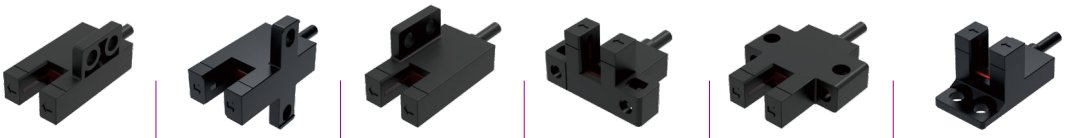


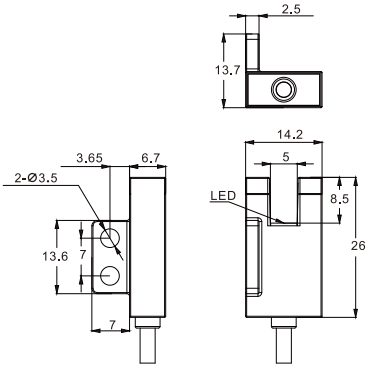
		F Shape	T Shape	R Shape	L Shape	K Shape	Y Shape
Shape							
Sensing distance		5mm (Slot width)					
Standard sensing object		Opaque objects (Size: 1.2*1.8mm)					
Repeat accuracy		0.01mm					
Output type		NPN or PNP open-collector					
Switch type		Selectable L.on/D.on					
Indicator		Red LED					
Response 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, 20MΩ 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.

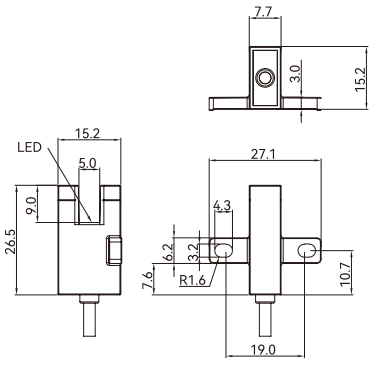
Dimensions

Unit: mm

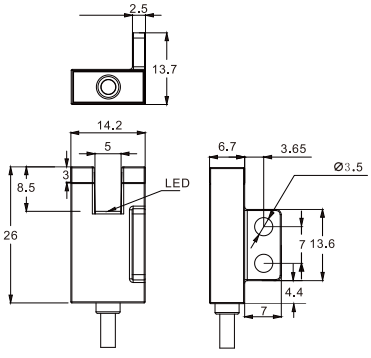
F Shape



T Shape



R Shape



Fiber Optic
Slot Sensors
Photoelectric
Laser
Proximity
Displacement
Magnetic
Contact
Area
Ultrasonic
Vision
Code Readers
Vibration
Temperature
Accessories

Guidance

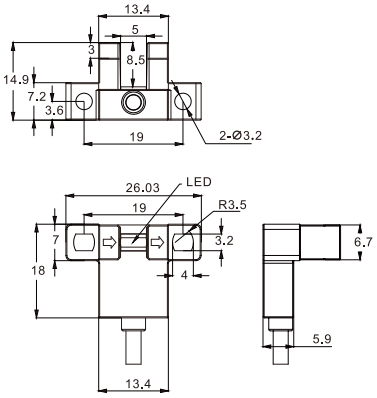
Slot type sensors
Mirco slot type
Slot type
Wide slot type
Label detection

Slot Type

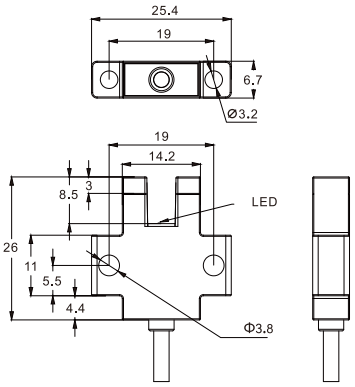
Dimensions

Unit: mm

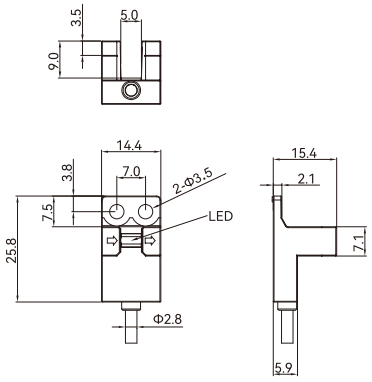
L Shape



K Shape

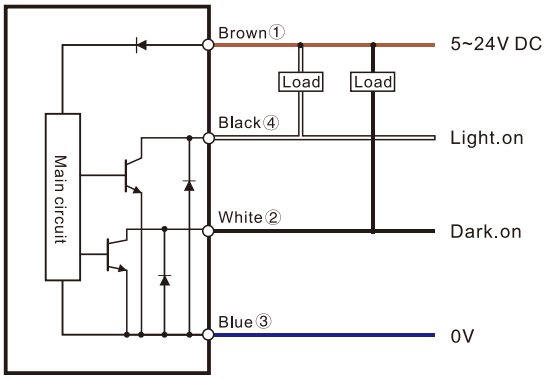


Y Shape

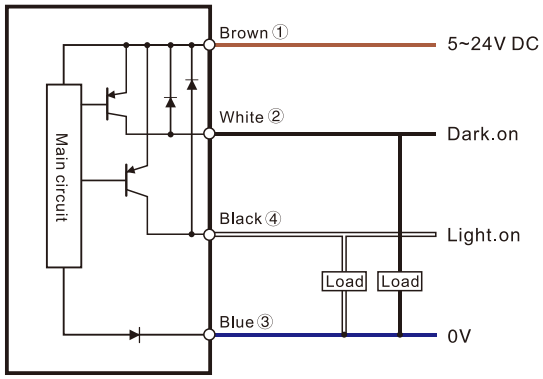


Circuit diagram

NPN



PNP



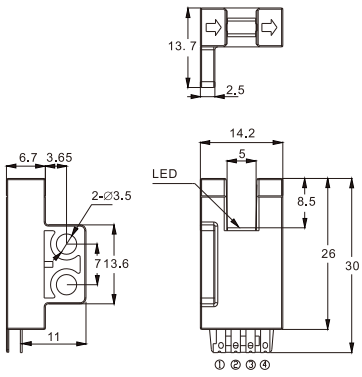
Appearance							
Shape		F Shape	T Shape	R Shape	L Shape	K Shape	Y Shape
Sensing distance		5mm (Slot width)					
Standard sensing objects		Opaque objects (Size:1.2*1.8mm)					
Repeat accuracy		0.01mm					
Output type		NPN or PNP open–collector					
Switch type		Selectable L.on/D.on					
Indicator		Red 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	Light on when objects are detected	SF-302N-SE	ST-303N-SE (HOT)	SR-304N-SE	SL-305N-SE (HOT)	SK-306N-SE	SY-307N-SE (HOT)
	Light off when objects are detected	SF-302NA-SE	ST-303NA-SE (HOT)	SR-304NA-SE	SL-305NA-SE (HOT)	SK-306NA-SE	SY-307NA-SE (HOT)
PNP	Light on when objects are detected	SF-302P-SE	ST-303P-SE	SR-304P-SE	SL-305P-SE	SK-306P-SE	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)

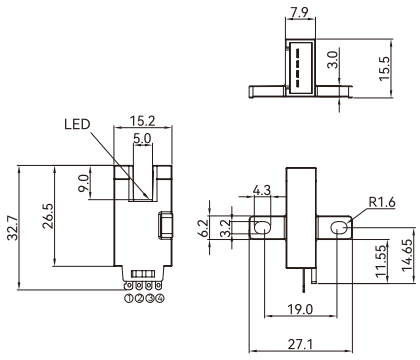
Dimensions

Unit: mm

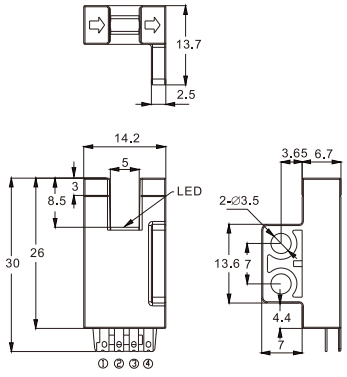
F Shape



T Shape



R Shape

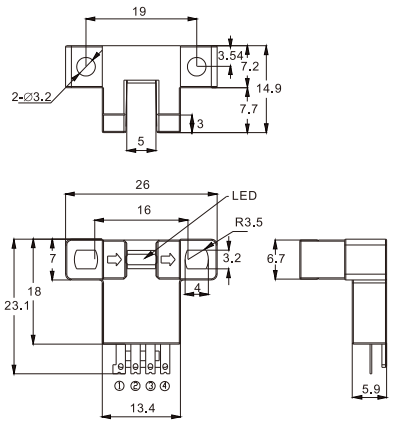


Slot Type

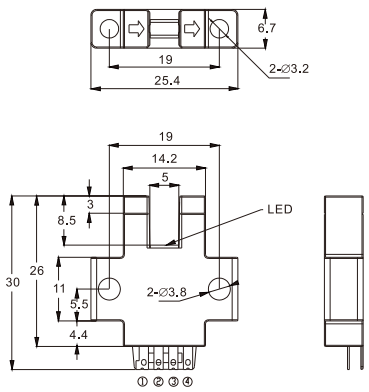
Dimensions

Unit: mm

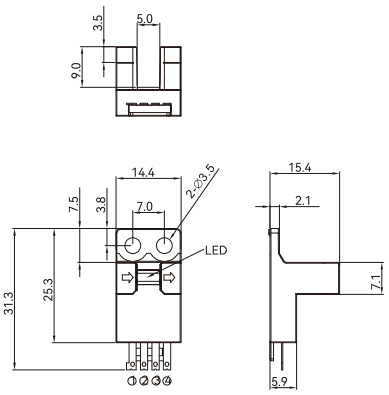
L Shape



K Shape

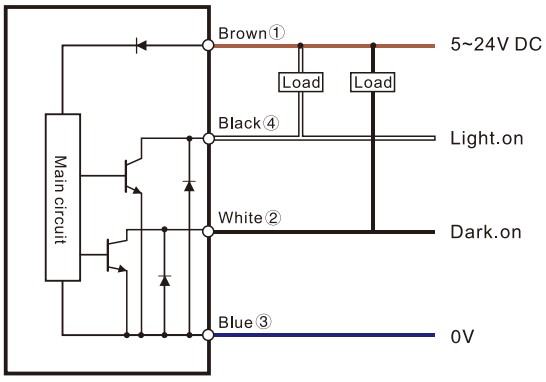


Y Shape

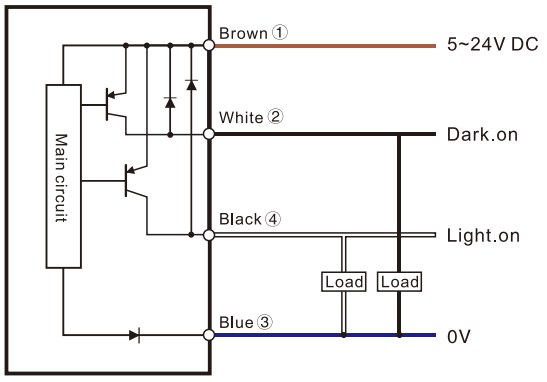


Circuit diagram

NPN



PNP



Fiber Optic
Slot Sensors
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Proximity
Displacement
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Contact
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Vision
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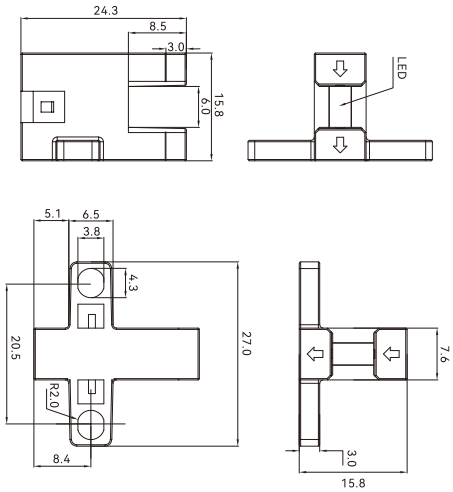
Vibration
Temperature
Accessories
Guidance
Slot type sensors
Mirco slot type
Slot type
Wide slot type
Label detection

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**

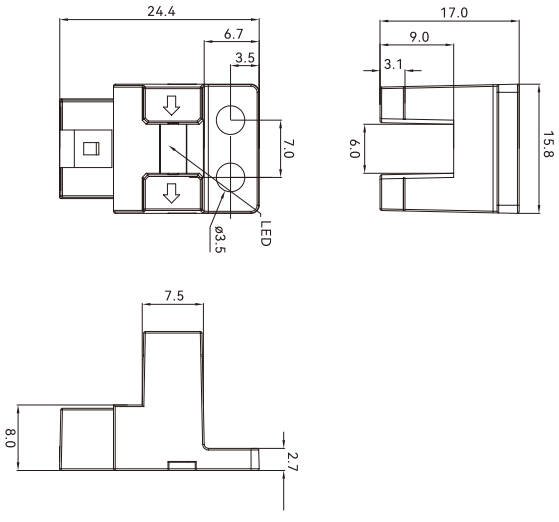
Dimensions

Unit: mm

ST-603NA-E2



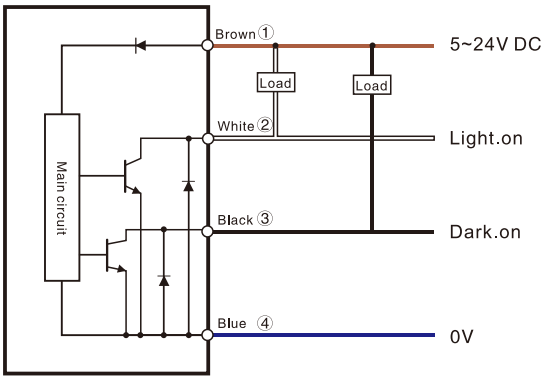
ST-607NA-E2



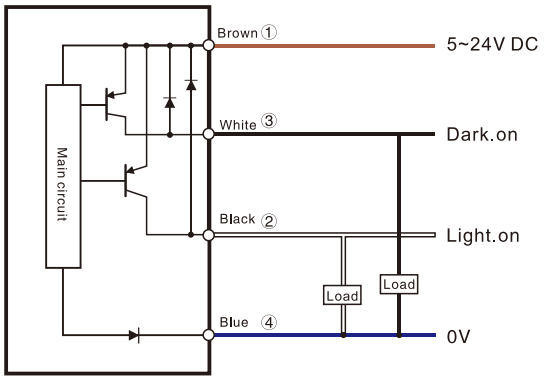
Slot Type

Circuit diagram

NPN



PNP



Fiber Optic
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Proximity
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Area
Ultrasonic
Vision
Code Readers
Vibration
Temperature
Accessories

Guidance

Slot type sensors
Mirco slot type
Slot type
Wide slot type
Label detection