

# AD16-22 Indicator Light 22mm Siemens APT

## Introduction

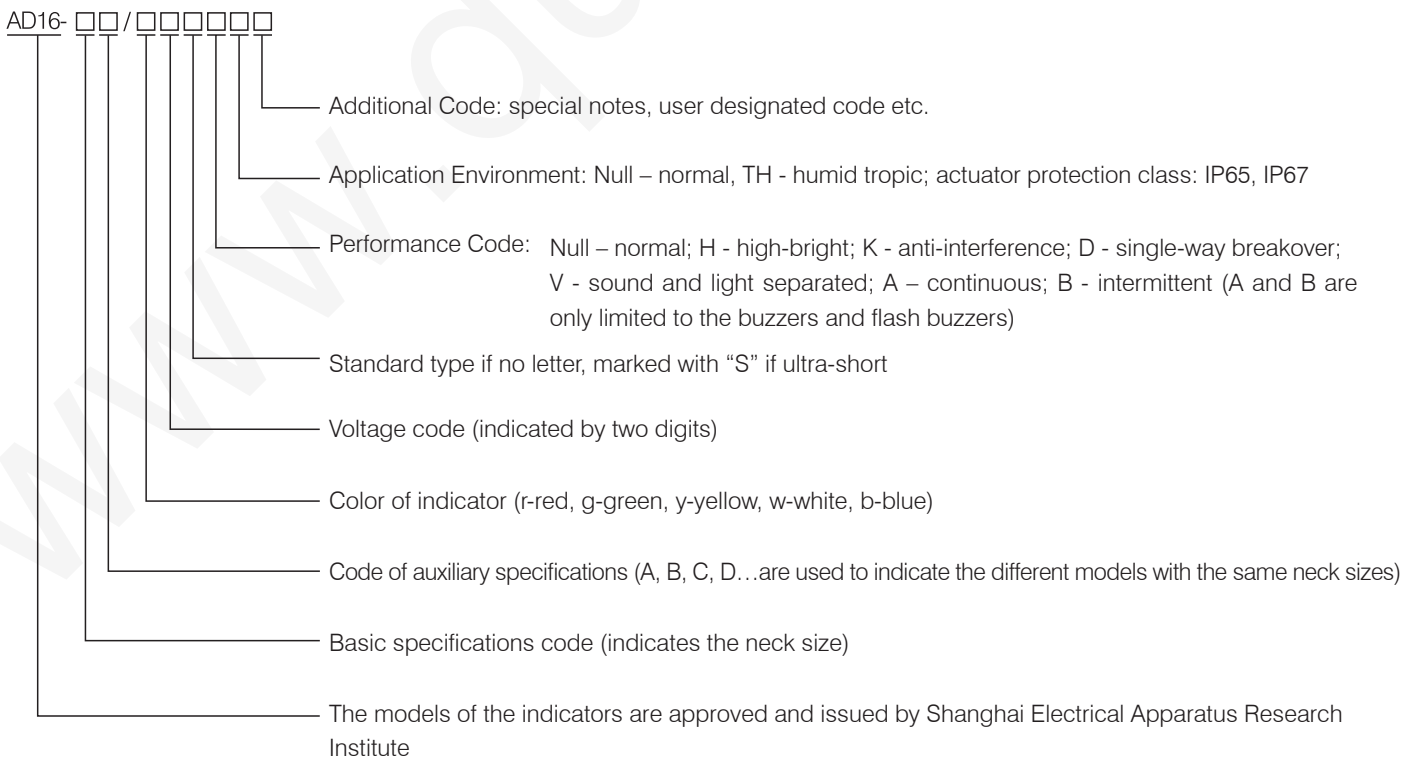
AD16 series indicators have all applied the high-bright pure LED lighting chips as the light source with long service life, low energy consumption, small volume and light weight. They are the upgraded products of various XD type incandescent lights and neon light indicator. We have successively launched AD16-22 type, AD16-16A&B type, AD16-12A type, AD16-35 type indicators, which have been well accepted by the users for their features such as high brightness, excellent reliability, good visual appearance and delicate manufacturing. To satisfy the continuously increasing requirements of the users for the quality and beauty, we also have developed 22 series products such as AD16-22B, C, D, E, H, P (plane type), and I (outdoor type) type double-color lights, position indicators, flash buzzers and ultra-short indicators etc. as well as 16 series products such as AD16-16C, CF, CJ, G (outdoor type) type indicators lights as well as AD-16M, MF and MJ type buzzers. Moreover, the visual design with the style same as that of LA39 series Pushbutton is applied. The various international standard symbols or custom-made symbols can be printed in the lampshades. The lampshades are made of high-strength polycarbonate with good impact resistance performance. The built-in screw type wiring is safer and more convenient. All improvements enable your option more convenient and design more complete.



## Application

AD16 series indicators are applicable to the circuits of the equipment for the power, telecommunications, machine tools, marine, textile, printing and mining machinery as the instruction, warning, and accident signals as well as other indication signals.

## Model and Meaning



# Description of 22mm AD16-22 Series Indicator

## Applicable Environment

1. Ambient temperature:  $-25\text{ }^{\circ}\text{C} \sim +55\text{ }^{\circ}\text{C}$
2. Relative air humidity:  $\leq 98\%$
3. Work normally at the vibration frequency of 2-80Hz and accelerated speed of 0.7g;
4. The pollution class is III and installation category is III;
5. Those with "TH" sign can work under the humid tropic environment.

## Main Technical Indexes

1. Rated impulse withstand voltage  $U_{imp}$ : 2.5KV (AC valid value), 1min.
2. Insulation resistance  $\geq 100\text{M}\Omega$ .
3. The allowable voltage fluctuation of AC indicator is  $\pm 20\%$
4. Continuous work life  $\geq 30,000\text{H}$
5. Brightness  $\geq 100\text{cd/m}^2$
6. Comparative tracking index (CTI)  $\geq 175$
7. Actuator protection class: IP54 for indicators. IP65 and IP67 can be customized; IP31 for buzzers
8. Application frequency AC50~60Hz

## Voltages, Currents and Codes

Unit: mA


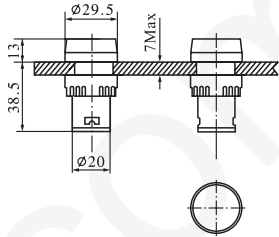

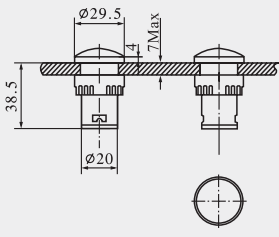

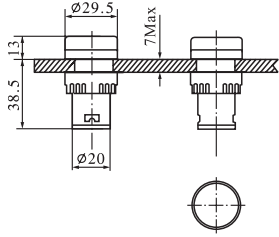

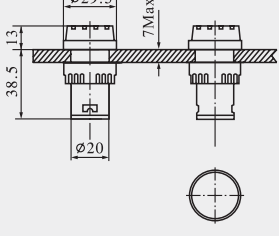
Voltage Code	Power Supply	Voltage	Current
21	AC.DC	6V	15 (g, w) 25 (b) 35 (r, y)
22		12V	15 (g, w) 25 (b) 35 (r, y)
23		24V	15
24		36V	15
25		48V	15
26		110V	15
27		127V	15
28	AC.DC	220V	10
29	FD	380V	10
30		500V	8
31	AC	220V	15
32		380V	18

## Description:

"FD" in the column of power supply indicates the discharge lights that can be installed in the capacitor cabinet.

## 22mm AD16-22 Series Indicator Model Selection

### Model Selection




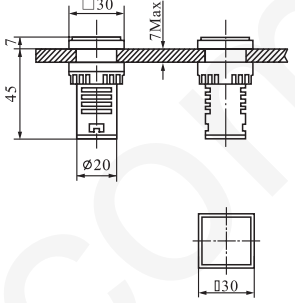



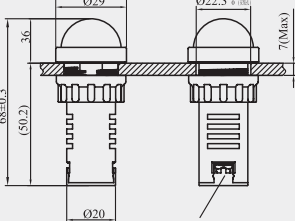



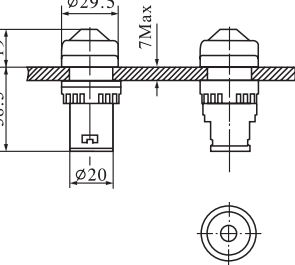



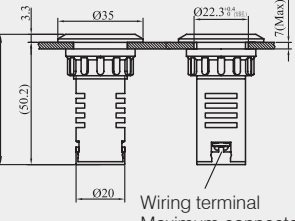
Name	Type	Model	Color	Lamp Voltage	Appearance dimension
Ø 22B		AD16-22B/ ■ ■ S			
Ø 22C		AD16-22C/ ■ ■ S			
Ø 22D		AD16-22D/ ■ ■ S	red-r green-g yellow-y blue-b white-w	21-AC.DC 6V 22-AC.DC 12V 23-AC.DC 24V 24-AC.DC 36V 25-AC.DC 48V 26-AC.DC 110V 27-AC.DC 127V 28-AC.DC 220V 31-AC 220V 32-AC 380V 29-FD 380V 30-FD 500V	
Ø 22E		AD16-22E/ ■ ■ S			

### Description:



1. The ultra-short indicators are applicable to the places with narrow and small installation spaces;
2. All ultra-short indicators are applicable to Ø22 and Ø25 holes, without additional accessories;
3. The indicators of DC power supply can be applicable to AC power supply;
4. The ultra-short indicators have no DC220V voltage class due to the heat radiation conditions; (if DC220V and discharge lights are required, we will provide the slightly longer lamp enclosures. S in the model will be removed);
5. ■ in the column of model will be filled with color, ■ will be filled with voltage class code.

# Description of 22mm AD16-22 Series Indicator

## Model Selection


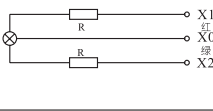
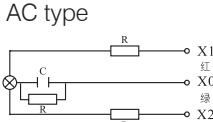
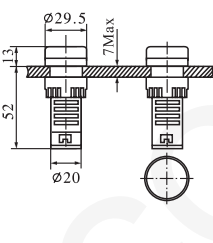

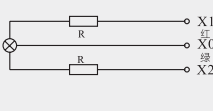
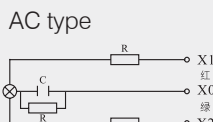
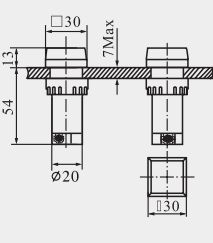

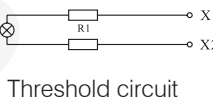
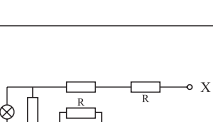
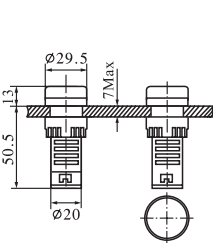

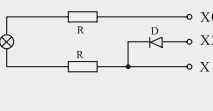
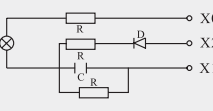
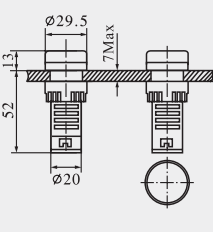
Name	Type	Model	Color	Lamp Voltage	Appearance dimension
Ø22F		AD16-22F/  	red-r green-g yellow-y white-w blue-b	21-AC.DC 6V 22-AC.DC 12V 23-AC.DC 24V 24-AC.DC 36V 25-AC.DC 48V 26-AC.DC 110V 27-AC.DC 127V 28-AC.DC 220V 31-AC 220V 32-AC 380V 29-FD 380V 30-FD 500V	
Ø22I	 For the outdoor type indicators, their brightness is 3 times of that of the normal indicators; the actuator protection class is defaulted as IP65	AD16-22I/  	red-r green-g yellow-y white-w blue-b	21-AC.DC 6V 22-AC.DC 12V 23-AC.DC 24V 24-AC.DC 36V 25-AC.DC 48V 26-AC.DC 110V 27-AC.DC 127V 28-AC.DC 220V 31-AC 220V 32-AC 380V	 Wiring terminal Maximum connected wire diameter 1.5mm
Ø22H		AD16-22H/   S	red-r green-g yellow-y white-w blue-b	21-AC.DC 6V 22-AC.DC 12V 23-AC.DC 24V 24-AC.DC 36V 25-AC.DC 48V 26-AC.DC 110V 27-AC.DC 127V 28-AC.DC 220V 31-AC 220V 32-AC 380V 29-FD 380V 30-FD 500V	
Ø22P		AD16-22P/  	red-r green-g yellow-y white-w blue-b	21-AC.DC 6V 22-AC.DC 12V 23-AC.DC 24V 24-AC.DC 36V 25-AC.DC 48V 26-AC.DC 110V 27-AC.DC 127V 28-AC.DC 220V 31-AC 220V 32-AC 380V 29-FD 380V 30-FD 500V	 Wiring terminal Maximum connected wire diameter 1.5mm

## Description:

1. The ultra-short indicators are applicable to the places with narrow and small installation spaces;
2. All ultra-short indicators are applicable to Ø22 and Ø25 holes, without additional accessories;
3. The indicators of DC power supply can be applicable to AC power supply;
4. The ultra-short indicators have no DC220V voltage class due to the heat radiation conditions; (if DC220V and discharge lights are required, we will provide the slightly longer lamp enclosures. S in the model will be removed);
5.  in the column of model will be filled with color,  will be filled with voltage class code.

# 22mm AD16-22 Series Special-purpose Indicator Model Selection

## Model Selection

Name	Type	Model	Color	Lamp Voltage	Internal Wiring Diagram	Appearance dimension	Remarks
Round Double-color Indicator		AD16-22D/▨▨▨	red-r green-g	22-AC.DC 12V 23-AC.DC 24V 24-AC.DC 36V 25-AC.DC 48V 26-AC.DC 110V 27-AC.DC 127V 28-AC.DC 220V 31-AC 220V 32-AC 380V	AC/DC type  AC type 		Warning 1. When AC type indicators are used, do not connect the wires wrongly. Otherwise, the indicators will be damaged. 2. This light is with red-green double colors. Please otherwise specify if any other color is required.
Square Double-color Indicator		AD16-22BF/▨▨▨	red-r green-g	22-AC.DC 12V 23-AC.DC 24V 24-AC.DC 36V 25-AC.DC 48V 26-AC.DC 110V 27-AC.DC 127V 28-AC.DC 220V 31-AC 220V 32-AC 380V	AC/DC type  AC type 		1. The normal threshold value is below 40V. Please otherwise specify if a higher threshold value is required. 2. It is suggested that the threshold value shall not be too high. Please check the wiring if the interference voltage is too high.
Anti-interference Indicator		AD16-22▨▨▨-K	red-r green-g yellow-y white-w blue-b	23-AC.DC 24V 24-AC.DC 36V 25-AC.DC 48V 26-AC.DC 110V 27-AC.DC 127V 28-AC.DC 220V 31-AC 220V 32-AC 380V	Threshold circuit  Threshold circuit 		They shall not be under the testing status for a long time.
Test Type Indicator		AD16-22DY/▨▨▨	red-r green-g yellow-y white-w blue-b	23-AC.DC 24V 24-AC.DC 36V 25-AC.DC 48V 26-AC.DC 110V 27-AC.DC 127V 28-AC.DC 220V 31-AC 220V 32-AC 380V	 		

### Description:

▨ before the oblique line of the model is filled with A, B, C, D etc. ▨ after the oblique line is filled with color and ▨ is filled with voltage class code. AC double-color lights must not be wired wrong (e.g. X1 and X2 are connected)

## 22mm AD16-22 Series Position Indicator Model Selection

### Model Selection

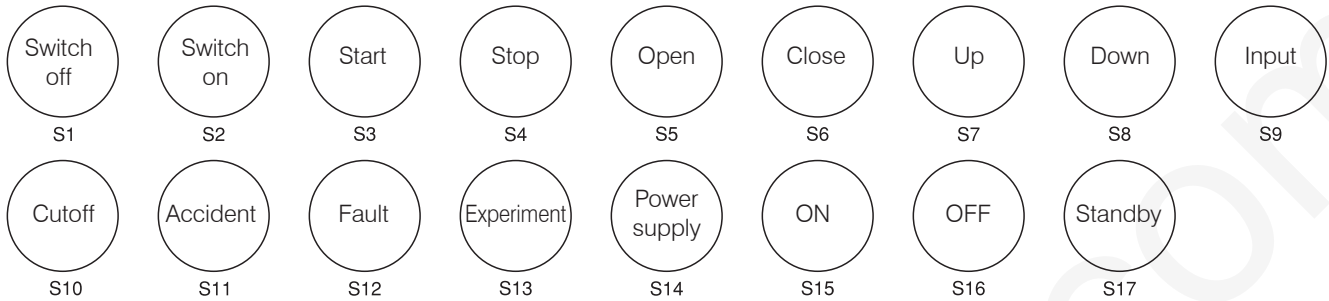
Name	Type	Model	Color	Lamp Voltage	Appearance dimension	Remarks
Position Indicator of Isolation Switch		AD16-22W/G (round) AD16-22WF/G (square)	□ is green when X0X1 are power on, □ is red when X0X2 are power on			
Position Indicators of Circuit Breaker		AD16-22W/D (round) AD16-22WF/D (square)	□ is red when X0X1 are power on, ⌋ is red when X0X2 are power on	23-AC.DC 24V 24-AC.DC 36V 25-AC.DC 48V 26-AC.DC 110V 27-AC.DC 127V 28-AC.DC 220V 31-AC 220V 32-AC 380V		If it is used as handcart type position indicators, when X0X1 are power on, ⌋ is red. When X0X2 are power on, ⌋ is red. Please add C after the model "D". That is: AD16-22W/DC, AD16-22WF/DC
Earthing Position Indicators		AD16-22W/N (round) AD16-22WF/N (square)	⏚ is red when X1X2 are power on			

### Description:

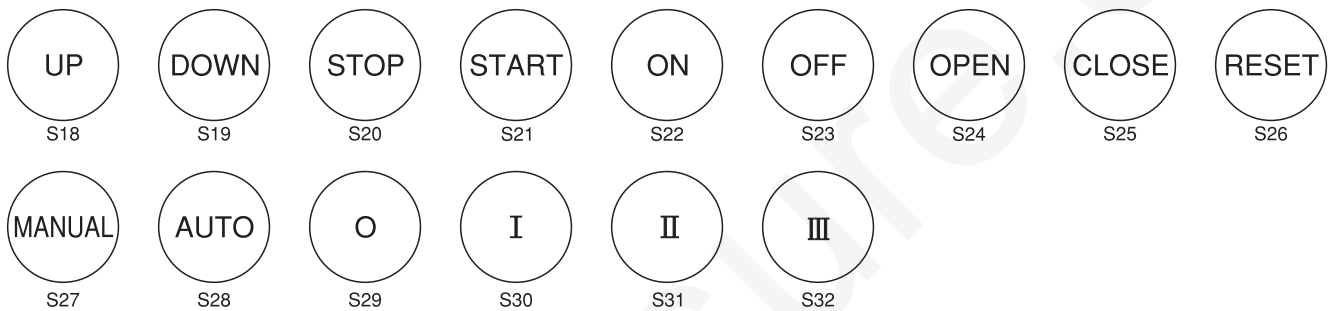
The position indicators of isolation switches/circuit breakers must not be wired wrongly (e.g.: X1 and X2 are connected)

# Printing Symbols on Pushbutton/Indicator

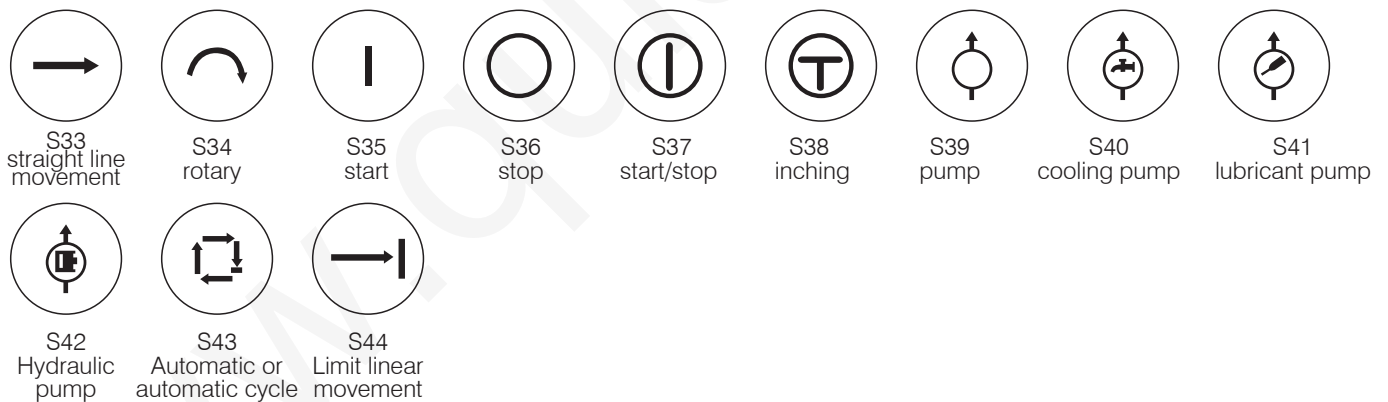
## Printing Symbols



## Standard Symbols



## ISO Symbols



## Selector switch Label or Inscription on Label Frame

