

Universal Square Photoelectric Sensor DK-GF43 Series

Product Features

- Unaffected by target color and background color, objects can be detected accurately;
- High precision, small differential distance, can detect small step difference;
- Anti-interference, can also resist variable frequency fluorescent lamps based on unique external interference light avoidance algorithm;
- The beam is not visible on the object, but the light spot is visible.



Product Specifications

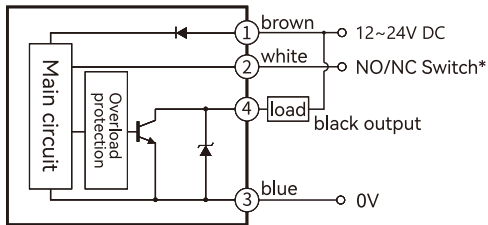


| Appearance | | Diffuse reflection | Specular reflection | Through-beam |
|------------------------|------------|-------------------------------------------------------------------------------------------------------|---------------------------------|-----------------------------------------|
| Type | | | | |
| Model | NPN output | DK-GF43-15N-ZAA | DK-GF43-02N-ZCA | DK-GF43-10N-ZBA |
| | PNP output | DK-GF43-15P-ZAA | DK-GF43-02P-ZCA | DK-GF43-10P-ZBA |
| Output action | | ON OFF switchable | ON OFF switchable | ON OFF switchable |
| Detection object | | 100*100mm white drawing paper | Objects with a diameter of ≥5mm | Opaque objects with a diameter of ≥12mm |
| Detection distance | | 30-150mm (adjustable) | 2M | 10M |
| Dysfunction | | 20% or less of the detection distance | - | - |
| Current consumption | | ≤25mA or less | ≤45mA or less | ≤45mA |
| No-load current | | 9mA | 9mA | Reflection 11mA, reception 9mA |
| Leakage current | | | Less than 0.01mA | |
| Dimensions | | | 32*23*12(mm) | |
| Light source | | | Visible LED red light | |
| Power supply voltage | | | DC12-24V | |
| Voltage drop | | | 1V | |
| Control output | | Load power supply current 100mA or less (residual voltage 1V or less) | | |
| Protection circuit | | Surge protection circuit, short circuit protection, reverse polarity protection | | |
| Response time | | Action/recovery 1.0ms or less each | | |
| Display light | | Green power indicator, red signal indicator | | |
| Ambient temperature | | Action: -25~+55°C (no icing, no condensation) Storage: -40°C~70°C (no icing, no condensation) | | |
| Ambient illumination | | Daylight: 10,000LX or less Incandescent lamp: 3,000LX or less | | |
| Ambient humidity | | Action: -45%~85% (no icing, no condensation); Hold: -35%~95% (no icing, no condensation) | | |
| Voltage influence | | When the rated power supply voltage fluctuates within ±15%, the detection distance remains within ±1% | | |
| Insulation barrier | | More than 20Mu (DC500 megohmmeter) between the charging part and the shell | | |
| Dielectric strength | | More than AC1000V at 50/60Hz 1min between charging part and shell | | |
| Vibration (durability) | | 10-55Hz, 1.5mm double amplitude, 2 hours in X,Y,Z direction | | |
| Impact (durability) | | 500m/S ² , 10 times in X, Y, Z axis direction | | |
| Protective structure | | IP65 | | |
| Connection method | | Wire lead type (standard wire length 2m) | | |
| Casing material | | PC | | |

Input/Output Circuit

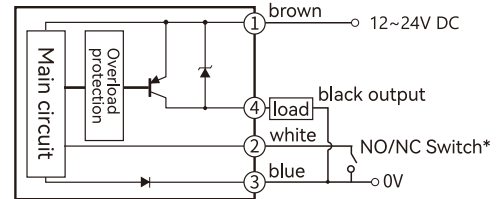
● Diffuse

■ NPN output



*NO white --- suspended, NC white --- 0V

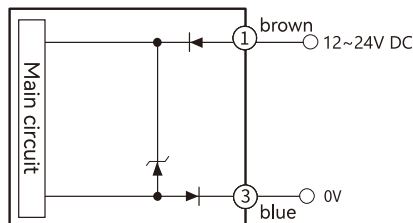
■ PNP output



*NO white --- suspended, NC white --- 0V

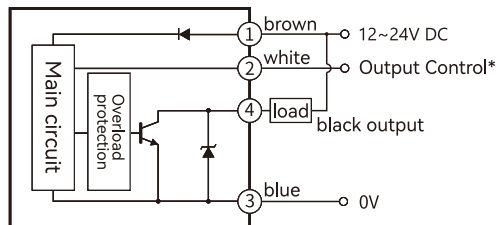
● Through-beam

Transmitter



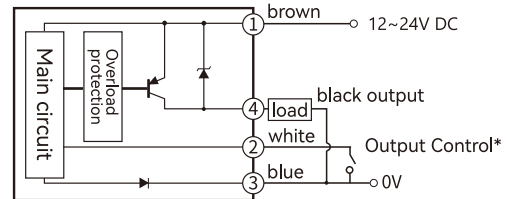
Receiver

NPN type



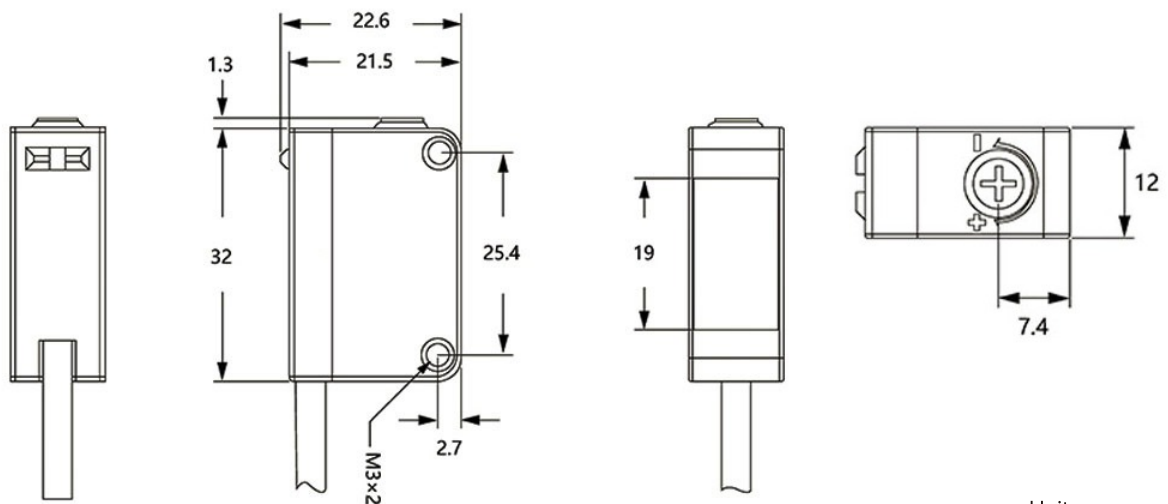
*NO white --- 0V, NC white --- suspended

PNP type



*NO white --- 0V, NC white --- suspended

Product Specifications



Unit: mm