

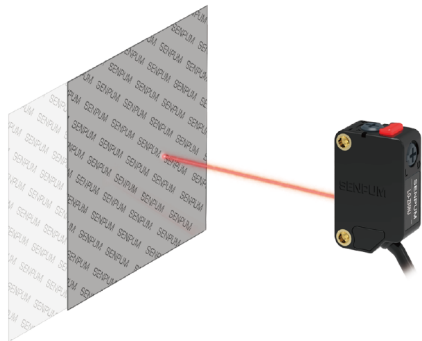
Economy Laser Sensor

LO-Z Series



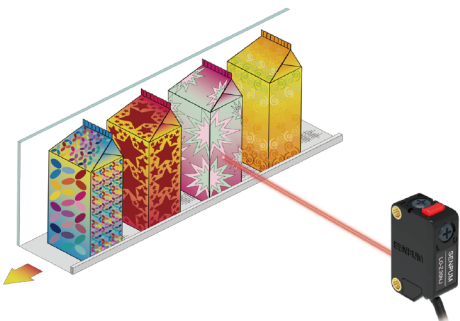
Strong background suppression effect, independent of the background

Stable detection even when the background is a light-colored object with high reflectivity.



Easy and stable detection regardless of object color

Easily identify objects of any color at the same distance with superior performance.



High speed and high performance for a wider range of applications

High response time of less than 1 ms for excellent speed performance.



Ask SENPUM

+86-755-83330055

Fast Delivery Standard Models



Most products are in stock. Upon receiving your order, we will arrange prompt shipment to minimize your downtime-related costs and losses.



WeChat

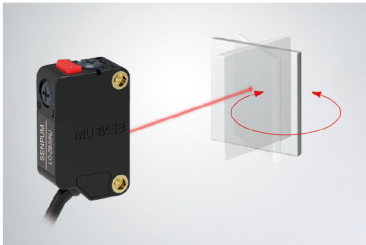


WhatsApp

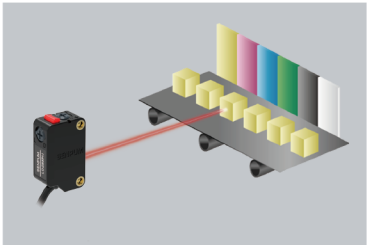


LINE

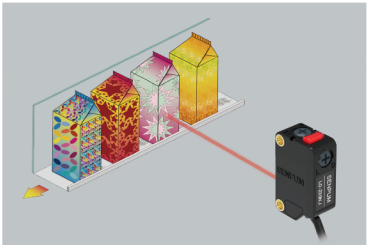
Applications



Angle-independent detection



Stable detection independent of background color



Unaffected by object color changes

Product List

Cable type

Type	Appearance	Detection distance (mm)	Spot size	Model	
				NPN	PNP
Diffuse reflective		25–300	≤Φ5 mm (distance 250 mm)	LO-Z30N	LO-Z30P
		25–600		LO-Z60N	LO-Z60P
		25–800		LO-Z80N	LO-Z80P

Relay type

Type	Appearance	Detection distance (mm)	Spot size	Model	
				NPN	PNP
Diffuse reflective		25–300	≤Φ5 mm (distance 250 mm)	LO-Z30CAN	LO-Z30CAP
		25–600		LO-Z60CAN	LO-Z60CAP
		25–800		LO-Z80CAN	LO-Z80CAP

Cable (sold separately)

Appearance	Sensor side	Cable termination	Cable length	Model
	M8 4-Pin Straight	Loose wire	2 m	OW-LOZ2000
			5 m	OW-LOZ5000
			10 m	OW-LOZ10M
			20 m	OW-LOZ20M

Fiber Optic Sensors

Photoelectric Sensors

Color Sensors

Laser Sensors

Proximity Sensors

Precision Contact Sensors

Area Sensors/
Safety Light Curtains

Laser Scanners

Digital Contact Sensors

Laser Displacement
Sensors

Laser Micrometers

Confocal Displacement
Sensors

Barcode Readers

AI Vision Sensors

RFID

Infrared Temperature
Sensors

Pressure Sensors

Flow Sensors

Magnetic Sensors

Ultrasonic Sensors

Magnetic Scales

Static Eliminators



LA2-ZB

LA-ZB

LO-Z

LA-ZH

LA-X

LA-N

LA-H

LA2-S

LA3-P

LA-MR

LA-T

Laser Sensors

Fiber Optic Sensors

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Static Eliminators



SEN-PUM
0465

LO-Z

Economy Laser Sensor

Specifications

Cable type

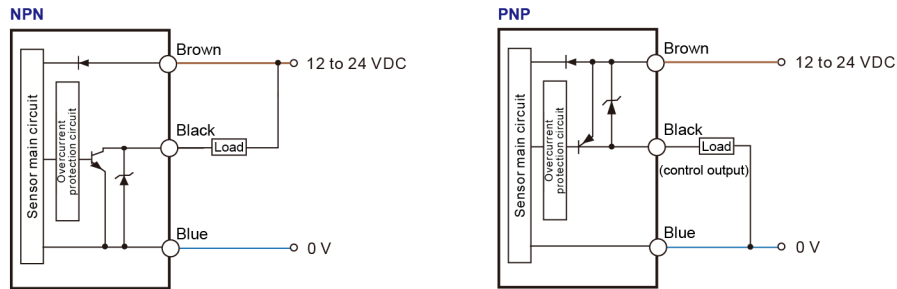
Type		Diffuse reflective		
Model	NPN	LO-Z30N	LO-Z60N	LO-Z80N
	PNP	LO-Z30P	LO-Z60P	LO-Z80P
Detection distance (mm)		300	600	800
Setting distance (mm)		25–300	25–600	25–800
Minimum detection blind zone		≤40 mm		
Detection mode		BGS function (background suppression function)		
Light source		Red laser semiconductor (with anti-jamming function)		
Spot size		≤Φ5 mm (distance 250 mm)		
Minimum detection object		≤Φ5 mm wire		
Operating voltage		DC 24 V (operating voltage range includes DC 24 V)		
Output action		NO/NC adjustable (not limited to knob adjustment or wiring change, etc.)		
Current consumption		30 mA max.		
Response time		≤10 ms		
Black-white chromatic difference		≤15% (at 250 mm)		
Sensitivity adjustment		Knob setting		
Output type		LIGHT-ON/DARK-ON		
Power indicator		Requires a power indicator, lighted when power on		
Motion indicator		Requires an action indicator, used to distinguish the sensor detection state		
Circuit protection		Reverse connection protection, short circuit protection		
Protection class		IP67		
Ambient light		Supports Incandescent lamp 5,000 lux and sunlight 10,000 lux or more		
Ambient temperature		-10 to +55 °C		
Relative humidity		35 to 85% RH (no condensation)		
Withstanding voltage		AC 1000 V, 50/60 Hz 1 min		
Shock resistance		500 m/s², 3 times in each of the X, Y, and Z directions		
Vibration resistance		10 to 55 Hz, Compound amplitude 1.5 mm, 2 hours in each of the X, Y, and Z directions		
Material		Plastic case		
Weight		Approx. 59 g		

Relay type

Type		Diffuse reflective		
Model	NPN	LO-Z30CAN	LO-Z60CAN	LO-Z80CAN
	PNP	LO-Z30CAP	LO-Z60CAP	LO-Z80CAP
Detection distance (mm)		300	600	800
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Ask SENPUM: +86-755-83330055

I/O Circuit Diagrams

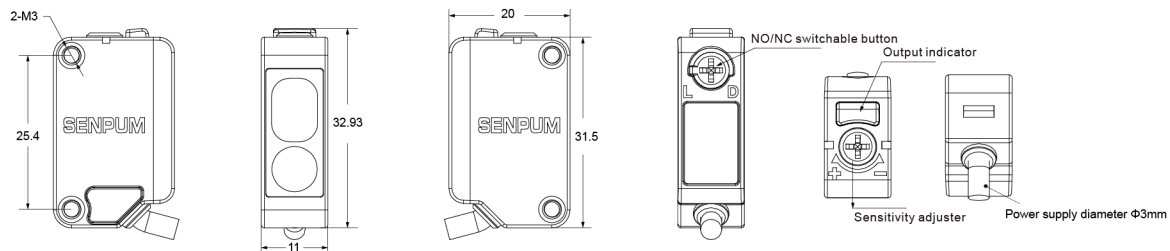


Dimensions

Unit: mm

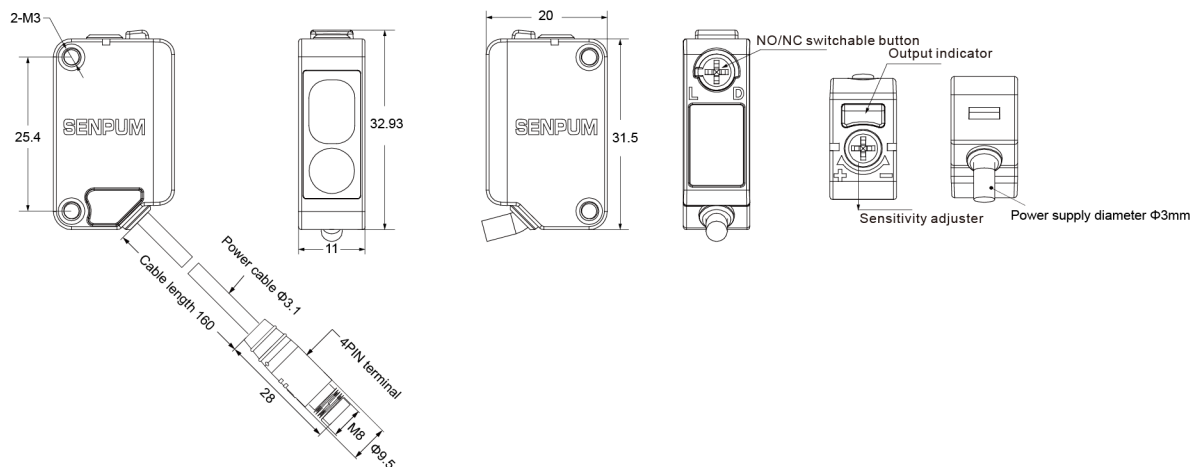
Cable type

LO-Z30N / P LO-Z60N / P LO-Z80N / P



Relay type

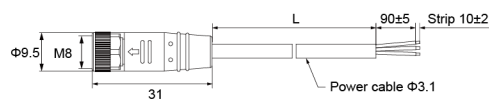
LO-Z30CAN / P LO-Z60CAN / P LO-Z80CAN / P



Cable (sold separately)

OW-LOZ2000 / OW-LOZ5000 / OW-LOZ10M / OW-LOZ20M

Pin definition



No.	Jacket color
①	Brown
②	-
③	Blue
④	Black

