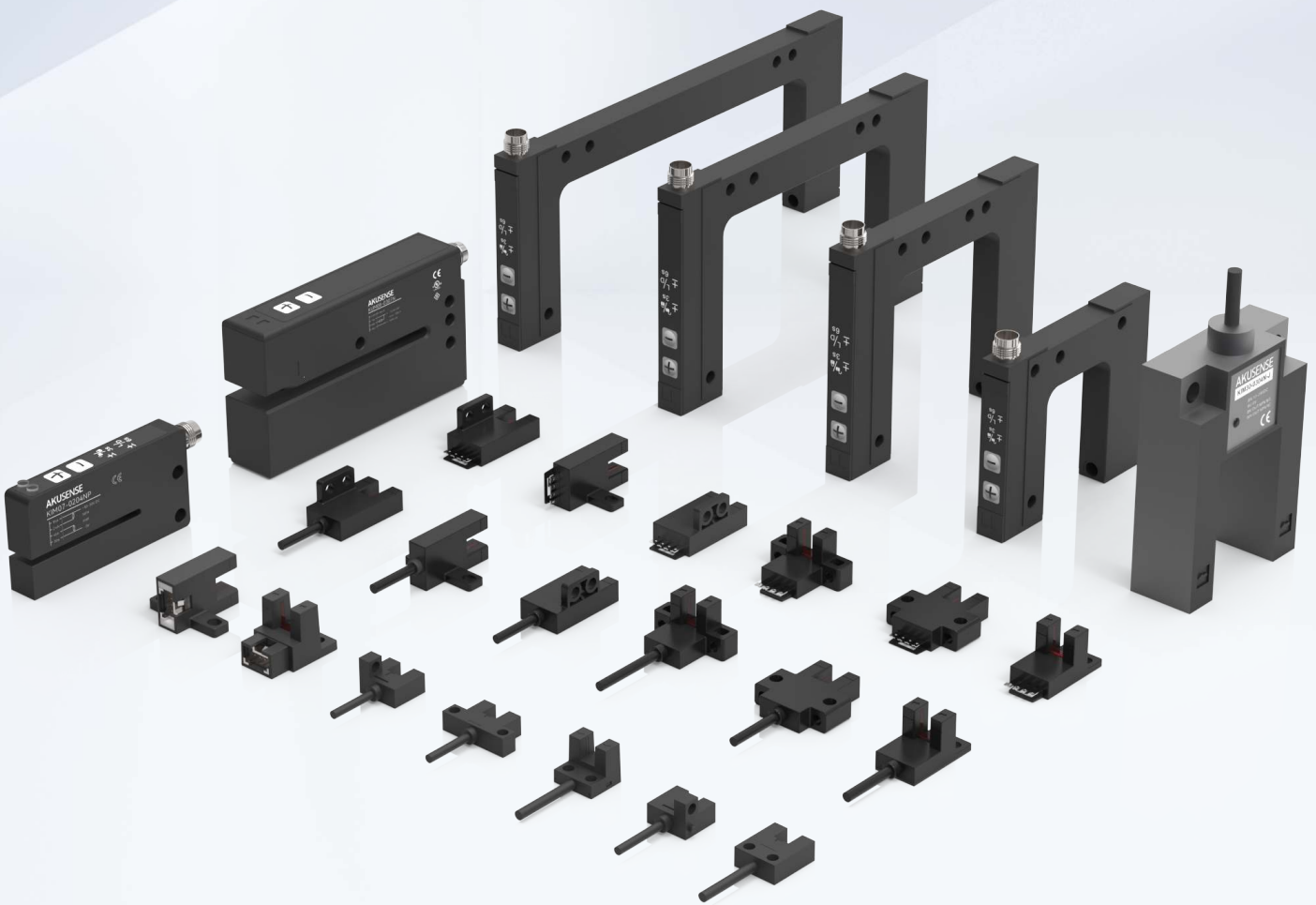


Slot-Type Sensors

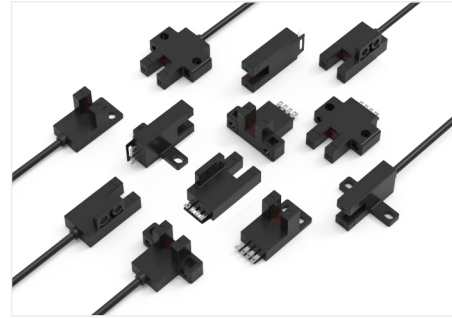
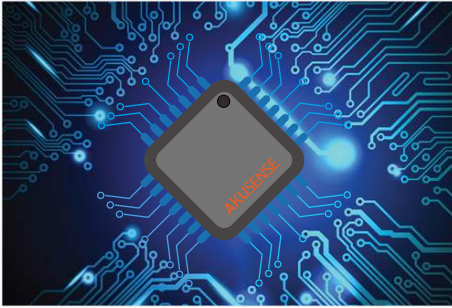


- ◎ Multiple product line, slot width ranges from 5mm to 120mm
- ◎ Microslot sensors can fully substitute for the popular models from other well-known brands
- ◎ Label sensors are equipped with standard teach-in function, can stably detect various labels

Chip-based Solution*

Integration of product functions and applications highly onto a single chip, achieving higher consistency

*ST-603NA-E2, SY-607NA-E2



Rich Product Line

Slot width ranges from 5mm to 120mm, compatible with over 12 shapes such as F/T/R/L/K
Mechanical installation, compatible with mainstream installation hole distances in the market

Clear LED Indicator Light Design

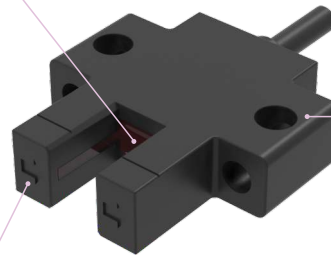
High-brightness LED lights
Ultra-wide viewing angle design

Clear LED Indicator Light Design

High-brightness LED lights
Ultra-wide viewing angle design

Strong Anti-interference Ability

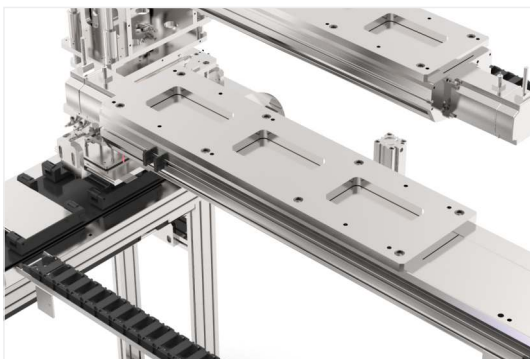
Resistant to incandescent light up to 1,000Lux



High Precision

Repeatability: 0.01mm
3KHz high-speed response,
response time: 0.17 milliseconds

Application Scenarios



Precision positioning of motion mechanism



Label positioning detection

Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Area

Ultrasonic

AI Image

Code Readers

Vibration

Temperature

RFID

Safety door lock

Pressure Switch

Communication

Accessories

Guidance

Slot type sensors

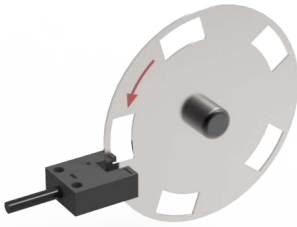
Micro slot type

Slot type

Wide slot type

Label detection

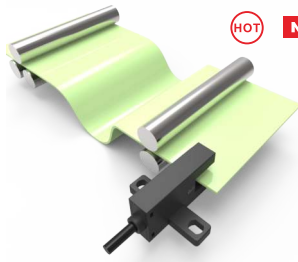
Guidance



Micro Slot Type

- Newly developed products, competitive price and good quality
- Derived from Japanese advanced technology, excellent performance
- 6.5mm slot depth (effectively prevents detected objects from hitting the bottom of the slots) ※Part of the model

P.B-05



Slot Type

- Available in pre-wired and connector type, 12 specifications such as F/T/R/L/K.T for option
- NO/NC output (easy wiring)
- 8.5 mm slot depth (prevents detected objects from hitting the bottom of the slot to a large extent)

P.B-07



NPN and PNP in one

Wide Slot Type

- Flexible to switch NPN and PNP output
- Provide laser and infrared light sources according to different needs
- Various wide slots are available, 30mm, 50mm, 80mm, 120mm, etc.

P.B-13



Label Detection Type

- Stably detects those labels with 2mm gaps or 2mm lengths.
- With two-point and single-point teaching function
- Infrared detection and ultrasonic detection are available

P.B-15

Micro Slot Type

Series	Appearance	Slot width	Model number		Pages		
			NPN Normally open	PNP Normally open			
Micro slot type(4-wire)		K shape	5mm	D.on/ L.on	SK-206NA-W	SK-206PA-W	B-05
		L shape	5mm	D.on/ L.on	SL-205NA-W HOT	SL-205PA-W	
		F shape	5mm	D.on/ L.on	SF-202NA-W	SF-202PA-W	
		R shape	5mm	D.on/ L.on	SR-204NA-W	SR-204PA-W	
		U shape	5mm	D.on/ L.on	SU-201NA-W	SU-201PA-W	

Slot Type

Series	Appearance	Slot width	Model number			Pages	
			When detecting objects	NPN Normally open&Normally closed	PNP Normally open&Normally closed		
Slot type(Pre-wired)		F shape	5mm	Light on when detecting object	SF-302N-SW	SF-302P-SW	B-07
				Light off when detecting object	SF-302NA-SW	SF-302PA-SW	
		T shape	5mm	Light on when detecting object	ST-303N-SW HOT	ST-303P-SW	
				Light off when detecting object	ST-303NA-SW HOT	ST-303PA-SW	
		R shape	5mm	Light on when detecting object	SR-304N-SW	SR-304P-SW	
				Light off when detecting object	SR-304NA-SW	SR-304PA-SW	

- Fiber Optic
- Slot Sensors
- Photoelectric
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- AI Image
- Code Readers
- Vibration
- Temperature
- RFID
- Safety door lock
- Pressure Switch
- Communication
- Accessories

Guidance

Slot type sensors










Micro slot type

Slot type

Wide slot type


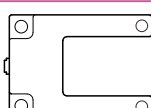
Label detection

Slot Type

Series	Appearance	Slot width	Model number			Pages
			When detecting objects	NPN Normally open&Normally closed	PNP Normally open&Normally closed	
Slot type(Pre-wired)		5mm	Light on when detecting object	SL-305N-SW (HOT)	SL-305P-SW	B-07
			Light off when detecting object	SL-305NA-SW (HOT)	SL-305PA-SW	
		5mm	Light on when detecting object	SK-306N-SW	SK-306P-SW	
			Light off when detecting object	SK-306NA-SW	SK-306PA-SW	
		5mm	Light on when detecting object	SY-307N-SW (HOT)	SY-307P-SW	
			Light off when detecting object	SY-307NA-SW (HOT)	SY-307PA-SW	
Slot type (Connector type)		5mm	Light on when detecting object	SF-302N-SE	SF-302P-SE	B-09
			Light off when detecting object	SF-302NA-SE	SF-302PA-SE	
		5mm	Light on when detecting object	ST-303N-SE (HOT)	ST-303P-SE	
			Light off when detecting object	ST-303NA-SE (HOT)	ST-303PA-SE	
		5mm	Light on when detecting object	SR-304N-SE	SR-304P-SE	
			Light off when detecting object	SR-304NA-SE	SR-304PA-SE	
		5mm	Light on when detecting object	SL-305N-SE (HOT)	SL-305P-SE	
			Light off when detecting object	SL-305NA-SE (HOT)	SL-305PA-SE	
		5mm	Light on when detecting object	SK-306N-SE	SK-306P-SE	B-11
			Light off when detecting object	SK-306NA-SE	SK-306PA-SE	
		5mm	Light on when detecting object	SY-307N-SE (HOT)	SY-307P-SE	
			Light off when detecting object	SY-307NA-SE (HOT)	SY-307PA-SE	

■ Remark: Standard 2 or 4m cable, cable length is customizable

Wide Slot Type

Series	Appearance	Slot width	Output mode	Model number	Pages
KLM		30mm	NPN & PNP dual output	KLM06-0304NP	B-13
		50mm		KLM06-0506NP	
		80mm		KLM06-0806NP	
		120mm		KLM06-1206NP	
KIM		15mm	NPN D.on/L.on	KIM15-0101N	B-15
		15mm	PNP D.on/L.on	KIM15-0101P	
		30mm	NPN D.on/L.on	KIM30-0304N-J	
		30mm	PNP D.on/L.on	KIM30-0304P-J	

Label Detection

Series	Appearance	Slot width	Min length of label	Model number		Pages
				NPN	PNP	
KIM		2mm	2mm	KIM07-0204NP		B-17
		3mm	2mm	KIM07-0304N	KIM07-0304P	
KUM		3mm	2mm	KUM08-0307N	KUM08-0307P	B-19

- Fiber Optic
- Slot Sensors**
- Photoelectric
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- AI Image
- Code Readers
- Vibration
- Temperature
- RFID
- Safety door lock
- Pressure Switch
- Communication
- Accessories

Guidance

Slot type sensors

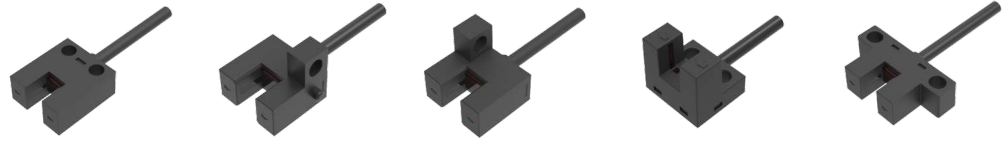
Micro slot type

Slot type

Wide slot type

Label detection

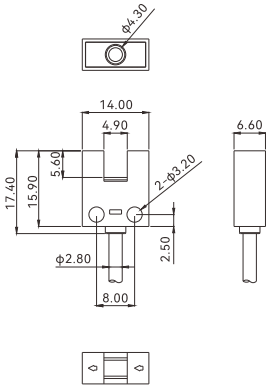
Micro Slot Type



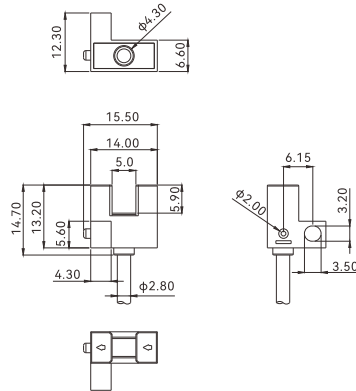
Basic Features	Working principle	Photoelectric sensor				
	Housing style	Shape U	Shape F	Shape R	Shape L	Shape K
	Optical working principle	Through-beam				
	Light source	Infrared LED, 940nm				
	Slot width	5.0mm				
	Slot depth	5.6mm	5.9mm	5.75mm	6.2mm	5.8mm
	Detecting object	1.2x1.8mm				
	Indicator light	Red LED				
Electrical data	Switching mode	L.on (light-on action)/D.on (dark-on action) switchable				
	Output mode	NPN or PNP collector open				
	Response time	0.33ms				
	Switching frequency	6.06kHz				
	Repeat accuracy	<0.03mm				
	Hysteresis	<0.2mm				
	Operating voltage	5~24V DC				
	Power consumption	≤16mA				
	Residual voltage	Below 1V (when load current is 50mA)				
	Load current	≤100mA(24VDC)				
	Insulation resistance	≥20MΩ(250VDC)				
	Withstand voltage	1000VAC (50/60Hz)				
	Protection circuit	Reverse polarity protection/short-circuit protection/surge protection				
Environmental conditions	Operating temperature	-25~55°C(no freezing)				
	Storage temperature	-30~80°C(no freezing)				
	Operating humidity	5~85%RH(no condensation)				
	Storage humidity	5~95%RH(no condensation)				
	Environmental illumination	Incandescent light ≤1000 Lux; LED light ≤1000 Lux; Sunlight ≤10000 Lux				
	Vibration resistance	10~55Hz, amplitude 1.5mm, 2 hours each in X/Y/Z axes				
	Protection rating	IP50				
Mechanical data	Connection method	2m/4-core cable				
	Dimensions	6.6x14.0x15.9mm	15.5x14.7x12.3mm	15.9x14.7x12.3mm	13.8x12.1x12.4mm	24.0x14.0x6.5mm
	Material	ABS				
	Weight	0.025kg	0.023kg		0.024kg	0.023kg
	Accessories	-				
Model	NPN	SU-201NA-W	SF-202NA-W	SR-204NA-W	SL-205NA-W (HOT)	SK-206NA-W
	PNP	SU-201PA-W	SF-202PA-W	SR-204PA-W	SL-205PA-W	SK-206PA-W

Note: SL-205NA/PA-W is recommended to be installed with small or non-standard M3 screws (screw head diameter less than 5.2mm); other models are recommended to be installed with general-purpose M3 screws.

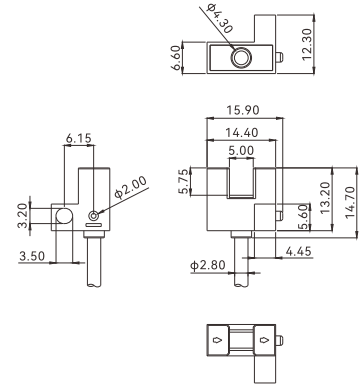
U Shape



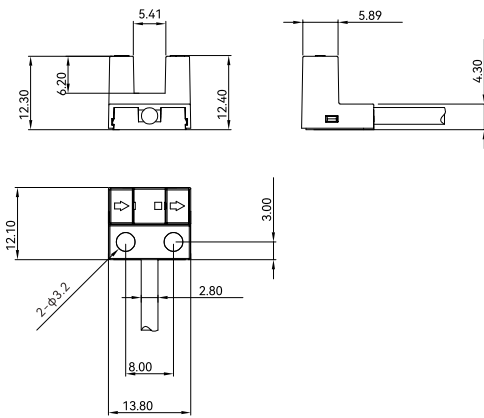
F Shape



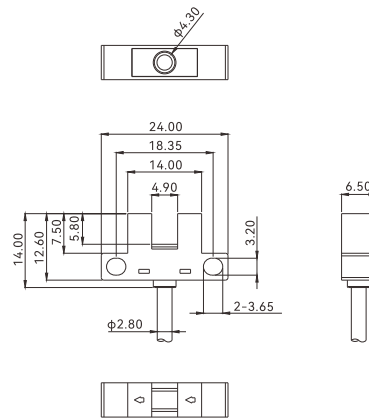
R Shape



L Shape



K Shape



- Fiber Optic
- Slot Sensors**
- Photoelectric
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- AI Image
- Code Readers
- Vibration
- Temperature
- RFID
- Safety door lock
- Pressure Switch
- Communication
- Accessories

Guidance

Slot type sensors

Micro slot type

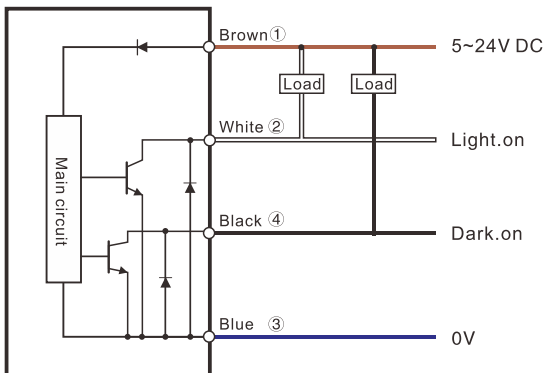
Slot type

Wide slot type

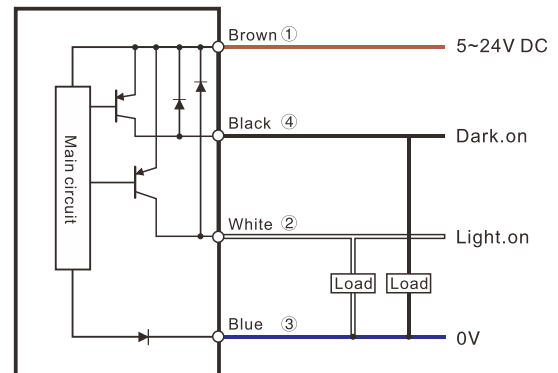
Label detection

Circuit diagram

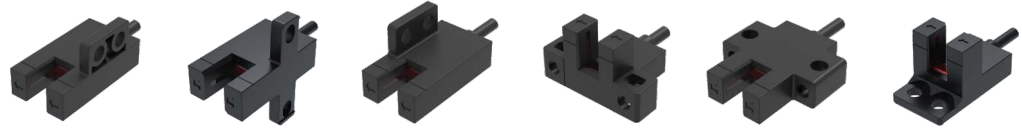
NPN



PNP



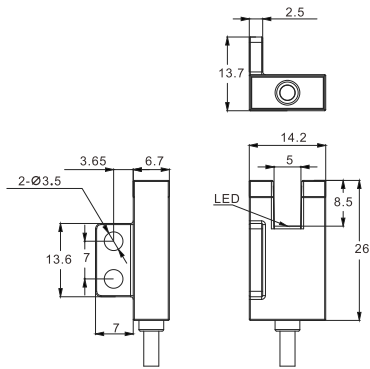
Slot Type



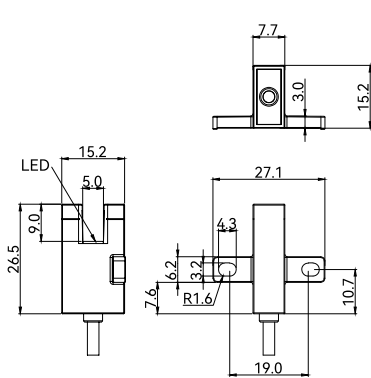
Basic Features	Working principle	Photoelectric sensor					
	Housing style	Shape F	Shape T	Shape R	Shape L	Shape K	Shape Y
	Optical working principle	Through-beam					
	Light source	Infrared LED, 940nm					
	Slot width	5.0mm					
	Slot depth	8.5mm					
	Detecting object	1.2x1.8mm opaque object					
	Indicator light	Red LED					
Electrical data	Switching mode	L.on (light-on action)/D.on (dark-on action) switchable					
	Output mode	NPN or PNP collector open					
	Response time	≤0.33ms					
	Switching frequency	3KHz					
	Repeat accuracy	0.01mm					
	Hysteresis	<0.2mm					
	Operating voltage	5~24V DC					
	Power consumption	<20mA					
	Residual voltage	Below 1.5V (with load current of 100mA and 2m wire length)					
	Load current	≤100mA(24VDC)					
	Insulation resistance	≥20MΩ(250VDC)					
	Withstand voltage	AC, 1000V for 1 minute, between all power supply connection terminals and the housing					
	Protection circuit	Reverse polarity protection/surge protection					
Environmental conditions	Operating temperature	-25~55℃					
	Storage temperature	-30~80℃(no freezing)					
	Operating humidity	5%~85%RH					
	Storage humidity	5~95%RH(no condensation)					
	Environmental illumination	Incandescent light ≤1000 Lux					
	Vibration resistance	10~55Hz, amplitude 1.5mm, 2 hours each in X/Y/Z axes					
	Protection rating	IP50					
Mechanical data	Connection method	2m/4-core cable					
	Dimensions	26x14.2x13.7mm	26.5x15.2x27.1mm	26x14.2x13.7mm	26.03x18x14.9mm	26x6.7x25.4mm	25.8x15.4x14.4mm
	Material	PC					
	Weight	0.025kg	0.026kg	0.025kg		0.026kg	0.025kg
	Accessories	-					
Model	NPN	SF-302NA-SW	ST-303NA-SW	SR-304NA-SW	SL-305NA-SW	SK-306NA-SW	SY-307NA-SW
	PNP	SF-302PA-SW	ST-303PA-SW	SR-304PA-SW	SL-305PA-SW	SK-306PA-SW	SY-307PA-SW

Note: For SL-305NA/PA-SW, it is recommended to use small or non-standard M3 screws (screw head diameter less than 5.2mm) for installation; for SK-306NA/PA-SW, it is recommended to use general-purpose M3.5 screws for installation. For other models, it is recommended to use general-purpose M3 screws for installation. Recommended torque value is less than 0.6N.

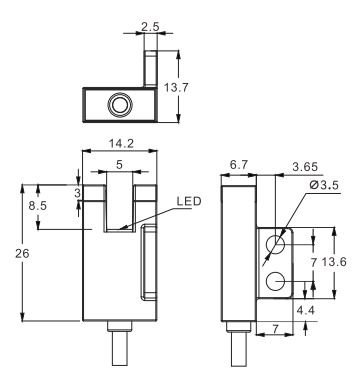
F Shape



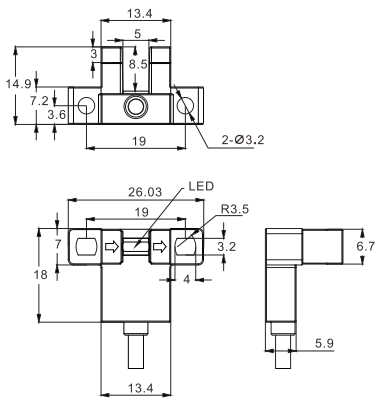
T Shape



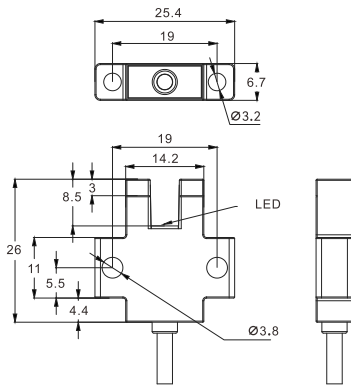
R Shape



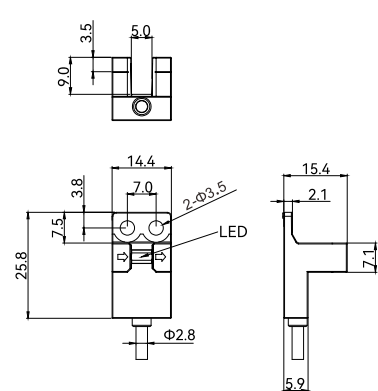
L Shape



K Shape

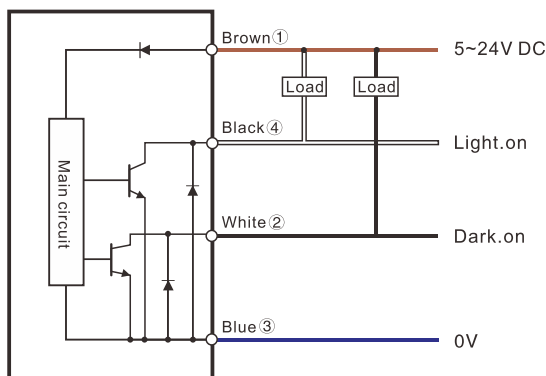


Y Shape

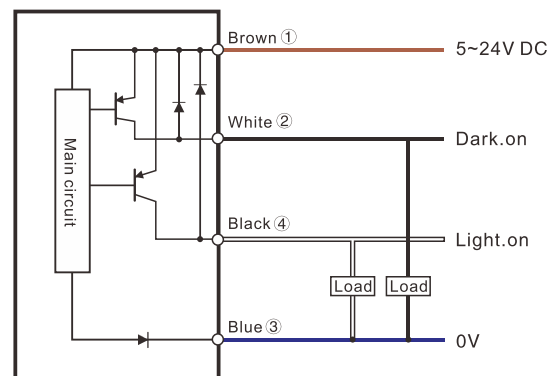


Circuit diagram

NPN



PNP



Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Area

Ultrasonic

AI Image

Code Readers

Vibration

Temperature

RFID

Safety door lock

Pressure Switch

Communication

Accessories

Guidance

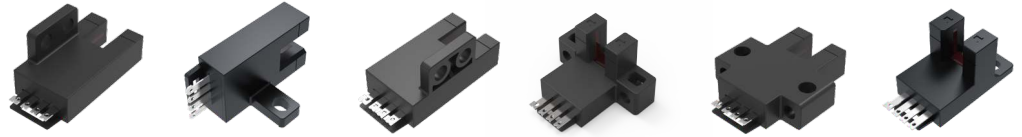
Slot type sensors

Micro slot type

Slot type

Wide slot type

Label detection



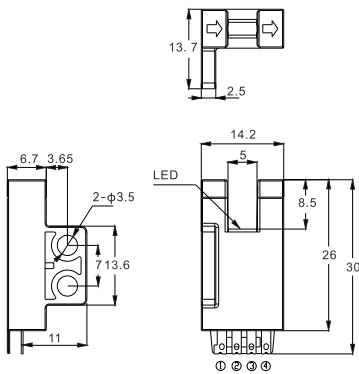
Basic Features	Working principle	Photoelectric sensor					
	Housing style	Shape F	Shape T	Shape R	Shape L	Shape K	Shape Y
	Optical working principle	Through-beam					
	Light source	Infrared LED, 940nm					
	Slot width	5mm					
	Slot depth	8.5mm			7.7mm		8.5mm
	Detecting object	1.2x1.8mm opaque object					
	Indicator light	Red LED					
Electrical data	Switching mode	light-on action)/D.on (dark-on action) switchable					
	Output mode	NPN or PNP collector open					
	Response time	0.3ms					
	Switching frequency	3KHz					
	Repeat accuracy	0.01mm					
	Hysteresis	<0.2mm					
	Operating voltage	5~24V DC					
	Power consumption	<20mA					
	Residual voltage	Below 0.2V (with load current of 10mA),Below 1.5V (with load current of 100mA)					
	Load current	≤100mA(24VDC)					
	Insulation resistance	≥20MΩ(250VDC)					
	Withstand voltage	AC, 1000V for 1 minute, between all power supply connection terminals and the housing					
	Protection circuit	Reverse polarity protection/surge protection					
	Environmental conditions	Operating temperature	-25~55°C				
Storage temperature		-30~80°C(no freezing)					
Operating humidity		5%~85%RH					
Storage humidity		5~95%RH(no condensation)					
Environmental illumination		Incandescent light ≤1000 Lux					
Vibration resistance		10~55Hz, amplitude 1.5mm, 2 hours each in X/Y/Z axes					
Protection rating		IP50					
Mechanical data	Connection method	4-pin connector					
	Dimensions	30x14.2x13.7mm	32.7x15.2x27.1mm	30x14.2x13.7mm	26x23.1x14.9mm	30x25.4x6.7mm	31.3x14.4x15.4mm
	Material	PC					
	Weight	0.003kg	0.002kg	0.003kg	0.002kg	0.003kg	0.002kg
	Accessories	-					
Model	NPN	SF-302NA-SE	ST-303NA-SE	SR-304NA-SE	SL-305NA-SE	SK-306NA-SE	SY-307NA-SE
	PNP	SF-302PA-SE	ST-303PA-SE	SR-304PA-SE	SL-305PA-SE	SK-306PA-SE	SY-307PA-SE

Note: For SL-305NA/PA-SE, it is recommended to use small or non-standard M3 screws (screw head diameter less than 5.2mm) for installation; for SK-306NA/PA-SE, it is recommended to use general-purpose M3.5 screws for installation.

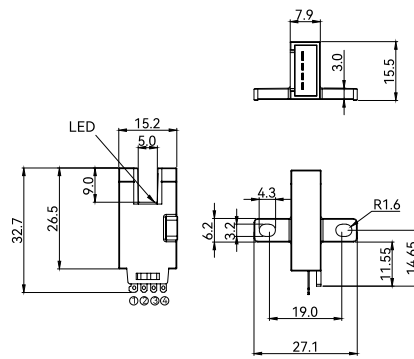
For other models, it is recommended to use general-purpose M3 screws for installation. Recommended torque value is less than 0.6N.

Connecting cable: ME-1007 (refer to O-11)

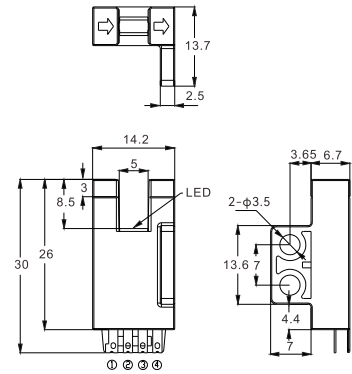
F Shape



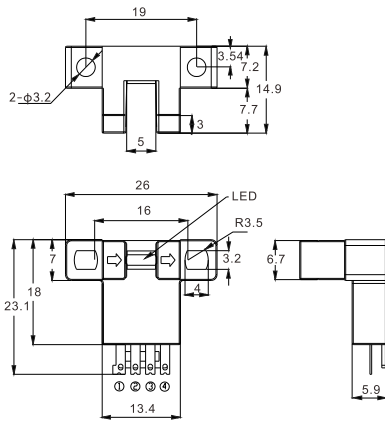
T Shape



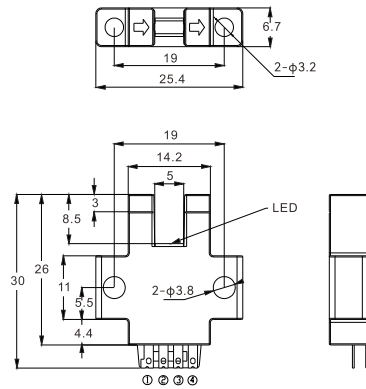
R Shape



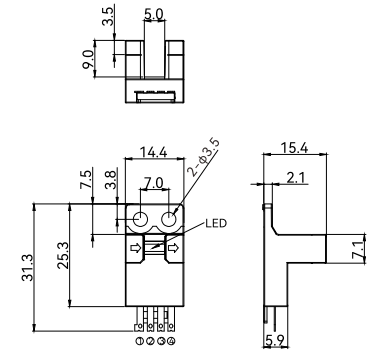
L Shape



K Shape

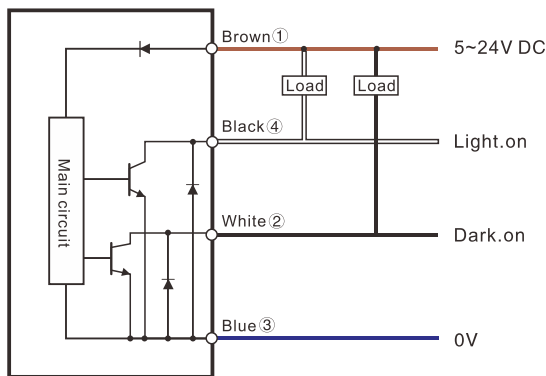


Y Shape

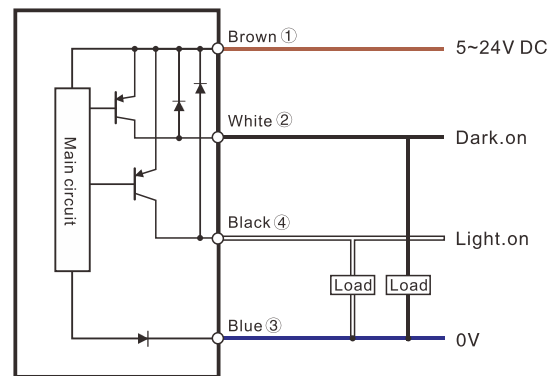


Circuit diagram

NPN



PNP



Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Area

Ultrasonic

AI Image

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Vibration

Temperature

RFID

Safety door lock

Pressure Switch

Communication

Accessories

Guidance

Slot type sensors

Micro slot type

Slot type

Wide slot type

Label detection

Slot Type



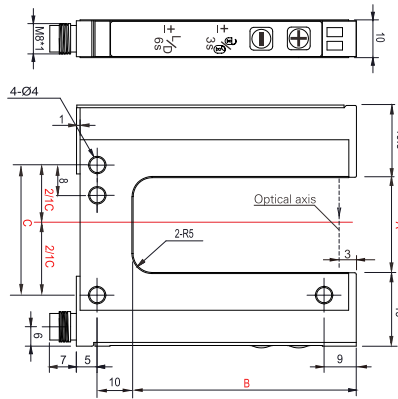
Basic Features	Working principle	Photoelectric sensor		
	Housing style	Shape T	Shape Y	
	Optical working principle	Through-beam		
	Light source	Infrared LED, 940nm		
	Slot width	6mm		
	Slot depth	8.5mm	9mm	
	Detecting object	1.2x1.8mm opaque object		
	Indicator light	Red LED		
	Electrical data	Switching mode	L.on (light-on action)/D.on (dark-on action) switchable	
Output mode		NPN or PNP collector open		
Response time		166.67ms		
Switching frequency		3kHz		
Repeat accuracy		<0.01mm		
Hysteresis		<0.05mm		
Operating voltage		5~24V DC		
Power consumption		≤15mA		
Residual voltage		Less than 0.4V (with load current of 40mA)		
Load current		< 50mA		
Insulation resistance		≥20MΩ(250VDC)		
Withstand voltage		±1000V 50/60Hz 60s		
Protection circuit		Reverse polarity protection		
Environmental conditions		Operating temperature	-25~55°C(no freezing)	
		Storage temperature	-30~80°C(no freezing)	
	Operating humidity	5~85%RH(no condensation)		
	Storage humidity	5~95%RH(no condensation)		
	Environmental illumination	Incandescent light ≤1000 Lux		
	Vibration resistance	10~55Hz, amplitude 1.5mm, 2 hours each in X/Y/Z axes		
	Protection rating	IP50		
	Mechanical data	Connection method	Plug-in	
Dimensions		27x24.3x15.8mm	17x24.4x15.8mm	
Material		PC		
Weight		0.0255kg	0.0254kg	
Accessories		-		
Model	NPN	Detect object light on.	ST-603N-E2	SY-607N-E2
		Detect object light off.	ST-603NA-E2	SY-607NA-E2
	PNP	Detect object light on.	ST-603P-E2	SY-607P-E2
		Detect object light off.	ST-603PA-E2	SY-607PA-E2

Wide Slot Type

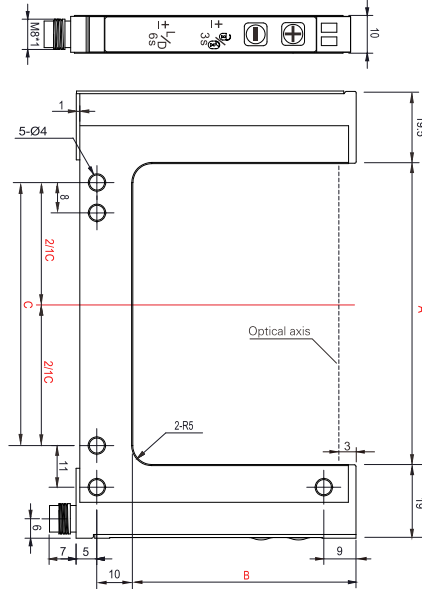
KLM Series



Basic Features	Working principle	Photoelectric sensor			
	Housing style	Shape U			
	Optical working principle	Through-beam			
	Light source	Red laser, 670nm (modulated)			
	Slot width	30mm	50mm	80mm	120mm
	Slot depth	42mm	59mm		
	Detecting object	0.05mm			
	Indicator light	Output function: Red LED, operational status: Green LED			
Electrical data	Switching mode	L.on (light-on action)/D.on (dark-on action) switchable			
	Output mode	NPN or PNP collector open			
	Response time	0.1ms			
	Switching frequency	20kHz			
	Repeat accuracy	<0.01mm		<0.2mm	<0.01mm
	Hysteresis	<0.01mm		<0.2mm	<0.01mm
	Operating voltage	12~24V DC \pm 10%			
	Power consumption	\leq 40mA			
	Residual voltage	\leq 2.0V(100mA)			
	Load current	\leq 100mA(24VDC)			
	Insulation resistance	\geq 50M Ω (500VDC)			
	Withstand voltage	1000VAC (50/60Hz)			
	Protection circuit	Reverse polarity protection/short-circuit protection			
	Environmental conditions	Operating temperature	-20~50°C(no freezing)		
Storage temperature		-30~80°C(no freezing)			
Operating humidity		35~85%RH(no condensation)			
Storage humidity		35~95%RH(no condensation)			
Environmental illumination		Incandescent light \leq 1000 Lux; LED light \leq 1000 Lux; Sunlight \leq 10000 Lux			
Vibration resistance		10~55Hz, amplitude 1.5mm, 2 hours each in X/Y/Z axes			
Protection rating		IP65			
Mechanical data	Connection method	M8/4-pin plug			
	Dimensions	57.0x10.0x68.5mm	74.0x10.0x88.5mm	74.0x10.0x118.5mm	74.0x10.0x158.5mm
	Material	Aluminum, glass			
	Weight	0.043kg	0.058kg	0.068kg	0.081kg
	Accessories	-			
	Model	KLM06-0304NP	KLM06-0506NP	KLM06-0806NP	KLM06-1206NP



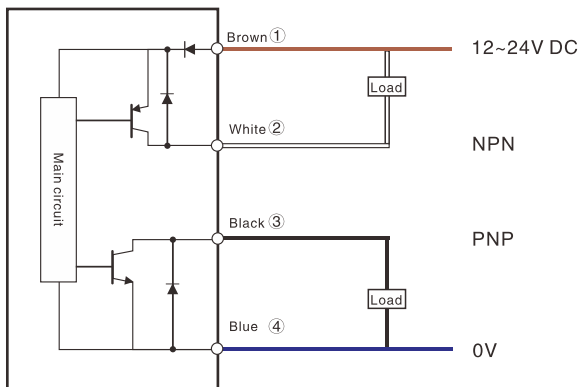
Model number	A	B	C
KLM06-0304NP	30	42	42



Model number	A	B	C
KLM06-0506NP	50	59	40
KLM06-0806NP	80	59	70
KLM06-1206NP	120	59	110

Circuit diagram

NPN/PNP



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Slot type sensors

Mirco slot type

Slot type

Wide slot type

Label detection

Wide Slot Type

KIM Series

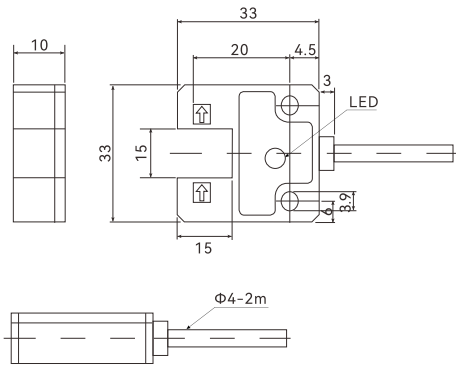


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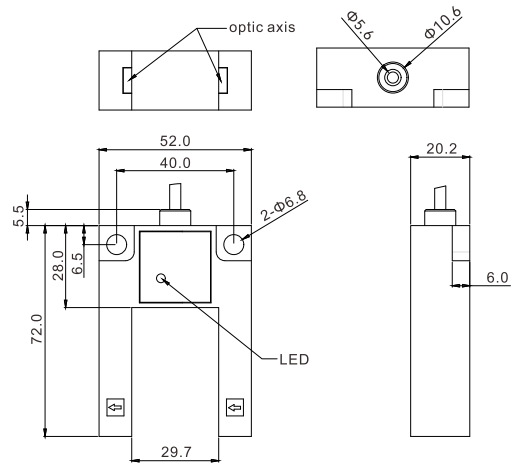


Basic Features	Working principle	Photoelectric sensor	
	Housing style	Shape U	
	Optical working principle	Through-beam	
	Light source	Infrared LED, 940nm(modulated)	
	Slot width	15mm	30mm
	Slot depth	15mm	44mm
	Detecting object	2mm	
	Indicator light	Output function: Yellow LED	
Electrical data	Switching mode	L on (light-on action)/D on (dark-on action) switchable	
	Output mode	NPN or PNP collector open	
	Response time	0.5ms	1ms
	Switching frequency	0.5kHz	2kHz
	Repeat accuracy	<1%	<0.03mm
	Hysteresis	≤2%	<0.03mm
	Operating voltage	12~24V DC ± 10%	
	Power consumption	≤15mA	
	Residual voltage	≤1.5V(100mA)	≤2.5V(100mA)
	Load current	≤100mA(24VDC)	
	Insulation resistance	≥20MΩ(500VDC)	≥50MΩ(500VDC)
	Withstand voltage	1000VAC (50/60Hz)	
	Protection circuit	Reverse polarity protection	Reverse polarity protection/short-circuit protection
	Environmental conditions	Operating temperature	-10~55°C(no freezing)
Storage temperature		-20~60°C(no freezing)	-25~80°C(no freezing)
Operating humidity		35~85%RH(no condensation)	35~95%RH(no condensation)
Storage humidity		35~95%RH(no condensation)	
Environmental illumination		Incandescent light ≤2000 Lux; Sunlight ≤1000 Lux	LED light ≤500 Lux
Vibration resistance		10~50Hz, amplitude 1.5mm, 2 hours each in X/Y/Z axes	
Protection rating		IP54	IP60
Mechanical data	Connection method	2m/4-core cable	
	Dimensions	10.0x33.0x33.0mm	52.0x20.2x72.0mm
	Material	ABS	
	Weight	0.025kg	0.065kg/0.019kg
	Accessories	-	
Model	NPN	KIM15-0101N	KIM30-0304N-J
	PNP	KIM15-0101P	KIM30-0304P-J

KIM15-0101N/P

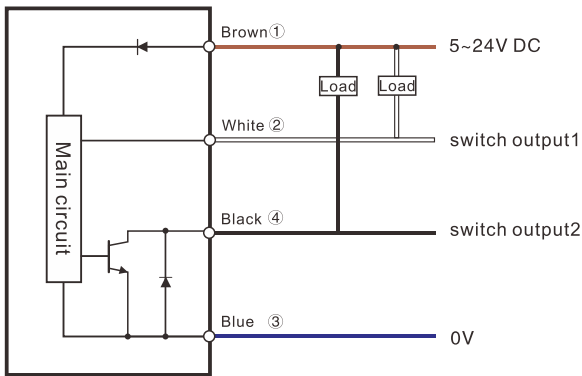


KIM30-0304N/P-J

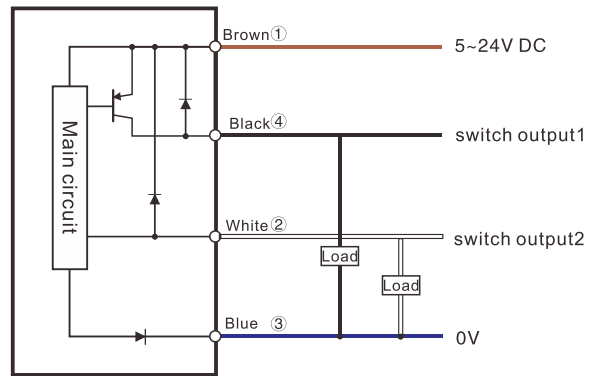


Circuit diagram

NPN



PNP



Fiber Optic

Slot Sensors

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Slot type sensors

Mirco slot type

Slot type

Wide slot type

Label detection

Label Detection

KIM Series

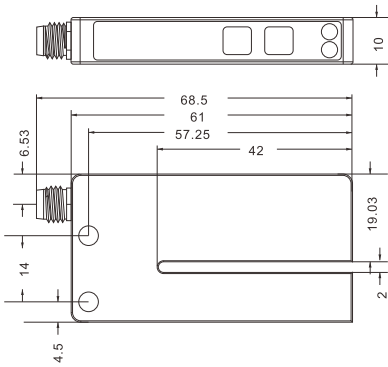


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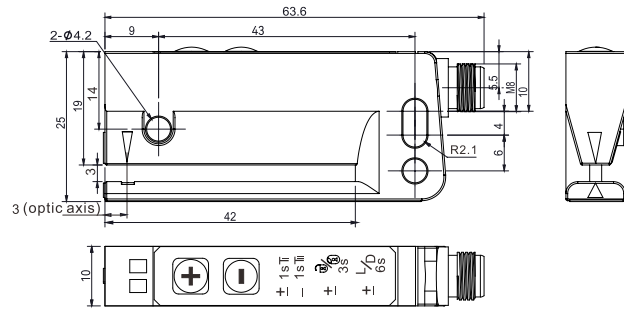


Basic Features	Working principle	Photoelectric sensor	
	Housing style	Shape U	
	Optical working principle	Through-beam	
	Light source	Infrared LED, 940nm	
	Slot width	2mm	3mm
	Slot depth	42mm	
	Detecting object	2mm (minimum label gap)	2mm (minimum label gap) 2mm (minimum label length)
	Indicator light	Output function: Red LED, operational status: Green LED	
Electrical data	Switching mode	L.on (light-on action)/D.on (dark-on action) switchable	
	Output mode	NPN or PNP collector open	
	Response time	0.02ms	
	Switching frequency	100kHz	
	Repeat accuracy	± 0.02mm	
	Hysteresis	≤ 0.02mm	
	Operating voltage	12~24V DC ± 10%	
	Power consumption	≤ 40mA	
	Residual voltage	≤ 2V	
	Load current	≤ 100mA(24VDC)	
	Insulation resistance	≥ 50MQ(500VDC)	
	Withstand voltage	1000VAC (50/60Hz)	
	Protection circuit	Reverse polarity protection/short-circuit protection	
Environmental conditions	Operating temperature	-10°C~+55°C	-20°C~+60°C
	Storage temperature	-30°C~+70°C	-30°C~+80°C
	Operating humidity	35%RH~85%RH	
	Storage humidity	35%RH~85%RH	
	Environmental illumination	Sunlight ≤ 10000 Lux	
	Vibration resistance	10~55Hz, amplitude 1.5mm, 2 hours each in X/Y/Z axes	
	Protection rating	IP65	
Mechanical data	Connection method	M8/4-pin plug	
	Dimensions	32.5x10.0x61.0mm	63.6x25x10mm
	Material	Aluminum	PA (reinforced glass fiber)
	Weight	0.035kg	
	Accessories	Cable connectors sold separately	
Model	NPN	KIM07-0204NP	KIM07-0304N
	PNP		KIM07-0304P

KIM07-0204NP



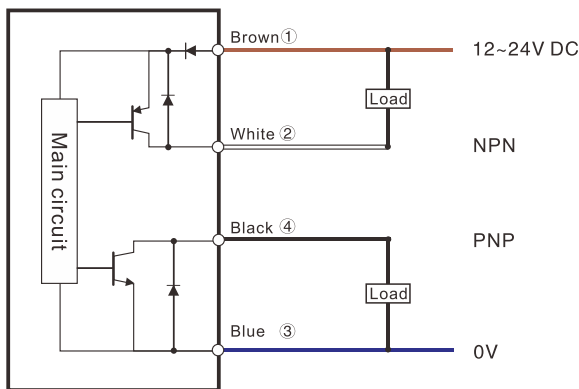
KIM07-0304N/P



Circuit diagram

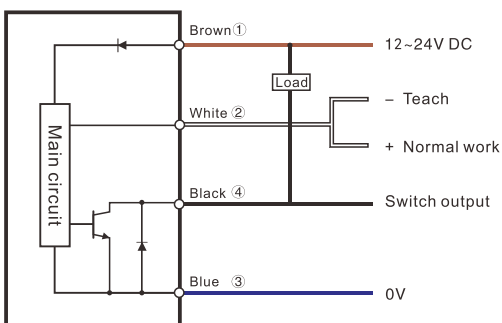
KIM07-0204NP

NPN/PNP

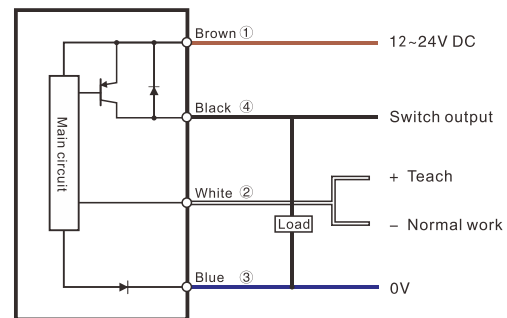


KIM07-0304N/P

NPN



PNP



Fiber Optic

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Guidance

Slot type sensors

Micro slot type

Slot type

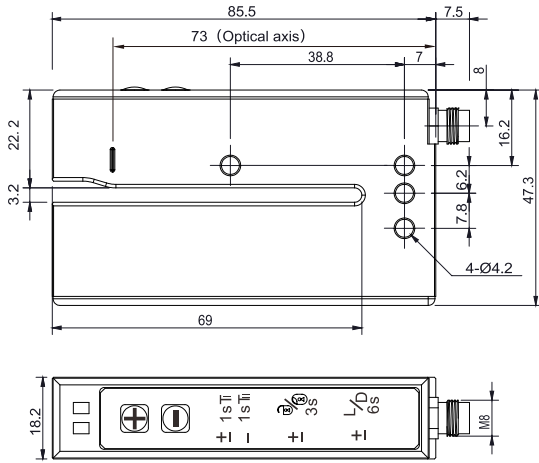
Wide slot type

Label detection

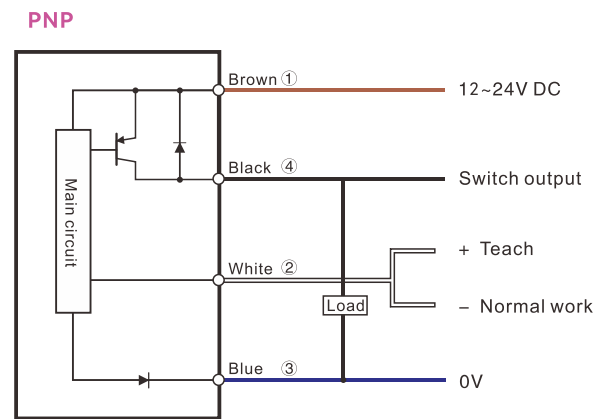
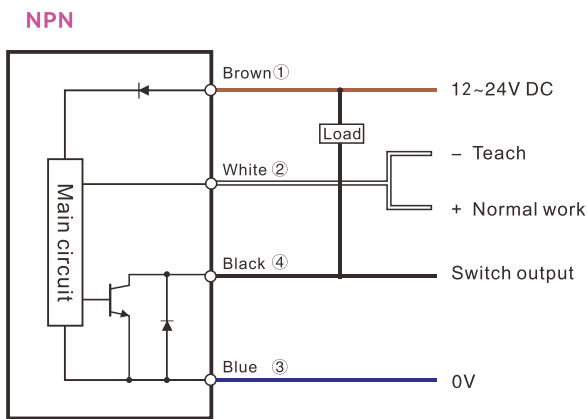
KUM Series



Basic Features	Working principle	Ultrasonic detection
	Housing style	U-shaped fork
	Optical working principle	Through-beam
	Transmitter	Ultrasonic
	Slot width	3.2mm
	Slot depth	69mm
	Detecting object	2mm minimum label gap
	Indicator light	Output function: Red LED, operational status: Green LED
Electrical data	Switching mode	L.on (light-on action)/D.on (dark-on action) switchable
	Output mode	NPN or PNP collector open
	Response time	0.3ms
	Switching frequency	1.5kHz
	Repeat accuracy	± 0.2
	Hysteresis	-
	Operating voltage	12~24V DC ± 10%
	Power consumption	≤45mA
	Residual voltage	<2V@1L=100mA
	Load current	≤100mA
	Insulation resistance	DC500V insulation resistance >50MΩ
	Withstand voltage	Insulation voltage of VC100V when current <0.1mA
Protection circuit	short-circuit protection	
Environmental conditions	Operating temperature	-5~55℃
	Storage temperature	-20~70℃
	Operating humidity	35~95%RH(no condensation)
	Storage humidity	35~95%RH(no condensation)
	Environmental illumination	Unavailable
	Vibration resistance	10~50Hz, amplitude 1.5mm, 2 hours each in X/Y/Z axes
	Protection rating	IP65
Mechanical data	Connection method	M8/4-pin plug
	Dimensions	85.5x47.3x18.2mm
	Material	Aluminum
	Weight	0.019kg
	Accessories	-
Model	NPN	KUM08-0307N
	PNP	KUM08-0307P



Circuit diagram



- Fiber Optic
- Slot Sensors**
- Photoelectric
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- AI Image
- Code Readers
- Vibration
- Temperature
- RFID
- Safety door lock
- Pressure Switch
- Communication
- Accessories

Guidance

Slot type sensors

- Mirco slot type
- Slot type
- Wide slot type
- Label detection**