The instruction of the Photoelectric switch

Dear Customer: Thank you for choosing our products. Our products are widely used in machinery, chemicals, textiles, tobacco, printing, plastics, food, beer, mining, metallurgy, railway, elevators and other industrial automation industries, as machine limit, location detection, automatic counting, measuring the number of programmable control, signal transmission, isolation protection, liquid level control and other automation control equipment.

When you use our products, please be sure to read the instruction manual in order to avoid operational errors, resulting in unnecessary loss.

- Photoelectric switches can detect any object, the switch is divided into diffuse type, feedback reflection type, transmission type and groove type. The Switches support using with PLC programmable controller, microcontroller, non-gate circuits, electronics devices, solid state relay, relays. The details pls check our website.

- Wiring diagram:

![Wiring Diagrams](image)

- Reliable movement distance (Sa) setting. When the target within the range of the rated detection distance, Reliable movement distance Sa < 0.81sn.

- Standard sensing object: To diffuse and reflection feedback type, the sensing object is square, thickness 1-2mm, the materials is white drawing paper, the surface shiny, and its side length is 2 times of the diameter of beam. To the transmission and groove type, the size of the sensing object will depend on the adjustment of sensitivity. The sensing object diameter is 10%-100% of the diameter of the beam.

- Precautions before using the switch: DC-type switch can connect with switch power supply or DC voltage regulator, electrick-power line and power line can not with the wire of the switch in the same groove, otherwise it would cause interference, the switch leading line should not exceed 200mm, so as to avoid pressure excessively. The transmitter of AC and DC Transmission type directly access power supplies, AC two-wire switch can not directly access the power switch, must series the load, otherwise they will burn out, see figure below.

![Wiring Diagrams](image)

- To prevent mutual interference method: when the photoelectric switch was installed, the other switch inject light, cause the instability, called the mutual interference. When the reflective type used in parallel, mutual interval distance must be setting 1.4 times of the sensing distance. When the transmission type used in parallel, mutual interval distance must be setting over 0.4 times of sensing distance.

- The following installation places will cause malfunction, please be noted: with a larger of dust, more corrosive gases, water and oil spills directly, exposure of sunshine and other bright.