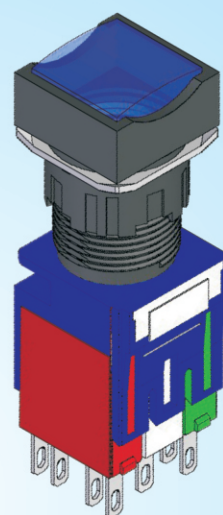


LAY39-φ16系列按钮开关

LAY39-φ16 Series Button Switch

——控制电器产品名录 2014

安全 智能 灵动



CE UL CCC TÜV CB RoHS

ISO9001 ISO14001 OHSAS18001

用途 APPLICATION

LAY39-φ16系列按钮开关，适用于交流50Hz(或60Hz)电压至220V或直流电压至220V的数控机床、纺织、船舶、汽车、电力、电讯、医疗器械等领域中作控制、信号、连锁等使用。

LAY39-φ16 series button switch, is suitable for use in AC 50Hz (or 60Hz) voltage to 220V or DC voltage to 220 V numerical control machine、textile、shipping、automobile、electric power、telecommunications、medical equipment and other areas of control、signal、interlocking and so on.

执行标准 Implementation of standards:

GB 14048.1-2006 低压开关设备和控制设备 第1部分：总则

Low-voltage switchgear and control equipment Part 1: General Provisions

GB 14048.5-2008 低压开关设备和控制设备 第5-1部分：控制电路电器和开关元件机电式控制电路电器

Low-voltage switchgear and control equipment Part 5-1: Control circuit devices and

Switching component – Electromechanical control circuit devices

结构型式 STRUCTURAL STYLE

该系列按钮开关为积木式组合结构，触头为双断点，有自洁作用，螺母安装，其结构由操动器，基座，触头系统组成。触头为直动式。

This series of button switch is cordwood system composite structure, contact is double breakpoints, have self-cleaning effect, nut installation , the structure consists of actuators, foundation bed, contact system. Contact is directly operated type.

型号及其含义 TYPE AND MEANS



△ 1表示常开触头数 Number of normally open contact

△ 1表示常闭触头数 Number of normally close contact

△ 3表示按钮类派生代号 Button type derived code

表(Table) 1

代号 Code name	含义 means	代号 Code name	含义 means
	一般按钮 general button	ZMD	自锁蘑菇带灯按钮 Self-locking mushroom with light button
D	带灯按钮 With light button	MJ	蘑菇急停按钮 Mushroom scram button
Z	自锁按钮 Self-locking button	X	旋钮 Knob
ZD	自锁带灯按钮 Self-locking with light button	XD	旋钮带灯按钮 Knob with light button
M	蘑菇按钮 Mushroom button	XF	自复位旋钮 Self-resetting knob
MD	蘑菇带灯按钮 Mushroom with light button	XDF	自复位旋钮带灯按钮 Self-resetting knob with light button
ZM	自锁蘑菇按钮 Self-locking mushroom button	Y	钥匙按钮 key button

信号灯类派生代号 Signal light type derived code

表(Table) 2

代号 Code name	含义 Means	代号 Code name	含义 Means
XDB	信号灯 Signal light	FM	蜂鸣器 Buzzer
XDB/k	抗干扰型信号灯 Anti-interference type signal light		

△ 4表示钮面颜色(见表3) Instate button surface color (as table 3)

表(Table)3

R	G	Y	B	W	K
红 red	绿 green	黄 yellow	蓝 blue	白 white	黑 black

△ 5 旋钮、钥匙钮动作位置及自复位旋钮动作位置(见表4)

Knob、key button action position and self-resetting knob action position(as table 4)

表(Table)4

2	3	f	fu	ffu	zffu	ffuz
二位置 two place	三位置 threeplace	左边自复 Left self-reset	右边自复 Right self-reset	左右 自复 Left and right self-reset	左锁定 右自复 Left lock and right self-reset	右锁定 左自复 Right lock and left self-reset

△ 6表示带灯钮、指示灯规格(见表5)

Instate light button、direct light character(as table 5)

△ 7表示电压规格(见表5)

Instate voltage character (as table 5)

表(Table)5

光源 light power	LED (发光二极管光源)						
代码 code	1	2	3	4	5	6	7
电源 power	AC/DC					AC、DC AC/DC	
电压 voltage	6	12	24	36	48	110	220

注:所有信号灯电压可订做380V Note: all signal lamp voltage can be customized to 380V

△ 8表示钮面形状(见表6);

Means Button surface shape see table 6;

表(Table)6

代号 Code name	A	F	J
含义 means	圆形 Rotundity	正方形 Square	长方形 Rectangle

△ 9表示湿热型字母为TH。Means damp-hot type letters to TH

工作条件 WORKING CONDITIONS

△ 周围空气温度-25℃ ~ +60℃; Ambient temperature: -25℃ ~ +60℃;

△ 安装地点海拔不超过3000m; Elevation≤3000m;

△ 最高温度为+40℃时, 空气的相对湿度为不超过85%, 对由于温度变化偶尔产生的凝露应采取特殊的措施;
Relative humidity is not exceeding 85% at the maximum ambient temperature +40℃. Should give consideration to the dews, which would appear due to temperature change;

△ 污染等级为: “污染等级3”; Pollution grade: Grade 3;

△ 安装类别为: “安装类别II”; Installation categories: class II;

△ 振动条件: 应安装在无显著摇动、冲击和振动的地方;

Vibration condition: Button switch should be installed at the place without significantly shaken, shock and vibration;

△ 板前防护等级IP40。Protection grade before board is IP40.

技术参数 TECHNICAL PARAMETERS

表(Table)7

额定绝缘电压Ui Rated insulation voltage		250V		
工频耐受电压 Frequency tolerance voltage		1500V 50Hz 1min		
AC-15	额定工作电压Ue (V) Rated working voltage	220	110	24
	额定工作电流Ie (A) Rated working current	0.7	1	2
DC-13	额定工作电压Ue (V) Rated working voltage	220	110	24
	额定工作电流Ie (A) Rated working current	0.1	0.2	0.7
约定发热电流Ith A Conventional thermal current			3A	
接触电阻 Contact resistance		≤50mΩ		
绝缘电阻 Insulation resistance		≥100MΩ		
寿命 life		机械寿命(次) Mechanical life (time)		电寿命(次) Electrical life (time)
	一般按钮式、蘑菇式 General button type、 mushroom type	100×10 ⁴		20×10 ⁴
	带灯按钮 With light button	30×10 ⁴		5×10 ⁴
	自锁式、钥匙式、旋钮式 Self-locking type、 key type、knob type	5×10 ⁴		5×10 ⁴
	信号灯、蜂鸣器 Signal light、buzzer			大约2×10 ⁴ 小时 About 2×10 ⁴ hours

带灯式按钮开关、信号灯、蜂鸣器参数见表8

With light button switch、signal light、buzzer parameter see table 8

表(Table)8

额定绝缘电压Ui (V) Nominal insulation voltage Ui (V)	AC 60V DC 60V	AC 380V	DC 220V
额定工作电压Ue(V) Rated operational voltage Ue(V)	AC/DC 6V、12V、24V、 36V、48V	AC 110V、220V、380V	DC110V、DC220V
	AC/DC110V、AC/DC220V抗干扰型信号灯门限电压为40V， 即40V以上信号灯可靠点亮 AC/DC110V、AC/DC220V anti-interference type signal light threshold voltage is 40V, that means above 40V signal light reliable lighten		
HYDZ(蜂鸣器) HYDZ (Buzzer) LED(发光二极管) LED (light-emitting diode)	工作电压6-8V 工作电流20mA Operating voltage 6-8V Operating current 20mA		

三位置钥匙钮、旋钮操动图

TRIOLOCATION KEY BUTTON、KNOB ACTUATOR FIGURE

三位置操动图 (钥匙钮、旋钮) three positions operation picture(key button、rotary button)													
型号 type	触头组合 Contact team	左旋45° 或90° Left rotation 45° or 90°				中间0° Middle 0°				右旋45° 或90° Right rotation 45° or 90°			
LAY39-11X/3A φ 16	1NO+1NC	①	×	×	②	①	×	—	②	①	—	—	②
LAY39-02X/3A φ 16	2NC	①	×	—	②	①	×	×	②	①	—	×	②
LAY39-20X/3A φ 16	2NO	①	—	×	②	①	—	—	②	①	×	—	②

×表示触头闭合，—表示触头开启，①表示第1组触头，②表示第2组触头

X means contact close, — means contact open, ①means group 1 contact, ②means group 2 contact

安装 INSTALLATION

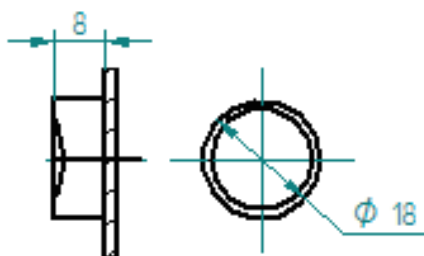
该系列按钮开关可以任意方位安装，导线即可插接也可焊接，插接采用2.8×0.8mm插头接线，用螺帽将操作器固定在面板上，并采用防转动垫片，使按钮安装定位准确，防止松动。

This series of button switch can be any position installed, wire can be plugged also can be welded, plug using 2.8 x 0.8mm plug bond, with a nut fixed manipulator on the panel, and the use of anti-rotate gasket, make button installation orientation accurately, to prevent loosening.

外型尺寸及安装尺寸

OVERALL DIMENSION AND INSTALLATION DIMENSION

△ 板前安装尺寸 Installation dimension before the board

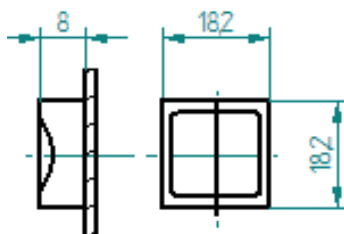


LAY39-□□/A Φ16

LAY39-□□Z/A Φ16

LAY39-□□D/A Φ16

LAY39-□□ZD/A Φ16

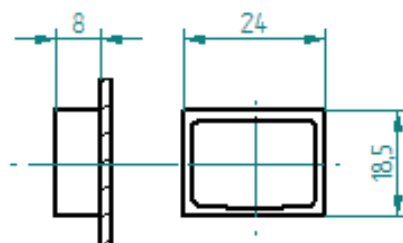


LAY39-□□/F Φ16

LAY39-□□Z/F Φ16

LAY39-□□D/F Φ16

LAY39-□□ZD/F Φ16

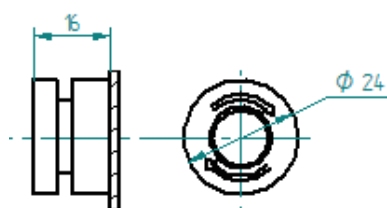


LAY39-□□/J Φ16

LAY39-□□Z/J Φ16

LAY39-□□D/J Φ16

LAY39-□□ZD/J Φ16



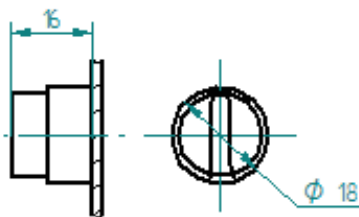
LAY39-□□MJ Φ16

LAY39-□□M Φ16

LAY39-□□ZM Φ16

LAY39-□□MD Φ16

L A Y 3 9 - □ □ Z M D Φ 1 6

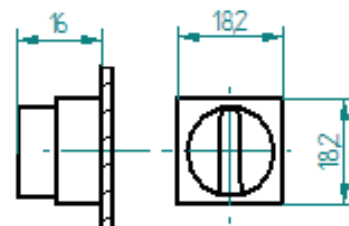


LAY39-□□X/2A Φ16

LAY39-□□XD/2A Φ16

LAY39-□□X/3A Φ16

LAY39-□□XD/3A Φ16

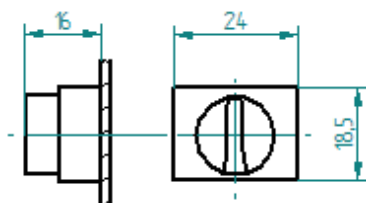


LAY39-□□X/2F Φ16

LAY39-□□XD/2F Φ16

LAY39-□□X/3F Φ16

LAY39-□□XD/3F Φ16

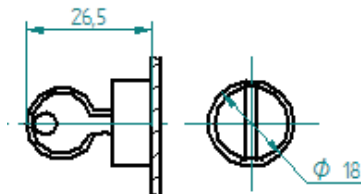


LAY39-□□X/2J Φ16

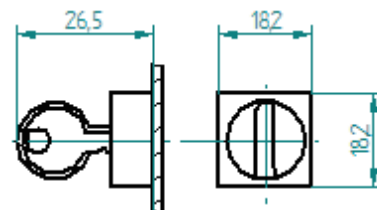
LAY39-□□XD/2J Φ16

LAY39-□□X/3J Φ16

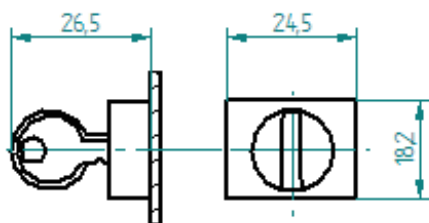
LAY39-□□XD/3J Φ16



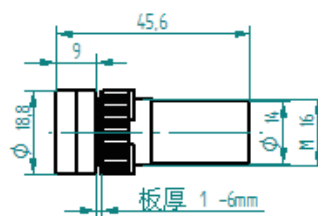
LAY39-□□Y/2A Φ16



LAY39-□□Y/2F Φ16

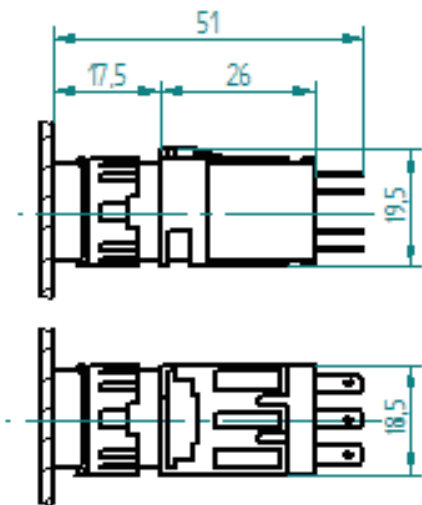


LAY39-□□Y/2J Φ16

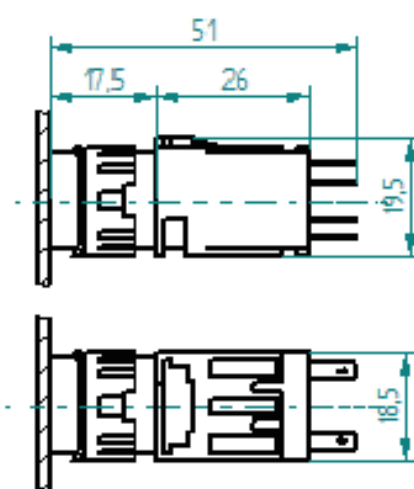


LAY39-XDB/FM Φ16

△ 板后安装尺寸 Installation dimension behind the board



带灯按钮、带灯旋钮板后安装尺寸
With light button、with light knob
installation dimension behind the board



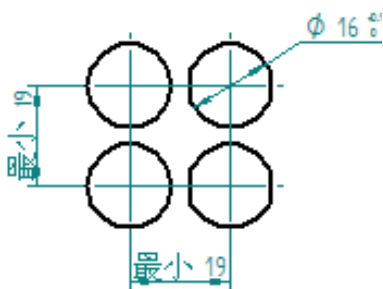
按钮、旋钮板后安装尺寸
Button、knob installation
dimension behind the board

△ 按钮及信号灯系列产品安装板厚尺寸 Buttons and lights products installed plate thickness:

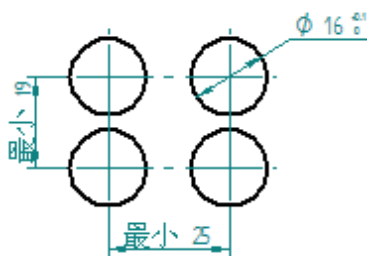
按钮及信号灯系列产品安装板厚尺寸为1-6mm

Buttons and lights products installed plate thickness is 1-6mm

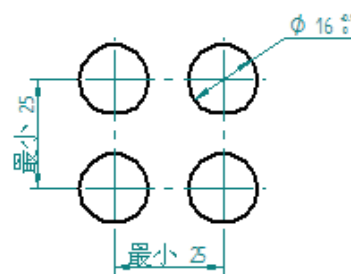
安装开孔尺寸 INSTALLATION OPEN PORE SIZE



圆形钮、方形钮头部开孔
Circular button、square button
head open pore



矩形钮头部开孔
Rectangle button
head open pore



蘑菇钮头部开孔
Mushroom button
head open pore

订货须知 ORDERING INSTRUCTION

用户需写明产品名称型号 User must indicate product name model

例: For example

LAY39-12/RA ϕ 16表示红色 圆形钮面 一常开二常闭触点的按钮

LAY39-12/RA ϕ 16means red circular button face one normal open two normal closed contact button

LAY39-11X/R2J ϕ 16表示红色 矩形钮面 一常开一常闭触点的二位置旋钮

LAY39-11X/R2J ϕ 16means red rectangle button face one normal open one normal closed contact two position knob

LAY39-11Y/3F ϕ 16表示方形钮面 一常开一常闭触点的三位置钥匙钮

LAY39-11Y/3F ϕ 16 means square button face one normal open one normal closed contact triolocation key button