



BP18Y Series Background Suppression Sensor 20-100mm Range Diffuse-reflective PNP/NPN IP67

Our Product Introduction

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Basic Information

- Place of Origin: Guangdong, China
- Brand Name: KRONZ
- Certification: CE
- Model Number: BP18Y-G100N
- 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

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Product Specification

- Detection Distance: 20-100mm
- Sensing Method: Diffuse-reflective With Background Suppression
- Output Type: PNP/NPN Selectable, Open Collector
- Power: 24 VDC
- Light Source: Red LED, 635nm Wavelength
- Protection Features: Short-circuit Protection, Reverse Polarity Protection

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More Images

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Product Description

BP18Y Series Background Suppression Photoelectric Sensors: Precise Detection, Unmatched Stability

The BP18Y-G100N represents the advanced tier of our photoelectric sensor series, featuring cutting-edge background suppression technology. This sophisticated sensor accurately detects objects within a predefined range while effectively ignoring any background surfaces beyond its set detection distance. Engineered for challenging applications requiring precise positioning and reliable performance, the BP18Y-G100N ensures optimal operation even when detecting objects against complex backgrounds.

Key Advantages:

Advanced Background Suppression: Utilizes precise triangulation principle to maintain consistent detection within 20-100mm range, completely ignoring background interference

Universal Output Configuration: Selectable PNP/NPN open-collector output with easy Light-On/Dark-On mode switching via control wire

Superior Stability: Advanced anti-interference circuitry ensures reliable performance in electrically noisy environments

Quick Status Monitoring: Dual-color LED system provides immediate visual feedback for power and output status

Industrial Durability: IP67-rated housing withstands harsh conditions including dust, moisture, and mechanical vibrations

Feature	Specification
Sensing Type	Diffuse-Background
Part Number	BP18Y-G100N
Detection Distance	20-100 mm
Ambient Temperature	-10 to +55 (non-freezing)
Connection	2 meter cable output

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BP18Y Series

Cylindrical Photoelectric Sensor

- Compact design for easy installation
- Clear indicator for status monitoring
- Wide variety of models available
- Equipped with automatic anti-interference function



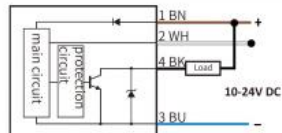
Technical Parameters

Type	Direct Diffuse	Diffuse-Transparent	Diffuse-Background	Retro-reflective	Through Beam
NPN	BP18Y-D500N	BP18Y-H150N	BP18Y-G100N	BP18Y-R3500N	BP18Y-T10N
PNP	BP18Y-D500P	BP18Y-H150P	BP18Y-G100P	BP18Y-R3500P	BP18Y-T10P
Detection Distance	10-500mm	10-150mm	20-100mm	30-3500mm	50mm-10m
Response Time	< 1ms				
Control Output	NPN&PNP: open collector output 24V, Max.100mA(only for main unit) residual voltage:1V				
Output Option	LIGHT-ON/DARK-ON configured via white control wire: Connect white wire to GND for DARK-ON; Connect to brown wire or leave open for LIGHT-ON				
Output Function	1 output pot, Short-Circuit Protection, Auto Anti-Interference Function				
Power	12 to 24VDC \pm 10%, Ripple (P-P): Max. 10% (Class 2)				
Light Source	Red light 635nm, 4-element LED array				
Indicator	Green LED indicator indicates power, and red LED indicator indicates output				
Power Consumption	Standard Mode: Max. 300mW, Max. Voltage: 24V				
Ambient Light Level	Incandescent light: Max: 20,000lux, Sunlight: Max: 30,000lux				
Ambient Temperature	-10 to +55°C (non-freezing)				
Vibration resistance	10 to 55Hz, double amplitude: 1.5mm, 2 hours each for X, Y, Z axes				
Connection	Flying leads, 2m cable				



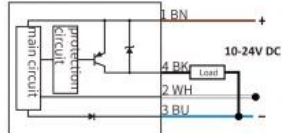
Circuit diagram

DC NPN output



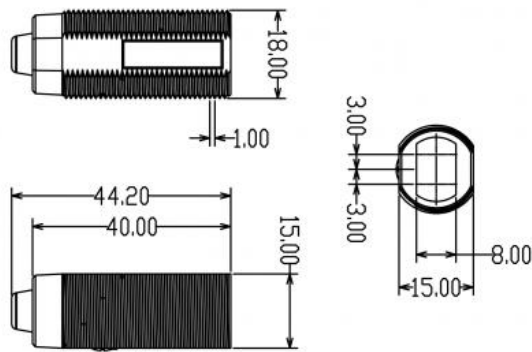
*LIGHT-ON mode WH—Connect to brown wire or left floating
DARK-ON mode WH—0V

DC PNP output



*LIGHT-ON Mode WH—Connect to brown wire or left floating
DARK-ON mode WH—0V

Dimension



Photoelectric Sensors



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