. ● To suggest that Emergency push button use slow action contact black.

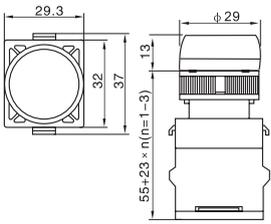
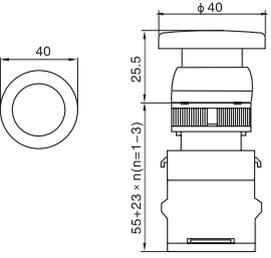
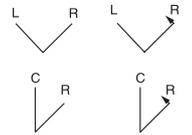
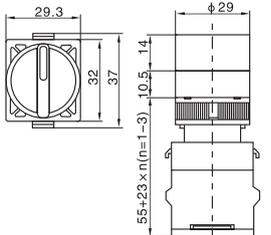
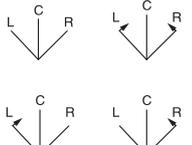
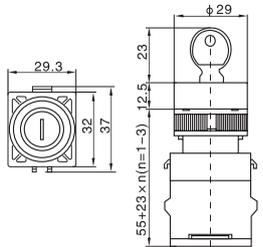
一般钮、蘑菇钮、旋钮、钥匙钮
Push button、Mushroom push button、Turn button、Key push button

外形图	功能 Function	型号 Model	颜色 Color	灯电压 Light voltage	外形尺寸 Overall dimension
 <p>一般钮 Push button</p>	瞬动型 Instantaneous type 自锁型 Self-locking type	LAY50-22B-□/□ LAY50-22B-□T/□	● 红 R ● 绿 G ● 黄 Y ● 蓝 B ○ 白 W ● 黑 K	有 Yes 21-DC.AC 6V 22-DC.AC 12V 23-DC.AC 24V 24-DC.AC 36V 25-DC.AC 48V 26-DC.AC 110V 27-DC.AC 127V 28-DC 220V 31-AC 220V 32-AC 380V	
 <p>蘑菇钮 Mushroom push button</p>	瞬动型 Instantaneous type 自锁型 Self-locking type	LAY50-22B-□M/□ LAY50-22B-□MT/□	● 红 R ● 绿 G ● 黄 Y ● 蓝 B ○ 白 W		
 <p>旋钮 Turn button</p>	二位置 Two-position 三位置 Three-position	LAY50-22B-□X/ LAY50-22B-□X/ffu LAY50-22B-□CX/ LAY50-22B-□CX/ffu LAY50-22B-□XS/ LAY50-22B-□XS/ffu LAY50-22B-□CXS/ LAY50-22B-□CXS/ffu			
 <p>钥匙钮 Key push button</p>	二位置 Two-position 三位置 Three-position	LAY50-22B-□Y/ LAY50-22B-□YS/			

说明 Remarks

- 1、B型按钮安装采用螺帽紧固方式，使安装更方便快捷，大幅减轻用户工作强度；
- 2、B、C两种型号的面板风格相同，主要是安装，结构方式不同；
- 3、旋钮二位置自锁有90°和45°二种，订货时请注明。
1、B type pushbutton uses screw fixture way in order to be more convenient and quick for installation and reduce user's working strength largely.
2、B、C model's panel style is same, whose main installation and structure way are different.
3、Two-position self-locking turn push button have types of 90° and 45° .It should be marked out when ordering.

旋钮、钥匙钮
Turn button、Key push button

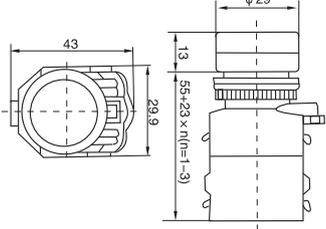
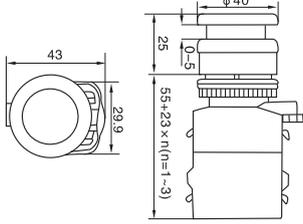
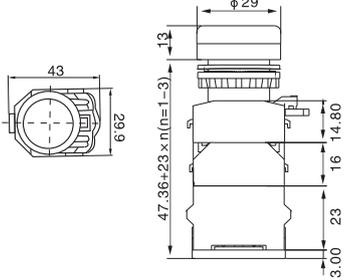
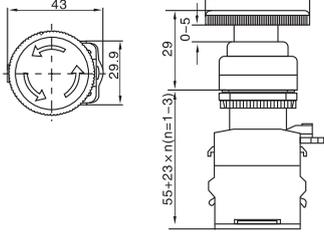
外形图	功能 Function	型号 Model	颜色 Color	灯电压 Light valtage	外形尺寸 Overall dimension
 <p>一般钮 Push button</p>	瞬时型 Instantaneous type 自锁型 Self-locking type	LAY50-22C-□/□ LAY50-22C-□T/□	● 红 R ● 绿 G ● 黄 Y ● 蓝 B ○ 白 W ● 黑 K	有 Yes 21-DC.AC 6V 22-DC.AC 12V 23-DC.AC 24V 24-DC.AC 36V 25-DC.AC 48V 26-DC.AC 110V 27-DC.AC 127V 28-DC 220V 31-AC 220V 32-AC 380V	
 <p>蘑菇钮 Mushroom push button</p>	瞬时型 Instantaneous type 自锁型 Self-locking type	LAY50-22C-□M/□ LAY50-22C-□MT/□	● 红 R ● 绿 G ● 黄 Y ● 蓝 B ○ 白 W		
 <p>旋钮 Turn button</p>	二位置 Two-position	LAY50-22C-□X/ LAY50-22C-□X/ffu LAY50-22C-□CX/ LAY50-22C-□CX/ffu			
	三位置 Three-position	LAY50-22C-□XS/ LAY50-22C-□XS/ffu LAY50-22C-□CXS/ LAY50-22C-□CXS/ffu			
 <p>钥匙钮 Key push button</p>	二位置 Two-position	LAY50-22C-□Y/	a o		
	三位置 Three-position	LAY50-22C-□YS/			

说明 Remarks

- 1、B型按钮安装采用螺帽紧固方式，使安装更方便快捷，大幅减轻用户工作强度；
- 2、A、B、C三种型号的面板风格相同，主要是安装，结构方式不同；
- 3、旋钮二位置自锁有90°和45°二种，订货请注明。
- 1、B type pushbutton uses screw ACp fixture way in order to be more convenient and quick for installation and reduce user's working strength largely.
- 2、A、B、C model's panel style is same, whose main installation and structure way are different.
- 3、Two-position self-locking turn push button have types of 90° and 45°. It should be marked out when ordering.

一般钮、蘑菇钮、紧急钮
Common push button、Mushroom push button、Emergency push button

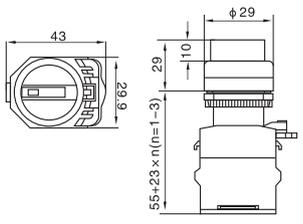
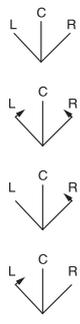
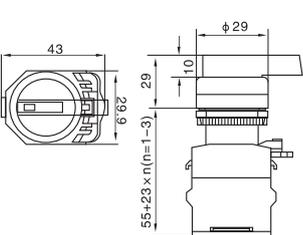
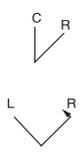
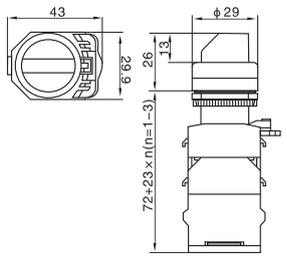
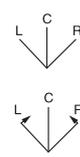
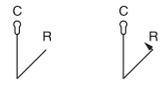
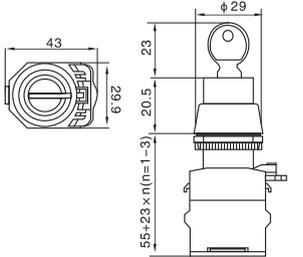
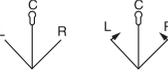


外形图	功能 Function	型号 Model	颜色 Color	灯电压 light voltage	外形尺寸 Overall dimension
 <p>一般钮 Push button</p>	瞬时型 Instantaneous type 自锁型 Self-locking type	LAY50-22D-□/□ LAY50-22D-□T/□	● 红 R ● 绿 G ● 黄 Y ● 蓝 B ○ 白 W ● 黑 K	有 Yes	
 <p>蘑菇钮 Mushroom pushbutton</p>	瞬时型 Instantaneous type 自锁型 Self-locking type	LAY50-22D-□M/□ LAY50-22D-□MT/□	● 红 R ● 绿 G ● 黄 Y ● 蓝 B ○ 白 W		
 <p>带灯按钮 push button with light</p>	瞬时型 Instantaneous type 自锁型 Self-locking type	LAY50-22D-□D/□ LAY50-22D-□TD/□	● 红 R ● 绿 G ● 黄 Y ● 蓝 B ○ 白 W		
 <p>紧急钮 Emergency push button</p>	按锁定， 顺时针， 转复位 Push locking, in clockwise direction, move reset	LAY50-22D-□Z/□	● 红 R		

说明 Remarks

- 1、斜线前的□填写常开，常闭的触点数，斜线后的□填写颜色；
- 2、蘑菇钮头部有φ36、φ40二种尺寸，订货时请注明。
- 1、Filling in normal open and close number in front of□, color in back of□.
- 2、There are two dimensions of φ36、φ40 on the head of mushroom pushbutton. It should be marked out when ordering.

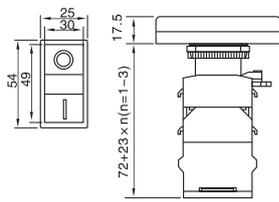
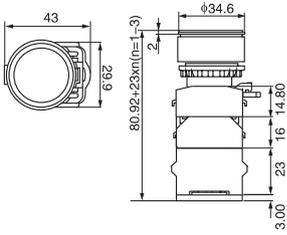
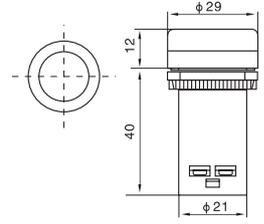
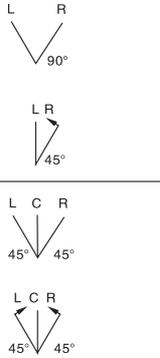
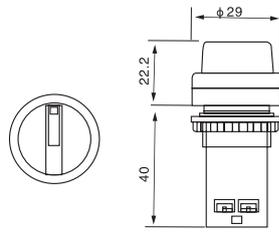
旋钮、带灯旋钮、钥匙钮
Turn button、Key push button

外形图	功能 Function	型号 Model	颜色 Color	手柄位置 Handle position	外形尺寸 Overall dimension
 <p>旋钮 Turn button</p>	自锁 Self-locking 右边自复位 Self reset on the right	LAY50-22D-□X/ LAY50-22D-□X/ffu LAY50-22D-□XS/ LAY50-22D-□XS/ffu	● 黑 K ● 红 R ● 绿 G ● 黄 Y		
 <p>旋钮 Turn button</p>	自锁 Self-locking 左右边自复位 Self reset on the left and right	LAY50-22D-□CX/ LAY50-22D-□CX/ffu LAY50-22D-□CXS/ LAY50-22D-□CXS/ffu	● 黑 K ● 红 R ● 绿 G ● 黄 Y		
 <p>带灯旋钮 Turn button with light</p>	二位置 Two-position 自锁 Self-locking	LAY50-22D-□XD/ LAY50-22D-□XD/ffu	● 红 R ● 绿 G		
	三位置 Three-position 自复位 Self reset	LAY50-22D-□XDS/ LAY50-22D-□XDS/ffu LAY50-22D-□XDS/ffu LAY50-22D-□XDS/f	● 黄 Y		
 <p>钥匙钮 Key push button</p>	二位置 Two-position	LAY50-22D-□Y/ LAY50-22D-□Y/ffu			
	三位置 Three-position	LAY50-22D-□YS/ LAY50-22D-□YS/ffu			

说明 Remarks

- 带灯旋钮没有长柄规格，全部采用纯色高亮度LED光源；
- 旋钮没有特殊说明将提供黑色手柄。
- Turn pushbutton with light don't have long-handle specification, all use pure high illuminant LED light source.
- Turn push button without special instruction will be offered black handle.

双位钮、经济型按钮
Double push button、Economize push button

外形图	功能 Function	型号 Model	颜色 Color	灯电压 light valtage	外形尺寸 Overall dimension
 <p>双位钮 Double position push button</p>	不带灯双位钮 Double push button without light 带灯双位钮 (灯珠为黄色或纯白色) Double push button with light (light ball is yellow or pure white)	LAY50-22D-□□R LAY50-22D-□□RD	红/绿 R/G 	21-DC.AC 6V 22-DC.AC 12V 23-DC.AC 24V 24-DC.AC 36V 25-DC.AC 48V 26-DC.AC 110V 27-DC.AC 127V 28-DC 220V 31-AC 220V 32-AC 380V	
 <p>φ 30带灯按钮 φ 30 push button with light</p>	瞬动型 Instantaneous type 自锁型 Self-locking type	LAY50-30D-□D / □ LAY50-30D-□TD/□		21-DC.AC 6V 22-DC.AC 12V 23-DC.AC 24V 24-DC.AC 36V 25-DC.AC 48V 26-DC.AC 110V 27-DC.AC 127V 28-DC 220V 31-AC 220V 32-AC 380V	
 <p>经济型按钮 Economize push button</p>	经济型按钮 Economize push button 经济型自锁按钮 Economize Self-locking push button	LAY50-22D-□J□ LAY50-22D-□JT□	不透明 Opacity 		
 <p>经济型旋钮 Economize Turn button</p>	二位置 Two-position 三位置 Three-position	LAY50-22D-□JX/ LAY50-22D-□JX/fu LAY50-22D-□JXS/ LAY50-22D-□JXS/ffu			

说明 Remarks

- 带灯按钮有普通和超短型之分订货时请注明，如无说明按普通型发货；
- 带灯按钮全部采用纯色高亮度LED光源。
- There are two types of common and super short type in push button with light, which should be marked out when ordering. If we will supply common type without marking out.
- Push button with light all use pure high illuminant LED light source.

图样 Picture	名称 Name	说明 Remarks	图样 Picture	名称 Name	说明 Remarks
 F-1	F-1/ ϕ 25 F-1/ ϕ 30 变径圈 Varying diameter ring	当面板开孔为 ϕ 25、 ϕ 30时，应加装该安装板 When panel hole is ϕ 25、 ϕ 30, should add installation plate	 F-11	安装扳手 Sleeve spanner	适用于安装 ϕ 16 指示灯、按钮，可提高安装效率，降低安装工人劳动强度 Suitable For install ϕ 16 pilot light and push button to improve installation effect and to decrease working strength
 F-2	ϕ 30 变径螺母 ϕ 30 Varying diameter nut	用于开孔 ϕ 30 面板并产生超薄型按钮效果 For ϕ 30 installation and creating ultra-thin button effect	 F-12	BA9S 安装手柄 Sleere handle	适用于组合式信号灯灯珠的安装 Suitable for install the combined led lamp
 F-3	防护罩 Switch cover 适用于 ϕ 22 圆形按钮 For ϕ 22 circular button	安装在按钮头部可防撞、防误动，可封锁。 Always on the operators prevent striking, knocking and mistaking operation, lockable.	 F-13	铝花帽 Aluminium cap	适用 A、B、C ϕ 22 按钮(黑/白) For A、B、C ϕ 22 psh button(K/W)
 F-4	F-4/J F-4/F ϕ 16 防护罩 Switch cover	安装在按钮头部可防撞、防误动，可封锁。 Always on the operators prevent striking, knocking and mistaking operation, lockable.	 F-14	铝花帽 Aluminium cap	适用 D 型 ϕ 22 按钮 For D ϕ 22 push button
 F-5	F-5/J F-5/F ϕ 16 防水罩 water proof	方型 矩形 Square rectangular 适用于 ϕ 16 按钮 Suitable for push button 硅橡胶 Silastic 适用于 A、B、C、D 型一般按钮 Suitable for A,B,C,D type push button	 F-15	插座适用于 ϕ 16 按钮更改接线方式为焊接式 For ϕ 16 button, way of changing connector is welding type	套在按钮的后部，便于按钮的安装、维护 Fixing in back of push button in order to be convenient to install concerning push button and protect.
 F-6	ϕ 22 防水罩 water proof	ϕ 22 按钮防水罩 防护等级:IP67 ϕ 22 Water proof protation degree:IP67	 F-16	ϕ 60 蘑菇头部、 ϕ 60 紧急钮头部 ϕ 60 mushroom head、 ϕ 60 emergency push button head	蘑菇型没有箭头标志 Mushroom model has not signal of arrowhead
 F-7	F-7/ ϕ 40 F-7/ ϕ 60 F-7/ ϕ 90 警告圈 Warning ring	适用 ϕ 22 紧急按钮增加警示功能 Suitable for ϕ 22 emergency stop button to increase warning ability	 F-17	防尘后盖 Dust proof back cover	适用于 A、B、C、D 按钮 ϕ 22 防尘后盖 Suitable for A,B,C,D type push button ϕ 22 Dustproof
 F-8	ϕ 60 保护圈 ϕ 60 Protecting ring	安装在按钮头部可防撞、防误动。 Always on the operators prevent strike, knocking and mistaking operation.	 F-18	F-18/25 \times 11 F-18/25 \times 15 标牌框 Brand frame	按装在 ϕ 22 的指示灯、按钮上作符号指示或文字说明用。 抽出式结构，可更换标志纸。 Hang it on the push button or ϕ 22 pilot light, for symbol or text explanation. Structure of putting out, which can change signed paper
 F-9	F-9/ ϕ 22 F-9/ ϕ 25 安装板 Mounting plate	适用于 A 型按钮 Suitable for type push button	 F-19	面板塞 (ϕ 22) Panel plug (ϕ 22)	用于装饰预留孔或多余孔 For blocking up prepared or useless holes on the panel
 F-10	安装扳手 Sleeve spanner	适用于安装 ϕ 22 指示灯、按钮，可提高安装效率，降低安装工人劳动强度 Always on the ϕ 22 pilot light and push button to improve installation effect and to decrease working strength	 F-20	F-20/Y F-20/F F-20/J 面板塞 (ϕ 16) Panel plug (ϕ 16)	

图样 Picture	名称 Name	说明 Remarks	图样 Picture	名称 Name	说明 Remarks
 D-1	D-1/01 D-1/10 D-1/11 D-1/20 D-1/02 开关触点 Switch contact	适用于A、B、C、D型按钮 Suitable for A,B,C,D type push button	 Z-3	AC型连接件 AC type connection	固定按钮用 For fix push button
 D-2	D-2/NO 常开 D-2/NC 常闭 开关触点 Switch contact	适用于SKB、SKB4型按钮 Suitable for SKB,SKB4 type push button	 Z-4	B、D型连接件 B、D type connection	适用于B、D型按钮 Suitable for B、D type push button
 D-3	D-3/NO 常开 D-3/NC 常闭 开关触点 Switch contact	适用于SKB2型按钮 Suitable for SKB2 type push button	 Z-5	C型连接件 C type connection	适用于C型按钮 Suitable for C type push button
 D-4	带灯机构 Mechanism with light	适用于A、B、C、D型所有带灯按钮 Suitable for A,B,C,D push button with light	 Z-6	SPB连接件 SPB connection	适用于SPB型按钮 Suitable for SPB type push button
 D-5	带灯机构 Mechanism with light	适用于SKB2型所有带灯按钮 Suitable for SKB2 push button with light	 Z-7	SPB2型连接件 SPB2 type connection	适用于SPB2型按钮 Suitable for SPB2 type push button
 D-6	带灯机构 Mechanism with light	适用于SKB、SKB4型所有带灯按钮 Suitable for SKB,SKB4 push button with light	 Z-8	SPB4型连接件 SPB4 type connection	适用于SPB4型按钮 Suitable for SPB4 type push button
 Z-1	AA型连接件 AA type connection	固定按钮用 For fix push button			
 Z-2	AB型连接件 AB type connection	固定按钮用 For fix push button			

图样 Picture	名称 Name	说明 Remarks	图样 Picture	名称 Name	说明 Remarks
 开关触点 Switch contact	SPB0-1	适用于SPB0系列 翘板式 Suitable for SPB0 Series snap action contact	 H-1	按钮盒 1孔 颜色 黄/白 Push button box 1 hole Color:Y/W	选配灯、钮，可制 造防护等级为IP65的 控制单元 Matching light, button, making IP65 of contrd unit
 开关触点 Switch contact	SPB0-2	适用于SPB0系列 平压式 Suitable for SPB0 Series Slow action contact	 H-2	按钮盒 2孔 颜色 黄/白 Push button box 2 holes Color:Y/W	选配灯、钮，可制 造防护等级为IP65的 控制单元 Matching light, button, making IP65 of contrd unit
 连接件 Connection	SPB0-3	适用于SPB0系列 Suitable for SPB0 Series	 H-3	按钮盒 3孔 颜色 黄/白 Push button box 3 holes Color:Y/W	选配灯、钮，可制 造防护等级为IP65的 控制单元 Matching light, button, making IP65 of contrd unit
 带灯机构 Mechanism with light	SPB0-4	适用于SPB0系列 Suitable for SPB0 Series	 H-4	按钮盒 4孔 颜色 黄/白 Push button box 4 holes Color:Y/W	选配灯、钮，可制 造防护等级为IP65的 控制单元 Matching light, button, making IP65 of contrd unit
 铝花帽 Aluminium cap	SPB0-5	适用于SPB0系列 Suitable for SPB0 Series	 H-5	按钮盒 5孔 颜色 黄/白 Push button box 5 holes Color:Y/W	选配灯、钮，可制 造防护等级为IP65的 控制单元 Matching light, button, making IP65 of contrd unit
 告警圈 Warning ring	SPB0-6	适用于SPB0系列 Suitable for SPB0 Series	 F-21	防护罩 Switch cover 适用于 $\phi 22$ 圆形按钮 For $\phi 22$ circular button	安装在按钮头部可防 撞、防误动，可封锁。 Always on the operators prevent striking, knocking and mistaking operation, lockable.
 告警圈 Warning ring	SPB0-7	适用于SPB0系列 Suitable for SPB0 Series			

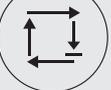
中文符号 Chinese signal

分闸 1	合闸 2	启动 3	停止 4	打开 5	关闭 6	上升 7	下降 8	投入 9
切除 10	事故 11	故障 12	试验 13	电源 14	开 15	关 16	备用 17	

标准符号 Standard signal

UP 18	DOWN 19	STOP 20	START 21	ON 22	OFF 23	OPEN 24	CLOSE 25	RESET 26
MANUAL 27	AUTO 28	O 29	 30	 31	 32			

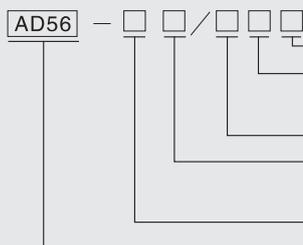
ISO符号 ISOsignal

 33 直线移动 Straight moving	 34 转动 Turn	 35 启动 Start	 36 停止 Stop	 37 启动·停止 Start · Stop	 38 点动 Inch	
 39 泵 Pump	 40 冷却泵 Cooling pump	 41 润滑泵 Lubricating pump	 42 液压泵 Hydraulic pressure pump	 43 自动或自动循环 Auto or auto circle	 44 限位直线移动 Limited straight moving	

旋钮标牌板或标牌框印字 Typing

停止 启动 Stop start X1 O X7 OFF-ON X13	分闸 合闸 Off on X2 O X8 STOP-START X14	手动 自动 Manual auto X3 O X9 HAND-AUTO X15	关闭 打开 Close open X4 O X10 REV-FOR X16	关 开 Close open X5 1 O 2 X11	检验 复位 Test reset X6 2 O 1 X12
---	---	--	--	---	---

型号及含义 Model and implication



灯电压代码 Light voltage code
 信号灯颜色: 红、绿、黄、白、蓝、橙 Color of pilot light: red, green, yellow, white, blue, orange
 详见下表格 Details refers to below table
 辅助规格代号表示同一颈部尺寸的不同外型。加“S”时为超短型, 不加“S”时为标准型。
 Aux code indicate same top, different shape. No letter for standard type, "S" for short type
 基本规格代号(表示颈部尺寸) Basis code (for top dimension), Φ16, Φ22, Φ25, Φ30
 信号灯型号(由上海电器科学研究所发放上海双科电气有限公司专用)
 Type (approved by Shanghai Electrical Appliance Scientific Research institution, monopoly for Shanghai Shuangke Electrical CO.LTD.)

型号含义

Model and implication

“ZH”为组合式信号灯	Marking out "ZH" when combined indicator lamp
“K”为抗干扰信号灯	Marking out "K" when indicator need anti-interfere
“F”为放电灯	Marking out "F" when indicator need discharge
“T”为测试信号灯	Marking out "T" when indicator need test
“S”为闪光灯	Marking out "S" when flashing light
“SS”为双色灯	Marking out "SS" when double color light
“S/S”双色闪光灯	Marking out "S/S" when bi-color flashing light
“FM”蜂鸣器	Marking out "FM" when buzzer
“SM”闪光蜂鸣器	Marking out "SM" when flash buzzer
“W/N”接地位置指示器	Marking out "W/N" when connect ground indicator
“W/G”隔离刀闸位置指示器	Marking out "W/G" when Isolation brake position indicator
“W/D”断路器位置指示器	Marking out "W/D" when circuit breaker position indicator
“WY/N”接地位置指示器	Marking out "WY/N" when connect ground indicator
“WY/G”隔离刀闸位置指示器	Marking out "WY/G" when Isolation brake position indicator
“WY/D”断路器位置指示器	Marking out "WY/D" when circuit breaker position indicator
“WF/N”接地位置指示器	Marking out "WY/N" when connect ground indicator
“WF/G”隔离刀闸位置指示器	Marking out "WY/G" when Isolation brake position indicator
“WF/D”断路器位置指示器	Marking out "WY/D" when circuit breaker position indicator

主要技术指标

TECHNICAL DATA

1、工频耐压: 2.5KV(交流有效值), 1min。	1、Power frequency withstand voltage:2.5kv/1 min (effective AC value)
2、绝缘电阻≥2MΩ	2、Insulation resistance:≥2MΩ
3、交流指示灯允许电压波动±20%	3、Allowable voltage fluctuation : ±20%
4、连续工作寿命≥30000小时	4、Continuous operating life:≥30000h
5、光亮度≥100cd/m ²	5、Brightness:≥100cd/m ²
6、相比漏电起痕指数CTI≥600V	6、CTI≥100
7、头部防护等级IP40, IP65,可定制IP67	7、Protection degree of the head IP 65,IP67 is available on request.
8、使用频率AC50~60Hz	8、Applying frequency:AC50~60Hz

适用环境

WORKING CONDITION

1、环境温度: -25℃~+55℃;	1、Ambient temperature:-25℃~+55℃;
2、空气相对湿度≤98%;	2、Relative humidity:≤98%;
3、在振动频率为2~80Hz加速度为0.7g下能正常工作;	3、Normally workable when vibration frequency is 2~80Hz with acceleration of0.7g;
4、污染等级为3级, 安装类别为Ⅲ类;	4、Pollution degree is 3,installation group os III;
5、有“TH”标志的能在湿热带环境下工作。	5、“TH” marked can work at damp-heat environment.