

Precision Positioning

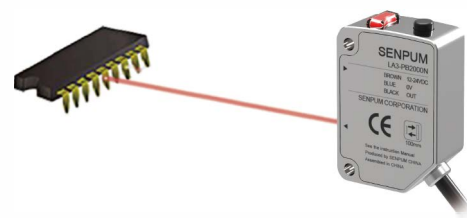
Laser Sensors

LA3-P series



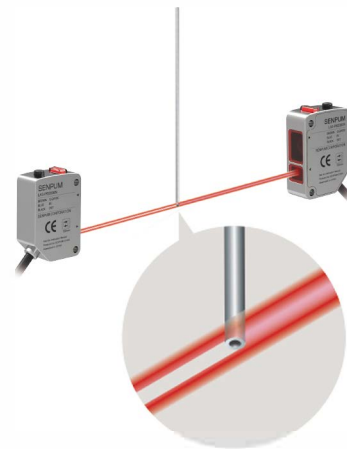
Ultra Small Laser Spot

Spot size down to less than 0.5mm, even for small objects
Stable detection



Stable detection even with very small objects

Detecting the positioning of the front end of the dispenser syringe



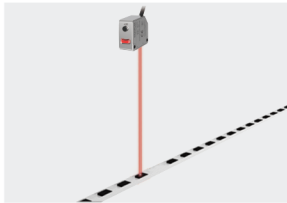
Metal housing with excellent impact resistance

Imported zinc alloy is used for greater sturdiness and durability

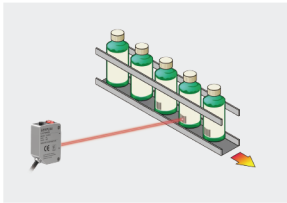


- More merits
- Ultra-small size for a wider range of applications
 - Easily recognizes subtle changes in reflective objects
 - Ultra-small laser spot
 - Can be used in high-precision applications

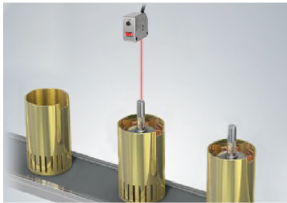
Application



Can be used to detect the presence or absence of tiny chips



Test bottles for printed barcodes



Detection of part insertion anomalies

Product List

Type	Appearance	Detection distance(mm)	Spot size	Output type	Model
Reflexive		15m	15mm	NPN	LA3-PR15MN
				PNP	LA3-PR15MP
		0.03~50m	About Φ60mm at 50m	NPN	LA3-PR50MN
				PNP	LA3-PR50MP
Directional		15m	15mm	NPN	LA3-PD15MN
				PNP	LA3-PD15MP
		30m	About Φ30mm at 30m	NPN	LA3-PD30MN
				PNP	LA3-PD30MP

Specs

Type		Reflexive		Directional	
Model	NPN	LA3-PR15MN**1	LA3-PR50MN**1	LA3-PD15MN	LA3-PD30MN
	PNP	LA3-PR15MP**1	LA3-PR50MP**1	LA3-PD15MP	LA3-PD30MP
Spot size		15mm	About Φ60mm at 50m	15mm	About Φ30mm at 30m
Detection distance	MEGA	15m	0.03~50m	15m	30m
	FINE				
	HSPD				
Response time		1ms			
Output type		NPN or PNP open collector output N.O./N.C. switching type			
Control output	NPN	Maximum load current: 100mA; Residual voltage: less than 2V			
	PNP	Maximum load current: 100mA; residual voltage: less than 2V			
Circuit protection		Power reverse connection protection, power surge protection, output short circuit protection			
Supply Voltage		Between 12 and 24VDC±10%, ripple voltage (P-P): 10% max.			
Power consumption		200mW or less (8mA or less at 24V, 15mA or less at 12V)		T:Maximum 7mA at 24V, Maximum 13mA at 12V R:Maximum 13mA at 12/24V	
Environmental temperature		-20°C to +55°C (no freezing)			
Environmental humidity		35 to 85% RH (no condensation)			
Vibration resistance		10-55 Hz, compound amplitude 1.5 mm, 2 hours each in the X, Y, Z direction			
Shock resistance		1000 m/s², 3 times each in X, Y, Z direction			
Enclosure		Housing: Zinc alloy Indicator cover: PC Lens cap: PMMA Button: ABS Cable (2m cable type only): PVC			
Enclosure Dimensions		33.13mm(H)x11.4mm (W)x23.33mm (L)			
Weight		Approx. 59g			

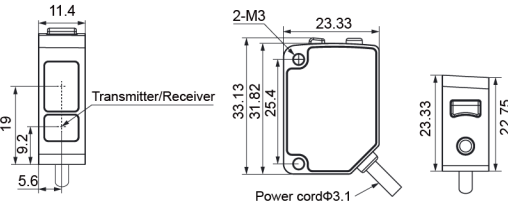
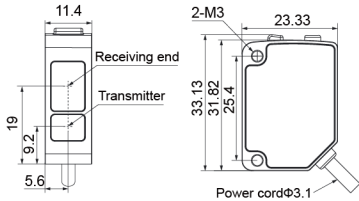
*1 Detection distances are tested against a white cardboard background.

Dimensional Specifications

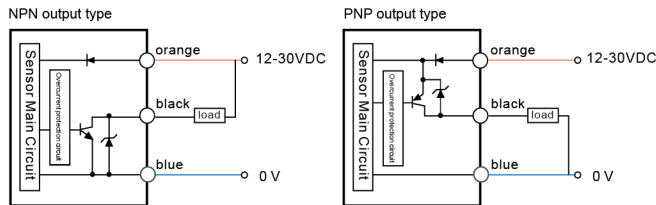
LA3-PR15MN/P LA3-PR50MN/P

LA3-PD15MN/P LA3-PD30MN/P

Unit: mm



Input/Output Circuit Diagrams



Stand (sold separately)

N-100



Laser Sensors

- LA2-ZB
- LA-ZB
- LO-Z
- LA-ZH
- LA-X
- LA-N
- LA-H
- LA2-S
- LA3-P
- LA-MR
- LA-T

Fiber Optic Sensors

Photoelectric Sensors

Color Sensors

Laser Sensors

Inductive Proximity Sensors

Precision Contact Sensors

Area/Safety Light

Curtain Laser Scanners

Digital Contact Sensors

Laser Displacement Sensors

Laser micrometer

Confocal Displacement Sensors

Barcode Scanners

AI Vision Sensor

RFID

Infrared Temperature Sensors

Digital Pressure Sensors

Flow Test Sensors

Gate Magnetic Sensors

Ultrasonic Displacement Sensors

Gate Magnetic Sensors

Static Eliminators

