



BROCHURE

Button switch/button control box/elevator control box
Signal light/warning light/cable connector/power distribution box

Smidnya
Technologies



AD22

INDICATOR LAMP SERIES

Indicator Lamp

AD22 Indicator Lamp Series

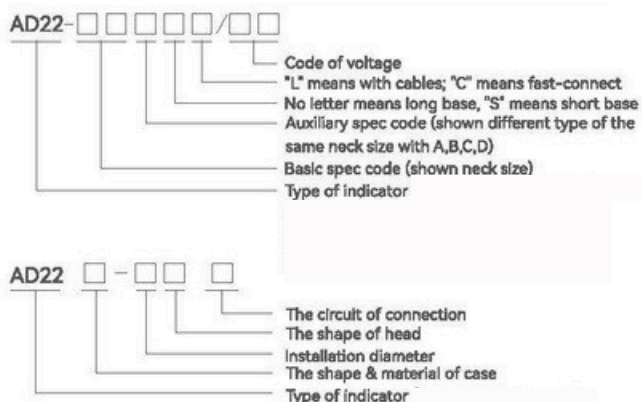
Brief Introduction

AD22(LED) series of indicator is equally used LED shining chip as light source. Because it features with long life, low consumption, small volume and light weight, this new type of product replaced the older incandescent lamp and neon lamp. AD22 indicators are produced by our factory enjoying following characters: high brightness, good reliability, beautiful shape and careful manufactured. Products are well praised by lots of clients. In order to fit in with top quality and aesthetic demand of user, we develop AD22-22B,C,D,E,G, H, double-color lamp, position indicator, shining buzzer and mini short indicator, and it is possible to meet all kinds of international standard lamp shade, which is made of polycarbonate with high intension and enjoying better anti-surge performance, and bolt-type connector design will make it safer and more convenient. All improvements will be provided for more convenient choice and to make your design perfect.

Use

AD22 series of indicators are used as indicating, foretelling, accident and other signals in the lines of equipment (such as electrical power, telecommunication, machine tool, watercraft, textile, printing and mine machinery, etc).

Type and Meaning



Applicable Environment

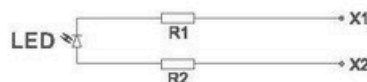
- (1) Surrounding temperature: $-25^{\circ}\text{C} \sim +55^{\circ}\text{C}$.
- (2) Relative humidity: $\leq 98\%$.
- (3) It can normally work under the conditions of 2-80Hz vibration frequency and 0.7g/h accelerated speed.
- (4) Pollution grade: III; Installation sort: III.
- (5) It is possible to work under hygrothermal environment if there is a "TH" sign.

Main Technical Target

- (1) PF voltage : 2.5kV(AC valid value), 1min.
- (2) Insulation resistance $\geq 2\text{M}\Omega$
- (3) Voltage fluctuation allowed by AC indicator $\pm 20\%$
- (4) Continuous working life $\geq 30000\text{h}$
- (5) Brightness $\geq 60\text{cd/m}^2$
- (6) Index of leakage $\text{Ct}1 \geq 100$
- (7) Protection grade is IP40, and it is possible to be made to up to IP67
- (8) Using frequency: AC 50 ~ 60 Hz

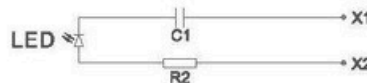
Circuit Introduction

- (1) AC and AC/DC indicator (AC/DC 6V ~ 220V)

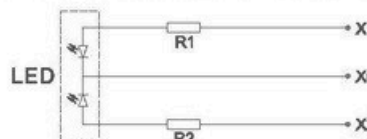


Note: The elimination of heat should be considered because the temperature will go up when DC is up to 110V, 220V and 380V.

- (2) AC indicator (AC220V, AC380V)



- (3) Return of double-color indicator (DC, AC110 ~ 220V)



Note: When we power X0 and X1, lamp is shining green, when we power X0 and X2, lamp is shining red.

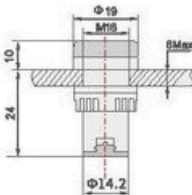
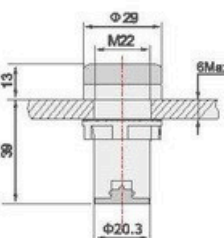
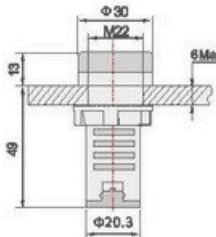
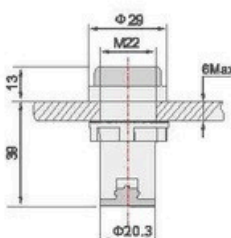
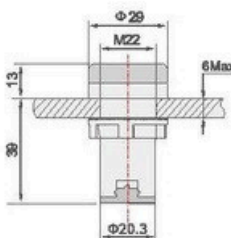
Contrast List of Voltage, Current

Supply Voltage	AC/DC							DC	FD			AC	
Voltage	6V	12V	24V	36V	48V	110V	127V	220V	380V	500V		220V	380V
Current	140	72	18~72	18	18	16	16	12	12	12		16	17

Note: "FD" in the list means a discharging lamp can be installed on the cupboard of capacitor. PG denotes pure green, PB denotes pure blue. PW denotes pure white

Indicator Lamp

AD22 Indicator Lamp Series

Indicator	Description	Voltage	Color	Type	Contour
 AD22-16DS	Protected LED Indicator	24V AC/DC	Red	AD22-16DS	
		36V AC/DC	Yellow		
		48V AC/DC	Green		
		110V AC/DC	Blue		
		220V AC	White		
		380V AC			
 AD22-22DS	Protected LED Indicator	24V AC/DC	Red	AD22-22DS	
		36V AC/DC	Yellow		
		48V AC/DC	Green		
		110V AC/DC	Blue		
		220V AC	White		
		380V AC			
 AD22-22D	Protected LED Indicator	24V AC/DC	Red	AD22-22D	
		36V AC/DC	Yellow		
		48V AC/DC	Green		
		110V AC/DC	Blue		
		220V AC	White		
		380V AC			
 AD22-22ES	Protected LED Indicator	24V AC/DC	Red	AD22-22ES	
		36V AC/DC	Yellow		
		48V AC/DC	Green		
		110V AC/DC	Blue		
		220V AC	White		
		380V AC			
 AD22-22CS	Protected LED Indicator	24V AC/DC	Red	AD22-22CS	
		36V AC/DC	Yellow		
		48V AC/DC	Green		
		110V AC/DC	Blue		
		220V AC	White		
		380V AC			

Push button bracket & contact

LAY5 Push Button Series

Parts	Description	Color	Type
	Contact element	N/O	LAY5-BE101D
		N/C	LAY5-BE102D

	Contact element	N/O	LAY5-BE101
		N/C	LAY5-BE102

	Contact element	N/O	LAY5-BE101
		N/C	LAY5-BE102

	Plastic bracket		LAY5-E
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	Plastic bracket + Contact element	N/O	LAY5-EZ101
		N/O+N/O	LAY5-EZ103
		N/O+N/C	LAY5-EZ105

	Plastic bracket + Contact element	N/C	LAY5-EZ102
		N/C+N/C	LAY5-EZ104

	Contact element with lamp Direct Type (BA9S) Neon LED		LAY5-EV6
			LAY5-EW06

	Contact element with lamp Direct Type (BA9S) Neon LED		LAY5-EW6
		N/O	LAY5-EW061
		N/C	LAY5-EW062
		N/O+N/O	LAY5-EW063
		N/C+N/C	LAY5-EW064

	Contact element with lamp Direct Type (BA9S) Neon LED		LAY5-EW7
		N/O	LAY5-EW071
		N/C	LAY5-EW072
		N/O+N/O	LAY5-EW073
		N/C+N/C	LAY5-EW074

	Metal bracket		LAY5-B
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	Metal bracket + Contact element	N/C	LAY5-BZ102
		N/C+N/C	LAY5-BZ104
		N/O	LAY5-BZ101
		N/O+N/O	LAY5-BZ103
		N/O+N/C	LAY5-BZ105

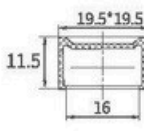
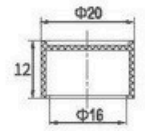
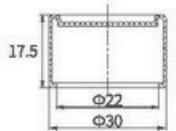
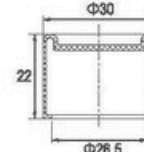
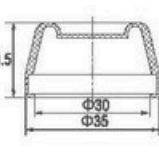
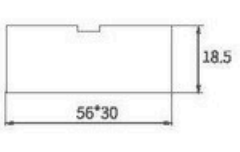
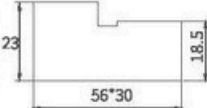
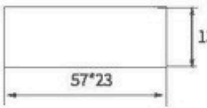
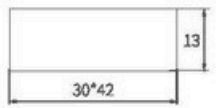
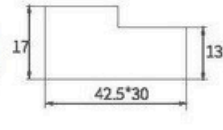
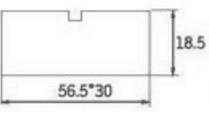
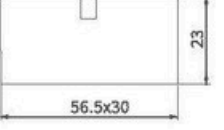
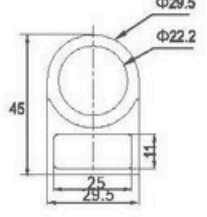
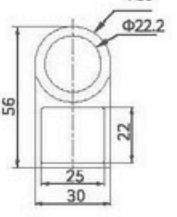
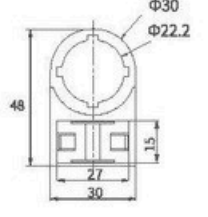
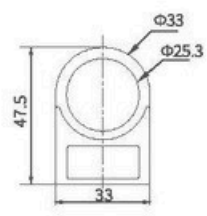
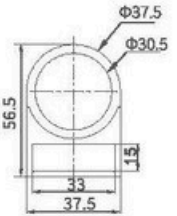
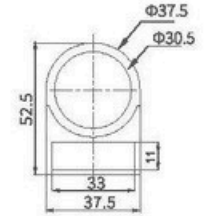
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			LAY5-BW06

	Contact element with lamp Direct Type (BA9S) Neon LED		LAY5-BW6
		N/O	LAY5-BW061
		N/C	LAY5-BW062
		N/O+N/O	LAY5-BW063
		N/C+N/C	LAY5-BW064

	Contact element with lamp Direct Type (BA9S) Neon LED		LAY5-BW7
		N/O	LAY5-BW071
		N/C	LAY5-BW072
		N/O+N/O	LAY5-BW073
		N/C+N/C	LAY5-BW074

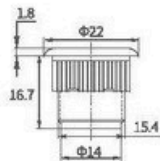
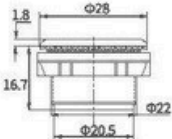
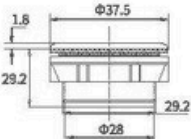
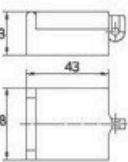
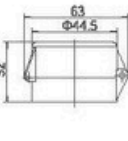
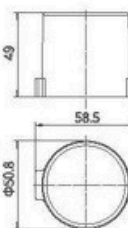
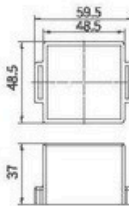
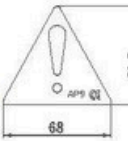
Push button accessory

LAY5 Push Button Series

Parts	Contour	Parts	Contour	Parts	Contour
					
LAY5-PE16F		LAY5-PE16A		LAY5-PE22A	
					
LAY5-PE22W		LAY5-PE30C		LAY5-PE22B	
					
LAY5-PE22BH		LAY5-PE22F		LAY5-PE22F	
					
LAY5-PE22FH		LAY5-PE22CF		LAY5-PE22CHF	
					
LAY5-EH2201		LAY5-EH2208		LAY5-EH2204	
					
LAY5-EH2206		LAY5-EH2225		LAY5-EH2230	

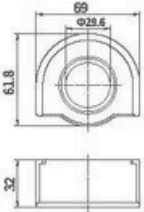
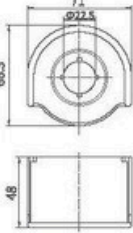
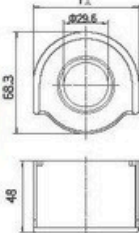
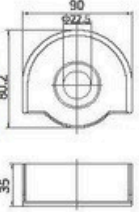
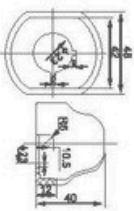
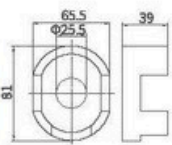
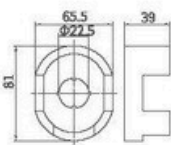
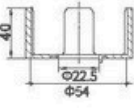
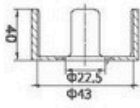
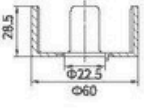
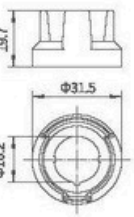
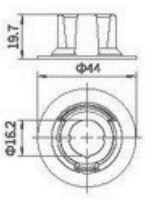
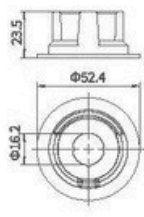
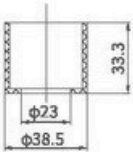
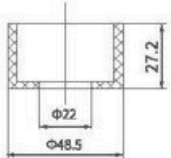
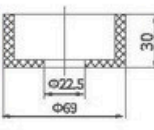
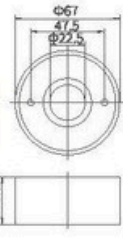
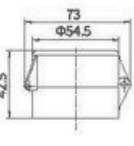
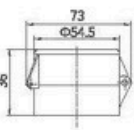
Push button accessory

LAY5 Push Button Series

Parts	Contour	Parts	Contour	Parts	Contour
					
LAY5-PB16		LAY5-PB22		LAY5-PB30	
					
LAY5-ZB16F		LAY5-ZB16CF		LAY5-EB22F	
					
LAY5-ZB43F		LAY5-EB22P		LAY5-EB45P	
					
LAY5-ER50X		LAY5-EBF48X		LAY5-ER25 (AD22-ER25)	
					
LAY5-EM01		LAY5-ER40		LAY5-ER60	
					
LAY5-ER90					

Push button accessory

LAY5 Push Button Series

Parts	Contour	Parts	Contour	Parts	Contour	Parts	Contour
							
LAY5-EB69E		LAY5-EB71ES		LAY5-EB71E		LAY5-EB90E	
							
LAY5-EB48E		LAY5-EB71ES		LAY5-EB71EA			
							
LAY5-EB54E		LAY5-EB43E		LAY5-EB60E			
							
LAY5-EB31E		LAY5-EB44E		LAY5-EB52E			
							
LAY5-EB30		LAY5-EB40		LAY5-EB60		LAY5-EB67	
					Plastic wrench Φ22		
LAY5-EB54P		LAY5-EB54PS		LAY5-PH22			

Push Button

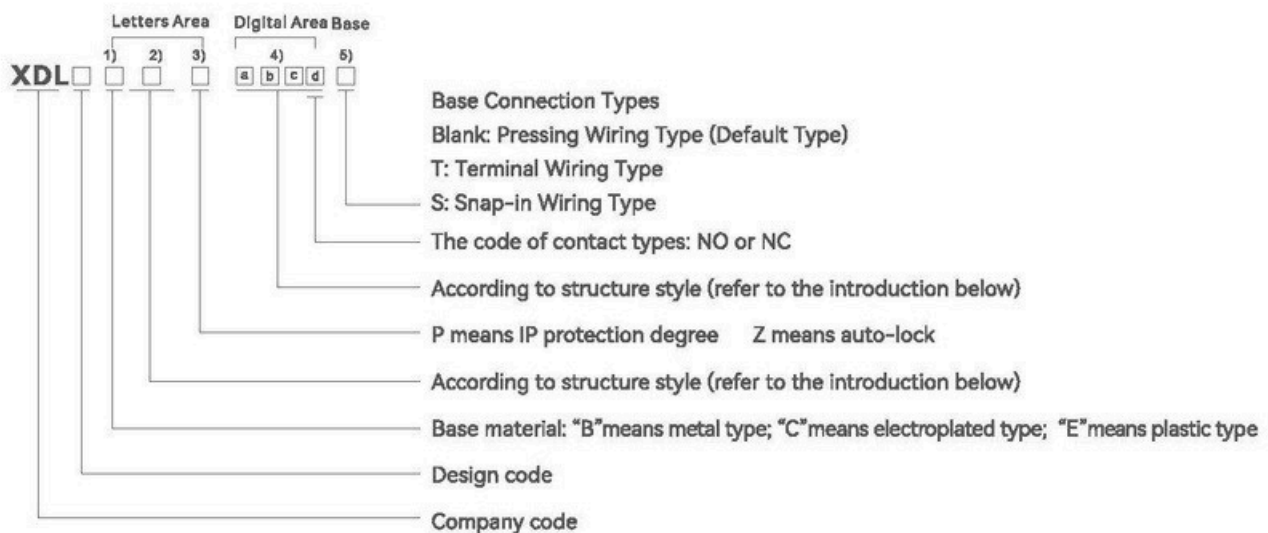
XDL21/37 Push Button Series

Product Instruction

The push button series are used in controlling circuit of AC voltage up to 660VAC 50Hz / 60Hz, rated voltage below 415V and DC voltage below 250V, which are applied to CNC machine, machinery, power sector, telecommunications, Shipping, metallurgy and chemical engineering, etc. It is used for controlling the circuit of electromagnetic starter, Contactor, relay and so on. The push buttons with indicator are applied to place where signal indicators are needed as Well. The main body of the push button is alloy and plastic.

The signal lamp series are suitable for electrical appliances circuit of AC voltage up to 380VAC 50Hz/60Hz, and the rated DC voltage below 380V. It is used as indicating signals, warning signals and emergency signals, etc. The product conforms to the standards of GB/T14048.1, GB/T14048.5 and IEC60947-5-1.

Model and Meanings



1) Base material: "B" means metal type; "C" means electroplated type; "E" means plastic type

2) Letters denotes structure type:

- | | | |
|--|-----------------------------------|------------------|
| A: Flush button | B: Double button | L: Convex button |
| D: Standard handle knob | J: Long handle knob | F: Other knob |
| G: Key switch | P: Button with water-proof cover | |
| S: Turn to release emergency switch | T: Push and pull emergency switch | |
| C: Spring return mushroom head | W: Button with lamp | |
| TB: Emergency switch with indication windows | | |
| K: Selector switch with lamp | V: Indicator lamp | |

3) P means IP protection degree; Z means auto-lock

4) The code of digital area: Refer to description below

The code of two digital area: push button products: "a" means gear selection, "b" means contact type.
other products: "a" means color, "b" means the contact type.

Push Button

XDL21/37 Push Button Series

The code of three digital area: "a" means the diameter of head; "b" means color; "c" means contact type.

The code of four digital area (the knob products): "a" means gear selection; "b" means color;

"c" means voltage; "d" means contact type. Double switch type: "a", "b", "c" denote structure

(8 means normal type, 9 means water-proof cover, 3 means two flush buttons, 4 means a flush and a convex buttons, 2 means type without lamp, 6 means type with lamp), "d" means contact type.

Key release type: without lamp: "a" and "b" mean structure; "c" means color;
"d" means contact type.
with lamp: "a" means structure; "b" means color; "c" means voltage;
"d" means contact type.

5) Base connection type: Blank means pressing wiring type (default type).

Remark

Appendix 1

■ Color Code: 1 - white; 2 - black; 3 - green; 4 - red; 5 - yellow; 6 - blue; 7 - others

■ Contact Type Code:

1 means 1NO; 2 means 1 NC; 3 means 2NO; 4 means 2NC; 5 means 1NO+1NC; 6 mean 3NO; 7 means 2NC+1NO;
8 means 2NO+1NC

■ Voltage Code:

3 means 110V-130V transformer; 4 means 220V-240V transformer; 5 means 380V transformer;
6 means 220V-240V direct type; 7 means 220V-240V resistance type; 8 means 415V transformer.

■ Mushroom Head Shape Code: 4 means $\Phi 30$; 5 means $\Phi 40$; 6 means $\Phi 60$.

■ Number Code of Rotary Knob

2 means 2-position stay put; 3 means 3-position stay put; 4 means 2-position spring return;
5 means 3-position spring return.

Basic Characteristic

Standard	IEC60947-5-1; GB/T14048.1, GB14048.5
Ambient temperature	Operating temperature: $-5^{\circ}\text{C}\sim+55^{\circ}\text{C}$; Storage temperature: $-25^{\circ}\text{C}\sim+70^{\circ}\text{C}$
Operating and storage air relative humidity	35~85%RH
Vibration frequency	Conforming to IEC 68-2-6
Impact resistance	Conforming to IEC 68-2-27
Pollution grade	III
Installation sort	Class III
Protection grade	Ordinary: IP40 IP54
	Protection: IP65 IP67
Mechanical life (cycles)	Push button: $100\cdot 10^4$; Selector switch: $30\cdot 10^4$; Emergency stop switch: $10\cdot 10^4$
Tightening torque of fixing screw	0.8N.m (Max.:1.2N.m)