

High-Performance Economy

Background Suppression

Photoelectric Sensor

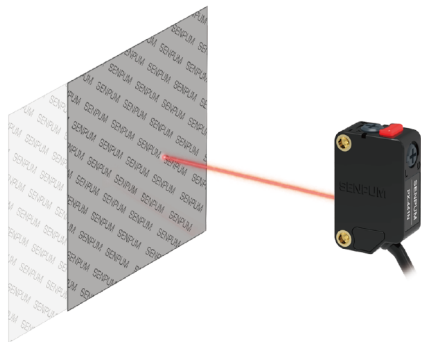
PX-400 Series



Strong background suppression effect,

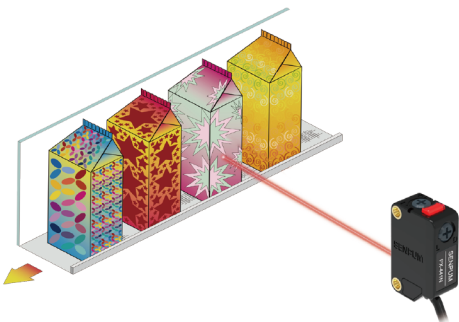
independent of the background

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, high-performance applications

more widely

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

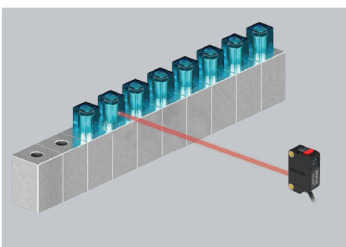


LINE

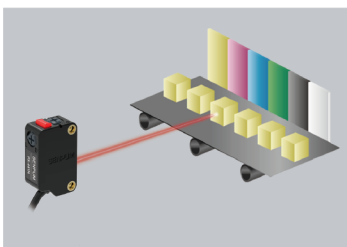
Applications



Detecting the presence or absence of color independent



Detecting the presence or absence of small electronic parts



Stable detection independent of background color

Product List

Cable type

Type	Appearance	Detection distance (mm)	Spot size (mm)	Output method	Model
Small spot type		5–100	Approx. Φ 5 mm (at 100 mm)	NPN	PX-441N
				PNP	PX-441P
Standard type		10–300	Approx. Φ 24 mm (at 300 mm)	NPN	PX-442N
				PNP	PX-442P
Infrared type		20–400	-	NPN	PX-450MN
				PNP	PX-450MP

Relay type

Type	Appearance	Detection distance (mm)	Spot size (mm)	Output method	Model
Small spot type		5–100	Approx. Φ 5 mm (at 100 mm)	NPN	PX-441CAN
				PNP	PX-441CAP
Standard type		10–300	Approx. Φ 24 mm (at 300 mm)	NPN	PX-442CAN
				PNP	PX-442CAP
Infrared type		20–400	-	NPN	PX-450MCAN
				PNP	PX-450MCAP

Cable (sold separately)

Appearance	Sensor side	Cable termination	Cable length	Model
	M8 4-Pin Straight	Loose wire	2 m	OW-PX2000
			5 m	OW-PX5000
			10 m	OW-PX10M
			20 m	OW-PX20M

Photoelectric Sensors

PX-400
PL-M/F
PK-L
PH2-T
PM-T
PQ-100
SE2-*45
SE2-*25
SE-400

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



PX-400

PL-M/F

PK-L

PH2-T

PM-T

PQ-100

SE2-45

SE2-25

SE-400

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SEN PUM
0227

PX-400

High-Performance Economy Background Suppression Photoelectric Sensor

Specifications

Cable type

Type		Reflective		
		Small spot type	Standard type	Infrared type
Model	NPN	PX-441N	PX-442N	PX-450MN
	PNP	PX-441P	PX-442P	PX-450MP
Distance setting range		20–100 mm	20–300 mm	50–400 mm
Detection distance		5–100 mm	10–300 mm	20–400 mm
Hysteresis ¹		Less than 2% of the action distance	Less than 5% of the action distance	Less than 5% of the action distance
Spot diameter		Approx. Φ2 mm (at 70 mm distance)	Approx. Φ24 mm (at 300 mm distance)	-
Repeatability		Along the detection axis: Less than 1 mm		
Supply voltage		12 to 24 VDC ±10%		
Current consumption		17 mA or less		25 mA or less
Electrical parameters	Maximum load current	100 mA		
	Maximum applied voltage	30 VDC		
	Residual voltage	Less than 1 V		
	Output action	NO/NC switchable		
	Protection	Short circuit protection / Inverse connection protection / Overcurrent protection / Surge protection		
Ambient temperature		-20 to +50 °C		
Protection class		IP67		
Response time		Less than 1 ms		
Status indicator light		Green: Output off; Red: Output on		
Cable		2 m		

¹ White non-glossy test card

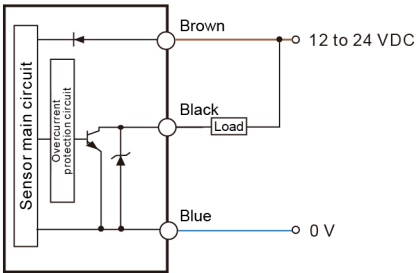
Relay type

Type		Reflective		
		Small spot type	Standard type	Infrared type
Model	NPN	PX-441CAN	PX-442CAN	PX-450MCAN
	PNP	PX-441CAP	PX-442CAP	PX-450MCAP
Distance setting range		20–100 mm	20–300 mm	50–400 mm
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Ambient temperature		-20 to +50 °C		
Protection class		IP67		
Response time		Less than 1 ms		
Status indicator light		Green: Output off; Red: Output on		
Cable		190±5 cm		

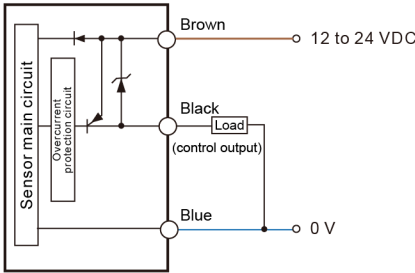
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I/O Circuit Diagrams

NPN



PNP

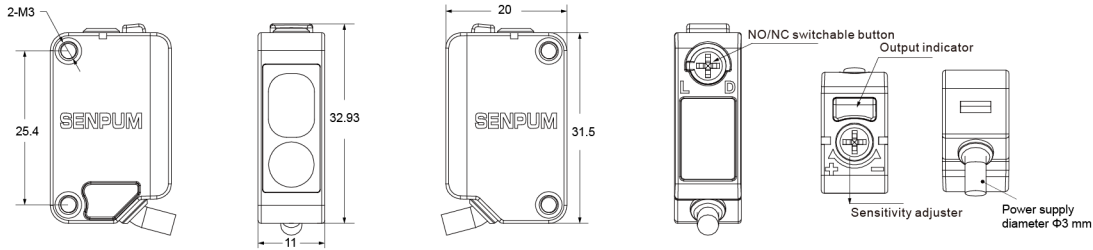


Dimensions

Unit: mm

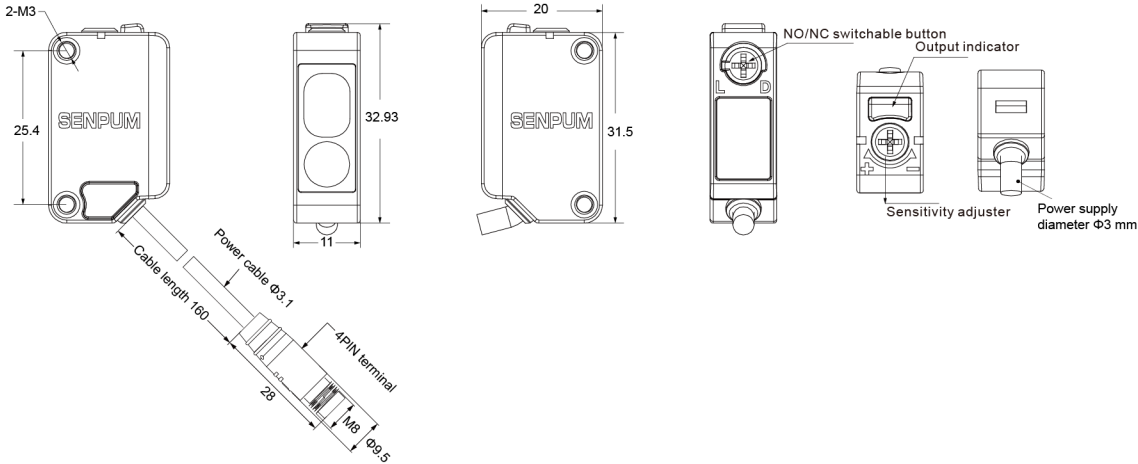
Cable type

PX-441N / P PX-442N / P PX-450MN / P



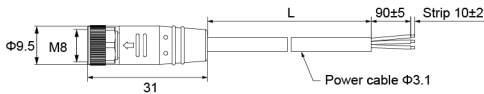
Relay type

PX-441CAN / P PX-442CAN / P PX-450MCAN / P



Cable (sold separately)

OW-PX2000 / OW-PX5000 / OW-PX10M / OW-PX20M



Pin definition



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

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