



## Slot-Type Photoelectric Sensor 5~24V DC Direct Cable Exit Type NPN BSM-T45N Indicator Red LED IP67

### Basic Information

- Place of Origin: Guangdong, China
- Brand Name: KRONZ
- Certification: CE
- Model Number: BSM-T45N
- Minimum Order Quantity: 1
- Price: Negotiable
- Packaging Details: Polybag packing
- Delivery Time: 5-8 working days
- Payment Terms: ,T/T,Western Union,MoneyGram
- Supply Ability: 10000 pieces per month



### Product Specification

- Detection Distance: 5mm(Fixed)
- Detected Object: 1.2 X 0.8mm Opaque Object
- Power Supply: 5~24VDC±10%
- Protection Level: IP67
- Ambient Temperature: Operating -25~70° C Condensation-Free、Ice-resistant Storage -30~80° C
- Ambient Humidity: Operating 5~95%RH; Storage 5~85%RH
- Connection Method: Standard Lead Wire Type (2m PVC Cable) Or Customizable PUR Drag Chain Cable
- Protection Circuit: Reverse Polarity Protection、 Overcurrent Protection、 Short-Circuit Protection



## Product Description

The **Slot-Type Photoelectric Sensor (BSM-T45N equivalent)** is a compact, industrial-grade sensor designed for precise object detection in automation systems. It features a **U-shaped or T-shaped slot** for through-beam detection, with an **NPN output** and **direct cable exit** for easy installation. The sensor operates on a **5–24V DC** power supply, making it compatible with most industrial control systems like PLCs. Its **IP67 protection** ensures reliable performance in dusty or wet environments, while the **red LED indicator** provides clear operational status feedback.

### Features:

#### Electrical Specifications

Voltage Range: 5–24V DC, suitable for diverse industrial applications .

Output Type: NPN open collector (NO/NC configurable) for sinking configurations .

Load Current: ≤100mA, with short-circuit and reverse polarity protection .

#### Detection Performance

Slot Width: 5mm (standard), capable of detecting opaque objects as small as 2×0.8mm .

Response Time: ≤0.5ms, with a high switching frequency (1kHz–2kHz) for fast-moving applications .

Light Source: Infrared (940nm) or visible red LED (630nm) for precise detection .

#### Durability & Design

IP67 Rating: Dustproof and waterproof for harsh environments .

Housing Material: Polycarbonate (PC) or aluminum for robustness .

Cable Exit: Direct 2m cable (or 1m options) for flexible wiring .

#### User Convenience

Red LED Indicator: Visual feedback for power and detection status .

Configurable Modes: Light-ON/Dark-ON switching via wiring or jumper settings .

Easy Installation: Slot-type design with screw or bracket mounting options .

#### Compliance & Warranty

Meets industrial standards (e.g., EN 60947-5-2) and includes a 12-month warranty.

## Technical Parameters

Detection Distance	5mm(Fixed)
Detected Object	1.2 x 0.8mm Opaque Object
Repeatability	< 0.01mm
Power Voltage	5–24VDC±10%
Control Output	Switching Capacity: 100mA, Residual Voltage <1V
Indicator	Red LED (Illuminates when light is received)
Output Operating	Equipped with dual outputs (ON when light is blocked, ON when light is received)
Protection Circuit	Reverse Polarity Protection, Overcurrent Protection, Short-Circuit Protection
Ambient Temperature	Operating: -25–70° C (Condensation-Free, Ice-resistant) Storage: -30–80° C
Ambient Humidity	Operating: 5–95%RH; Storage: 5–85%RH
Temperature Effect	Operating Temperature Range: -25° C to +70° C, with ≤ ±10% variation in sensing distance per 20° C change
Voltage Effect	Within ±15% fluctuation of the rated power supply voltage, the sensing distance variation shall be ≤ ±1%.
Withstand Voltage	AC1000V 1min between all power terminals and enclosure
Insulation Resistance	Insulation resistance ≥ 20MΩ between all power terminals and enclosure, measured with 250V megohmmeter.
Vibration Resistance	Frequency: 10Hz–2,000Hz, Double Amplitude: 1.5mm (Peak Acceleration: 196m/s <sup>2</sup> ), 2 hours per axis (X/Y/Z)
Shock Resistance	Acceleration: 15,000 m/s <sup>2</sup> (approx. 1,500 G), 3 times in each XYZ direction
Connection Method	Standard lead wire type (2m PVC cable) or customizable PUR drag chain cable
Material	Housing: PBT, Lens Cover: Polycarbonate (PC)
Protection Level	IP67
Wire Diameter	2.8mm

## Product Images

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**Company Profile**

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## ABOUT US

KRONZ is a manufacturing enterprise located in Zengcheng District, Guangzhou City. We focus on providing customers with high-efficiency industrial automation solutions and related industrial products. After many years of innovation and development, KRONZ has complete product processing equipment and a professional team who are proficient in various automation technologies.

In order to improve the quality of products and production efficiency, we continue to introduce advanced production equipment and technology, strengthen investment in research and development. At present, our main products include Industrial Connectors, Inductive Sensors, Capacitive Sensors, Photoelectric Sensors, Ultrasonic Sensors, Industrial power supplies, Industrial fieldbus, RFID recognition systems, Industrial Ethernet Switches

We not only produce the orders of standard products, but also have ability to make customize production based on customer design drawings or samples.

Adhering to the principle of mutual benefit, we provide our customers with competitive prices , and perfect after-sales service. KRONZ's products have been sold in multiple countries, have won the trust and praise of customers. KRONZ expect to collaborate with you.

## OUR FACTORY





# Certifications



# Logistics and Payment



1. Samples and small orders can be shipped with fast shipment method, by air and by express. Bulk order will ship by sea, by air, by train, by truck etc.
2. We also can send the goods to your agent warehouse.
3. If you need any more shipping method, please feel free to contact with us.







### Note:

Due to the wide range of our products, we cannot list all product pictures and corresponding product parameters. If you have other needs, please communicate with me. We can provide supplementary information and technical support.  
We Are Happy to Serve You.



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