

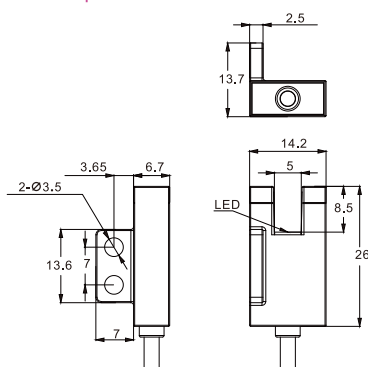
Shape	F Shape	T Shape	R Shape	L Shape	K Shape	Y Shape	
Sensing distance	5mm (Slot width)						
Standard sensing object	Opaque objects (Size: 1.2*1.8mm)						
Repeat accuracy	0.01mm						
Output type	NPN or PNP open–collector						
Switch type	Selectable L.on/D.on						
Indicator	Red LED						
Response frequency	3KHz						
Response time	≤0.3ms						
Light source	Infrared LED (940nm)						
Operating voltage	5~24V DC						
Voltage drop	< 1.5V (load current 100mA, 2m cable length)						
Current consumption	< 20mA						
Protective circuit	Surge protection, Reverse polarity protection						
Ambient temperature	Operation:–25℃~+55℃, Storage: –30℃~+80℃, no freezing						
Ambient humidity	Operation:5%~85%, Storage: 5%~95%, no condensation						
Ambient brightness	Incandescent lamp ≤1000Lux						
Withstand voltage	AC, 1000V 1 minute between all supply terminals connected to the housing						
Vibration resistance	10 to 55 Hz with 1.5mm amplitude for 2 hours each in X, Y, and Z directions						
Insulation resistance	Between all supply terminals connected with the housing, 20M Ω or more (based DC250V)						
Degree of protection	IP50						
Material	PC						
Connection method	2M 4core cable						
NPN	Light on when objects are detected	SF-302N–SW	ST-303N–SW	SR-304N–SW	SL-305N–SW	SK-306N–SW	SY-307N–SW
	Light off when objects are detected	SF-302NA–SW	ST-303NA–SW	SR-304NA–SW	SL-305NA–SW	SK-306NA–SW	SY-307NA–SW
PNP	Light on when objects are detected	SF-302P–SW	ST-303P–SW	SR-304P–SW	SL-305P–SW	SK-306P–SW	SY-307P–SW
	Light off when objects are detected	SF-302PA–SW	ST-303PA–SW	SR-304PA–SW	SL-305PA–SW	SK-306PA–SW	SY-307PA–SW

Remarks: SL-305NA/PA-SW, suggest to install with small-head or non-standard M3(diameter less than 5.2mm) screws; SK-306NA/PA-SW, suggest to install with universal M3.5 screws; for other models, please take regular M3 screws for mounting. Recommend installing with a torque less than 0.6N.

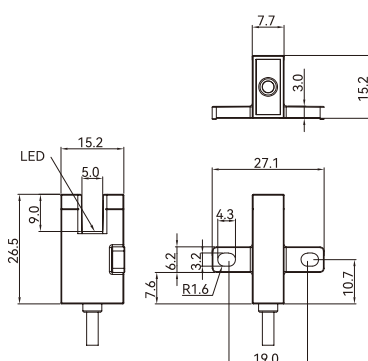
Dimensions

Unit: mm

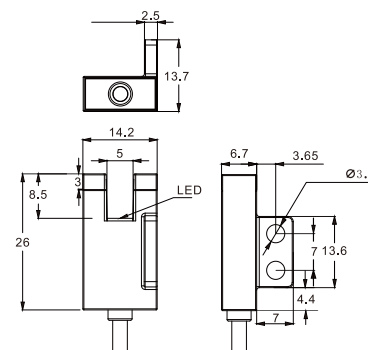
F Shape



T Shape



R Shape



Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Area

Ultrasonic

Vision

Code Readers

Vibration

Temperature

Accessories

Guidance

Slot type sensors

Micro slot type

Slot type

Wide slot type

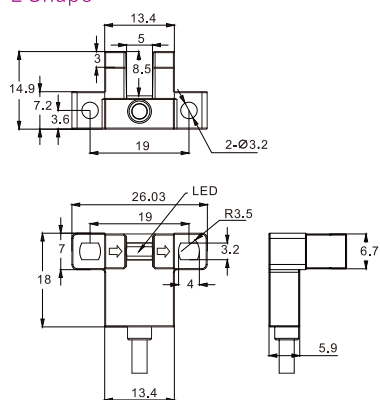
Label detection

Slot Type

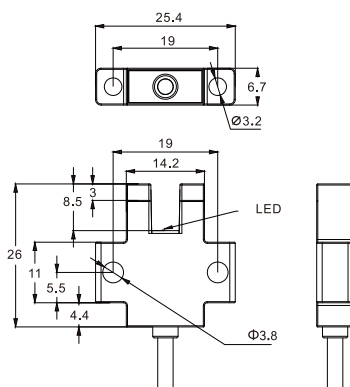
Dimensions

Unit: mm

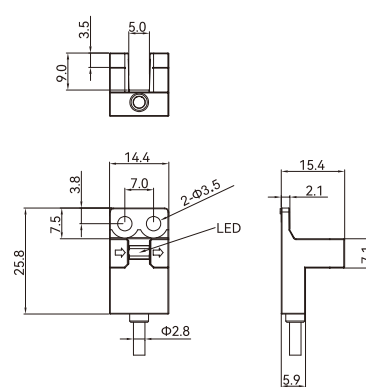
L Shape



K Shape

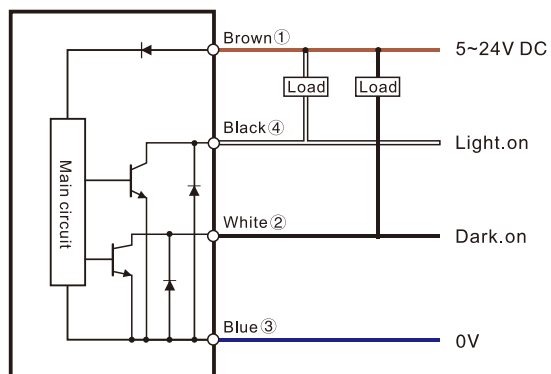


Y Shape

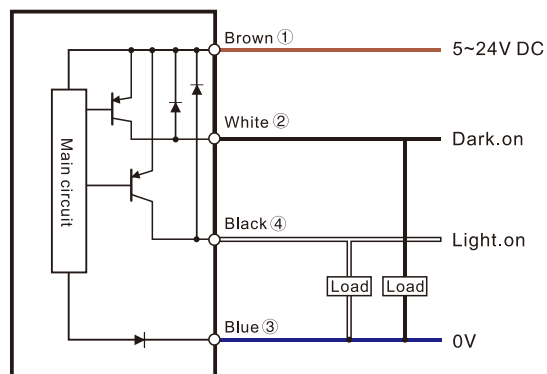


Circuit diagram

NPN



PNP



Fiber Optic

Slot Sensors

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Slot type

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Label detection



Appearance



Shape	F Shape	T Shape	R Shape	L Shape	K Shape	Y Shape
Sensing distance	5mm (Slot width)					
Standard sensing objects	Opaque objects (Size:1.2*1.8mm)					
Repeat accuracy	0.01mm					
Output type	NPN or PNP open-collector					
Switch type	Selectable L.on/D.on					
Indicator	Red LED					
Response frequency	3KHz					
Response time	≤0.3ms					
Light source	Infrared LED(940nm)					
Operating voltage	5~24V DC					
Voltage drop	0.2V or less (load current 10mA), 1.5V or less (load current 100mA)					
Current consumption	<20mA					
Protective circuit	Surge protection , Reverse polarity protection					
Ambient temperature	Operation: -25℃~+55℃, Storage: -30℃~+80℃, no freezing					
Ambient humidity	Operation: 5%~85%, Storage: 5%~95%, no condensation					
Ambient brightness	Incandescent lamp ≤1000Lux					
Withstand voltage	AC, 1000V 1 minute between all supply terminals connected to the housing					
Vibration resistance	10 to 55 Hz with 1.5mm amplitude for 2 hours each in X, Y, and Z directions					
Insulation resistance	Between all supply terminals connected with the housing, 20MΩ or more (based DC250V)					
Degree of protection	IP50					
Material	PC					
Connection method	Connector					
NPN	SF-302N-SE Light on when objects are detected	ST-303N-SE (HOT) Light off when objects are detected	SR-304N-SE (HOT) Light off when objects are detected	SL-305N-SE (HOT) Light on when objects are detected	SK-306N-SE (HOT) Light on when objects are detected	SY-307N-SE (HOT) Light off when objects are detected
PNP	SF-302P-SE Light on when objects are detected	ST-303P-SE Light off when objects are detected	SR-304P-SE Light off when objects are detected	SL-305P-SE Light on when objects are detected	SK-306P-SE Light on when objects are detected	SY-307P-SE Light off when objects are detected
	SF-302PA-SE	ST-303PA-SE	SR-304PA-SE	SL-305PA-SE	SK-306PA-SE	SY-307PA-SE

Remarks: SL-305NA/PA-SE, suggest to install with small-head or non-standard M3(diameter less than 5.2mm) screws; SK-306NA/PA-SE, suggest to install with universal M3.5 screws; for other models, please take regular M3 screws for mounting. Recommend installing with a torque less than 0.6N.

Cable: ME-1007 (P:O-11)

Fiber Optic

Slot Sensors

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Slot type sensors

Micro slot type

Slot type

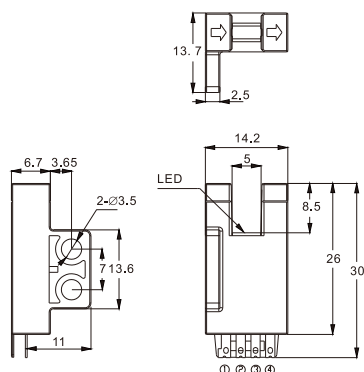
Wide slot type

Label detection

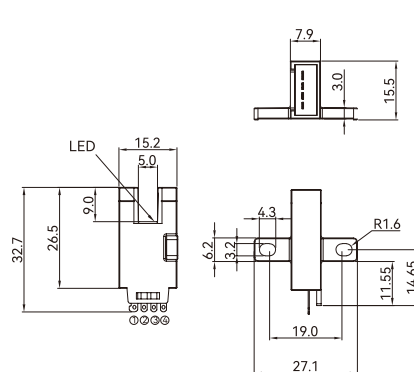
Dimensions

Unit: mm

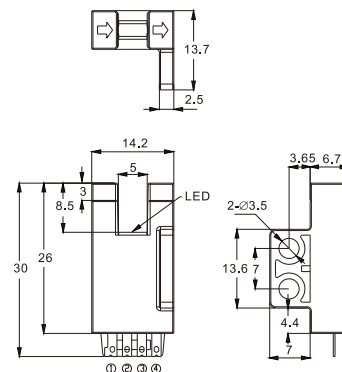
F Shape



T Shape



R Shape

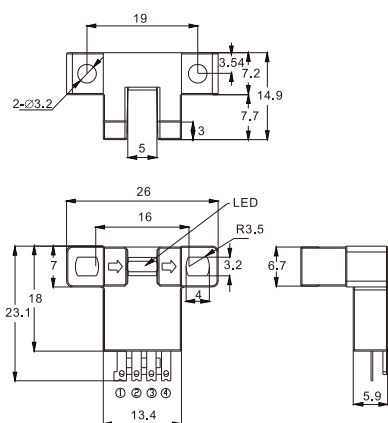


Slot Type

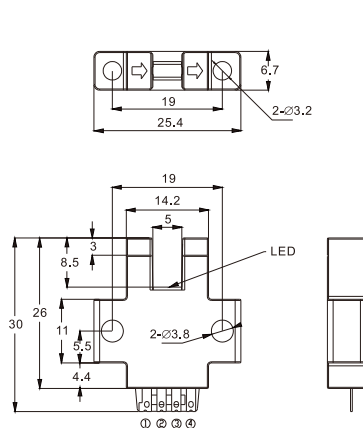
Dimensions

Unit: mm

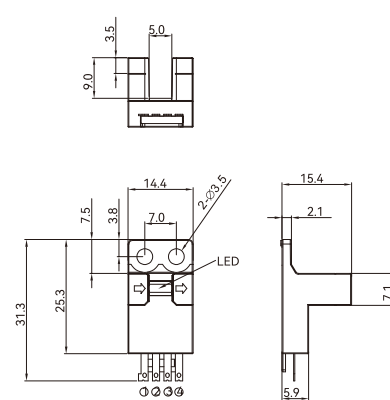
L Shape



K Shape

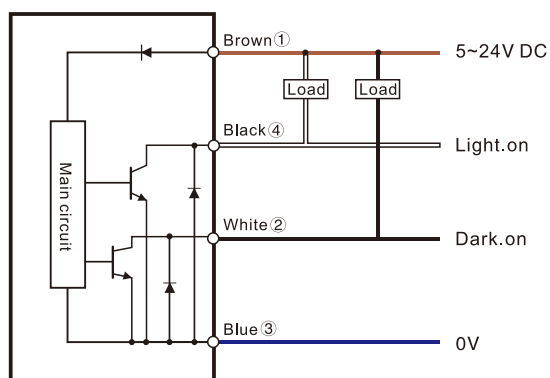


Y Shape

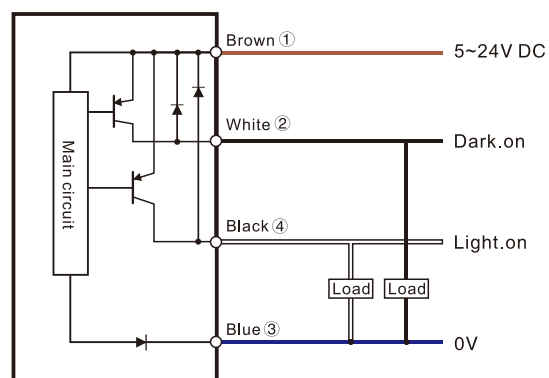


Circuit diagram

NPN



PNP





Sensing type	Thru-beam
Sensing distance	6mm (slot width)
Light source	RedLED (940nm)
Detected objects	> 1.2*1.8mm,opaque
Output	NPN open-collector
Switch mode	L.on/Don selectable
Indicator	Red LED
Hysteresis	Below 0.05mm
Repeat accuracy	Below 0.01mm
Response frequency	3KHz
Operating voltage	5~24V DC
Residual voltage	Below 0.4V (Load current: 40mA)
Current consumption	< 15mA
Load current	< 100mA
Protective circuit	Short circuit protection/Reverse polarity protection
Ambient temperature	Operation: -25℃-55℃, Storage: -30℃-80℃, no freezing
Ambient humidity	5~85% RH, Storage: 5~95% RH
Insulation resistance	± 1000V 50/60Hz 60s
Static electricity	± 8000V
Electrical Fast Transient	± 2000V
Vibration resistance	10~55Hz with 1.5mm amplitude for 2 hours each in X, Y and Z directions
Ambient brightness	Incandescent lamp ≤ 1000Lux
Degree of protection	IP50
Housing material	PC
Connection	Connector
Model	ST-603NA-E2 SY-607NA-E2

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Slot type sensors

Micro slot type

Slot type

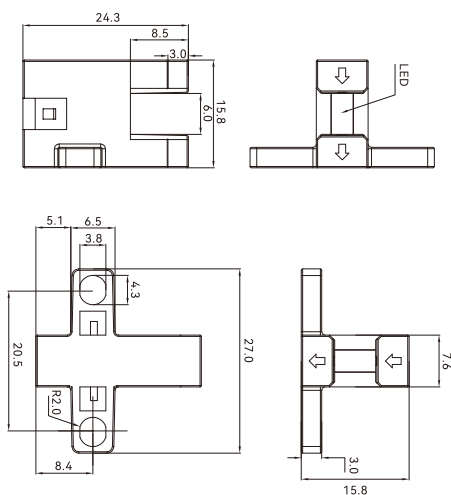
Wide slot type

Label detection

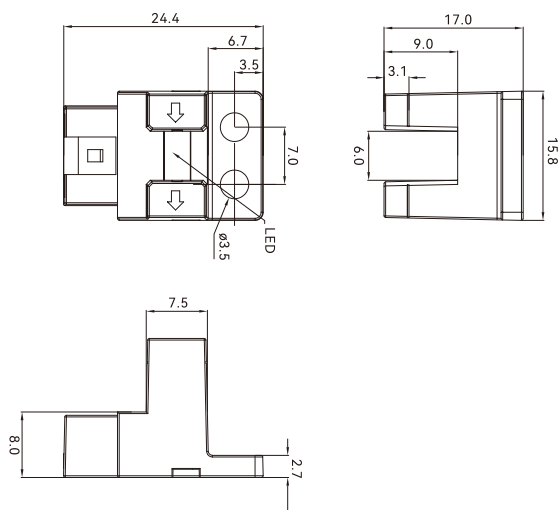
Dimensions

Unit: mm

ST-603NA-E2



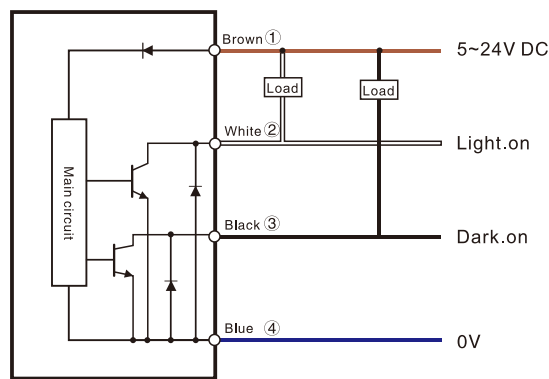
ST-607NA-E2



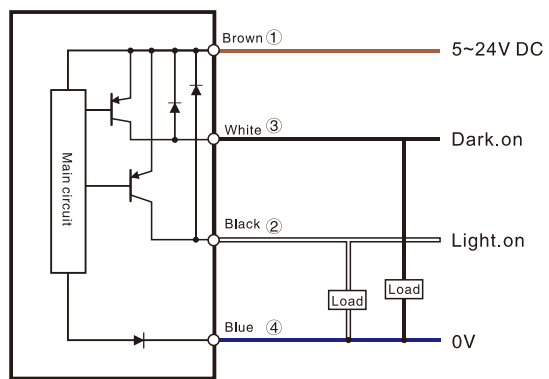
Slot Type

Circuit diagram

NPN



PNP



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Label detection