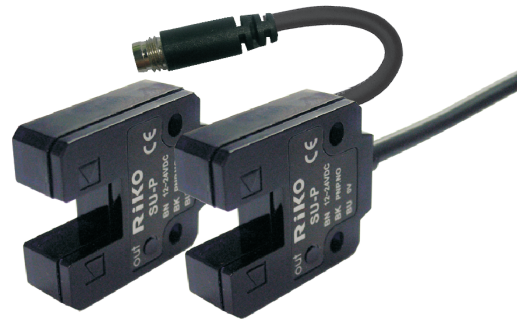


U-shape Photo Sensor

SU

◆ Characteristic :

- High-speed response, 1 kHz (DC-light type)
- Sensing distance 10mm, suitable for the detection of small objects.
- Infrared beam axis 1mm width.



◆ Specifications

Model	SU-N	SU-ND	SU-P	SU-PD
	SU-N2	SU-N2D	SU-P2	SU-P2D
Sensing distance	10mm			
Min. detection object	Opaque (Ø0.5 x 10.0mm)			
Emitting light	Infrared LED 940nm			
Operating voltage	DC12 ~ 24 V			
Current Consumption	20 mA Max.			
Load current	100mA Max. at DC24V			
Output type	NO Type	N : NPN N.O. (dark operated)		P : PNP N.O. (dark operated)
	NC Type	N2 : NPN N.C. (light operated)		P2 : PNP N.C.(light operated)
Response time	1 ms Max.			
Ambient illumination	Incandescent light / : 1,000 lux max.			
Insulation resistance	20MΩ min. (DC500V)			
Voltage withstandability	AC500V 60Hz for 60 Sec.			
Operating temperature	-10°C ~ + 55°C			
Ambient humidity	45% ~ 85% RH			
Protection degree	IP64			
Vibration resistance	1.5-mm peak-to-peak amplitude, 10 to 55 Hz, 2 hours each in X, Y, and Z directions			
Shock resistance	50G, repeated 10 times each in X, Y, and Z directions			
Material	PC			
Wiring method	Pre-wired Ø4.2 x 2 M / 3-wires	M8 pigtailed type	Pre-wired Ø4.2 x 2 M / 3-wires	M8 pigtailed type
Weight	Approx.55g	Approx.35g	Approx.55g	Approx.35g

Photo / Area Photo / Ultrasonic Sensor

R5JM
/R3JK

PTQ18

PMF
/RMF
/MMF

PK3
/PK5
/PM6

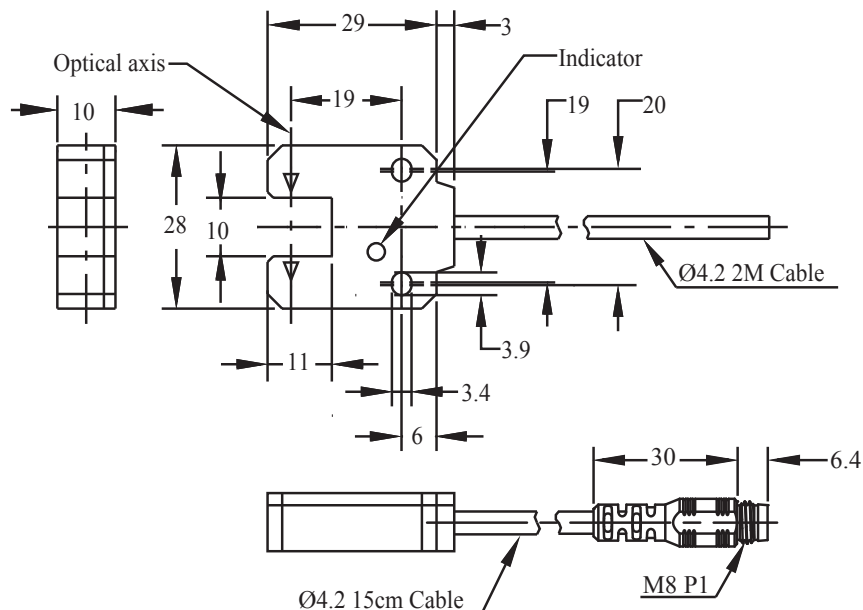
SU
/SU15
/SU07
/SU30

SPR
/RX

OAP
/ASP

RU18

◆ Dimensions : (unit:mm)



◆ Characteristic :

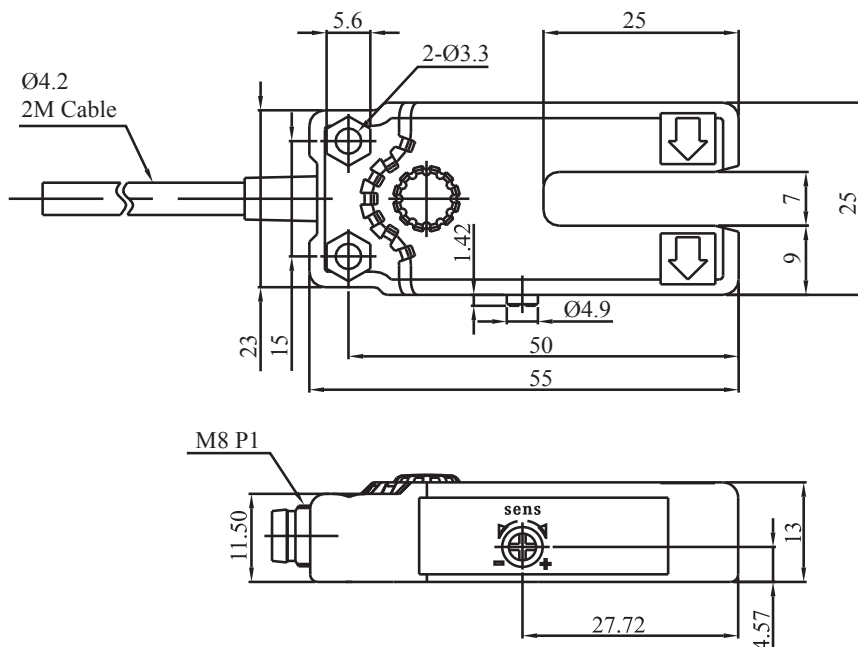
- Sensing distance 7mm.
- Bright LED output indicator.
- Sensitivity adjustment 12-turn potentiometer (VR).
- Visible red light detection application : Address reading and cut mark sensing.



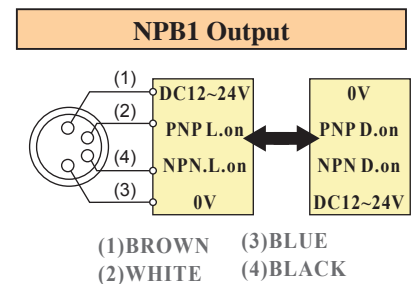
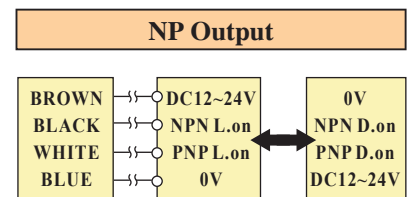
◆ Specifications :

Model	NPN D.on	SU07-N	SU07-ND1
	PNP D.on	SU07-P	SU07-PD1
	NPN L.on/D.on PNP L.on/D.on	SU07-NP	SU07-NPB1
Sensing distance	7 mm		
Min. detection object	Opaque(Ø0.5 x 10.0mm)		
Emitting light	Red LED 660 nm		
Operating voltage	DC12 ~ 24 V		
Current Consumption	18 mA Max.		
Load current	100mA Max. at DC24V		
Response time	1 ms Max.		
Ambient illumination	Incandescent light : 1,000 lux max.		
Insulation resistance	20MΩ min. (DC500V)		
Voltage withstandability	AC500V 60Hz for 60 Sec.		
Operating temperature	-10°C ~ + 55°C		
Ambient humidity	35% ~ 85% RH		
Protection degree	IP64		
Vibration resistance	1.5 mm peak to peak amplitude, 10 to 55 Hz, 2 hours in X,Y and z directions		
Shock resistance	50 G repeated 10 times each in X,Y and Z directions		
Material /	PC		
Wiring method	N/P : Pre-wired Ø4.2 x 2 M / 3-wires NP : Pre-wired Ø4.2 x 2 M / 4-wires		M8 connector / M8
Weight	Approx.65g		Approx.25g

◆ Dimensions (unit:mm)

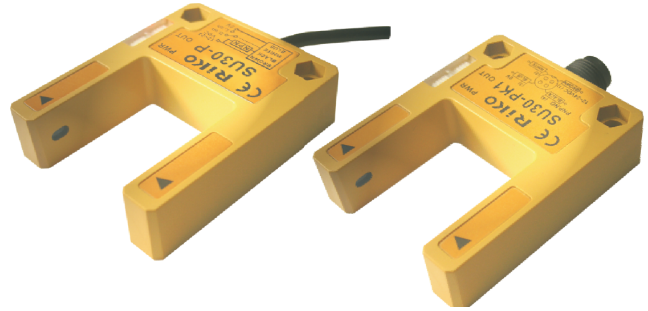


◆ Wiring diagrams :



◆ Characteristic:

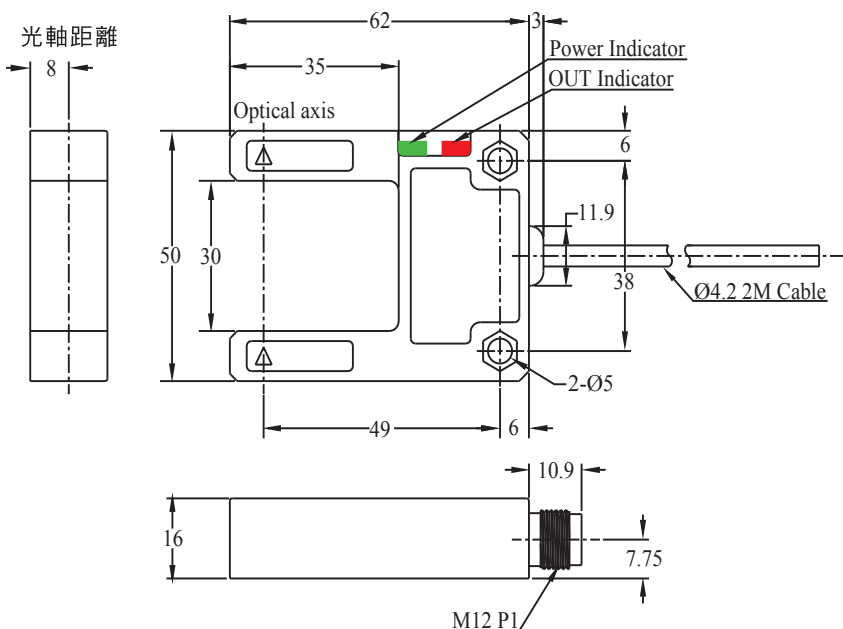
- Wide sensing range : 30mm.
- Two indicators (power/sensing). Easy to recognize.
- NP model : NPN+PNP L.on/D.on 4-in-1 outputs.



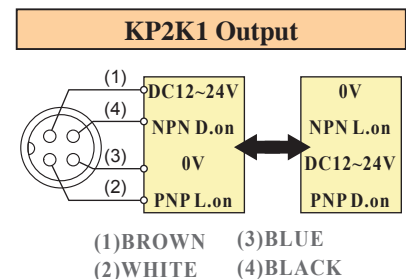
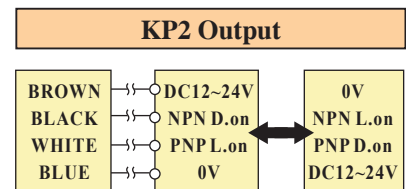
◆ Specifications:

Model	NPN L.on/D.on	SU30-N	SU30-NK1
	PNP L.on/D.on	SU30-P	SU30-PK1
	NPN L.on/D.on PNP L.on/D.on	SU30-KP2	SU30-KP2K1
Sensing distance	30 mm		
Min. detection object	Opaque (Ø1.0 x 10.0mm)		
Emitting light	Infrared LED 940 nm		
Operating voltage	DC12 ~ 24 V		
Current Consumption	20 mA Max.		
Load current	100mA Max. at DC24V		
Response time	1 ms Max.		
Ambient illumination	Incandescent light : 3,000 lux max.		
Insulation resistance	20MΩ min. (DC500V)		
Voltage withstandability	AC500V 60Hz for 60 Sec.		
Operating temperature	-20°C ~ + 60°C		
Ambient humidity	35% ~ 85% RH		
Protection degree	IP64		
Vibration resistance	1.5 mm peak to peak amplitude, 10 to 55 Hz, 2 hours in X,Y and z directions		
Shock resistance	50 G repeated 10 times each in X,Y and Z directions		
Material	PC		
Wiring method	SU30-□	Pre-wired Ø4.2 x 2 M / 4-wires	
	SU30-□K1	M12 pigtailed type / M12 ヘッド	
Weight	SU30-□	Approx.86g	
	SU30-□K1	Approx.26g	

◆ Dimensions: (unit:mm)



◆ Wiring diagrams:

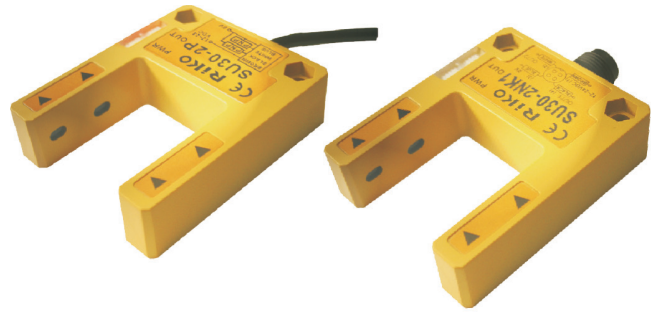


U-shape Photo Sensor

SU30

◆ Characteristic :

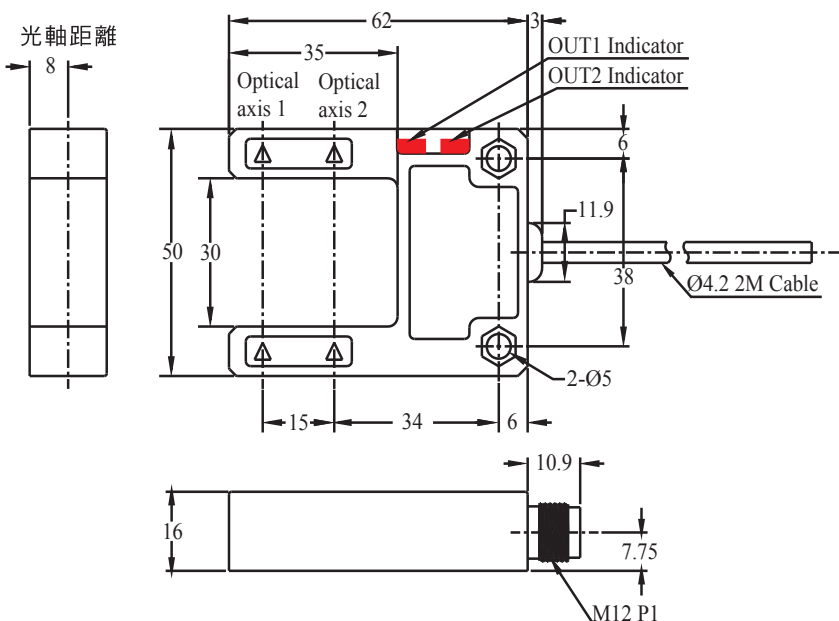
- Two indicators (OUT1 Indicator/OUT2 Indicator). Easy to recognize.
- The distance is 7mm between front edge and first optic axis. The distance is 15mm between two optic axes.
- Two optic axes react respectively.



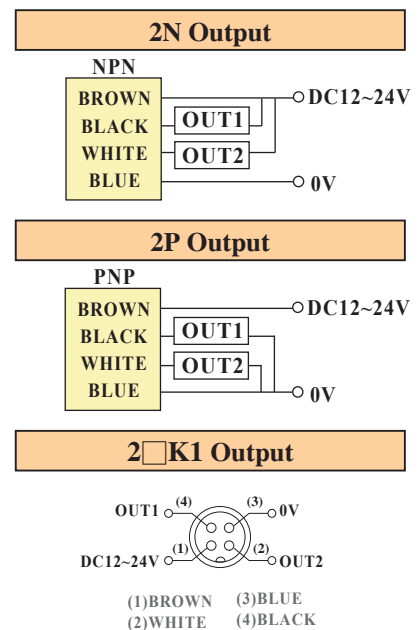
◆ Specifications :

Model	NPN D.on	SU30-2N	SU30-2NK1
	PNP D.on	SU30-2P	SU30-2PK1
Sensing distance	30 mm		
Min. detection object	Opaque (Ø1.0 x 10.0mm)		
Emitting light	Infrared LED 940 nm		
Operating voltage	DC12 ~ 24 V		
Current Consumption	30 mA Max.		
Load current	100mA Max. at DC24V		
Response time	1 ms Max.		
Ambient illumination	Incandescent light : 1,000 lux max.		
Insulation resistance	20MΩ min. (DC500V)		
Voltage withstandability	AC500V 60Hz for 60 Sec.		
Operating temperature	-20°C ~ + 60°C		
Ambient humidity	35% ~ 85% RH		
Protection degree	IP64		
Vibration resistance	1.5 mm peak to peak amplitude, 10 to 55 Hz, 2 hours in X,Y and z directions		
Shock resistance	50 G repeated 10 times each in X,Y and Z directions		
Material	PC		
Wiring method	Pre-wired Ø4.2 x 2 M / 4-wires	M12 Plug-in connector type	
Weight	Approx.86g		Approx.26g

◆ Dimensions : (unit:mm)

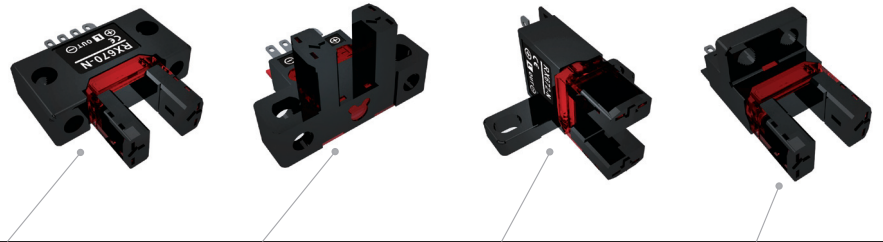


◆ Wiring diagrams



◆ Characteristic :

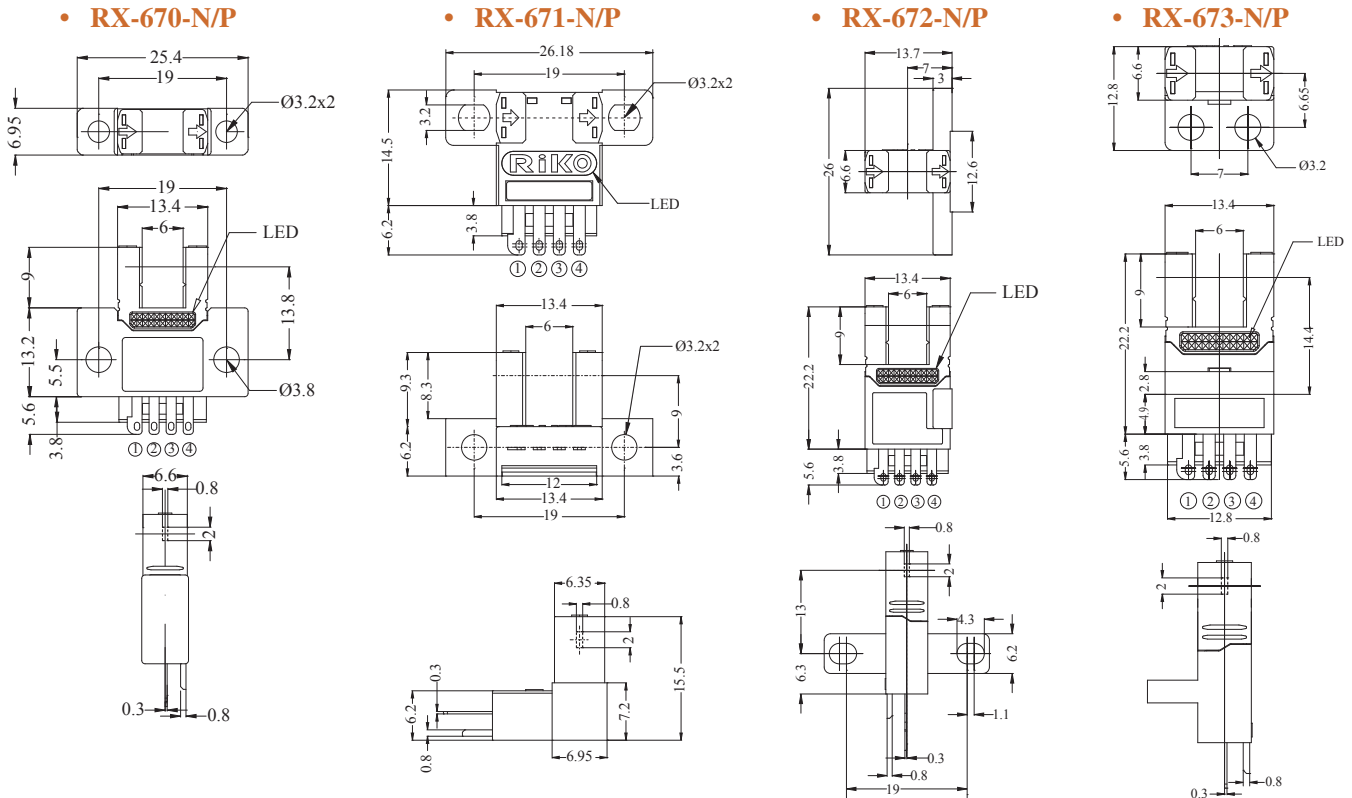
- High-speed response : 2kHz.
- Sensing distance 6mm, suitable for the detection of small objects.
- Infrared beam axis 0.8x2mm width.



◆ Specifications :

Model	RX670-N	RX671-N	RX672-N	RX673-N
	RX670-P	RX671-P	RX672-P	RX673-P
Sensing distance	6 mm			
Output type	NPN L.on/D.on PNP L.on/D.on	NPN L.on/D.on PNP L.on/D.on	NPN L.on/D.on PNP L.on/D.on	NPN L.on/D.on PNP L.on/D.on
Emitting light	Infrared LED 940 nm			
Operating voltage	DC10 ~ 30 V			
Current Consumption	15 mA Max.			
Load current	100mA Max. at DC24V			
Response time	0.5 ms Max.			
Insulation resistance	20MΩ min. (DC500V)			
Voltage withstandability	AC1000V 60Hz for 60 Sec.			
Operating temperature	0 °C ~ + 60 °C			
Ambient humidity	35% ~ 85% RH			
Material	ABS			
Protection degree	IP50			
Option (Page 256)	EE-1001 / RE-1006-PVC-2M			
Weight	Approx.3.5g	Approx.3.5g	Approx. 3g	Approx. 3g

◆ Dimensions : (unit:mm)



◆ Wiring diagrams :

Pin fitting			
①	②	③	④
+	L	OUT	-

