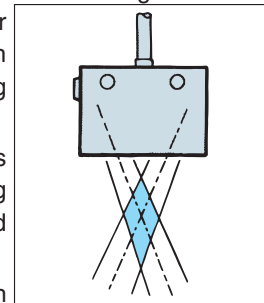




- Stable detection performance by limiting detection zone for less influence of disturbance

Reflective type photo sensor with light axes of transmitter and receiver crossed at about 20 mm from sensor for limiting detection zone

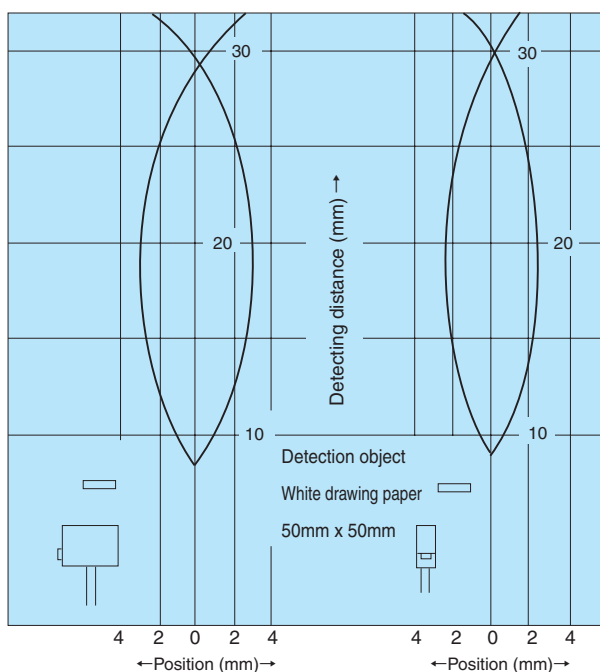


- Detection method less affected by disturbing external or background reflection
- Highly-accurate detection achieved by restricting detection zone

### Type

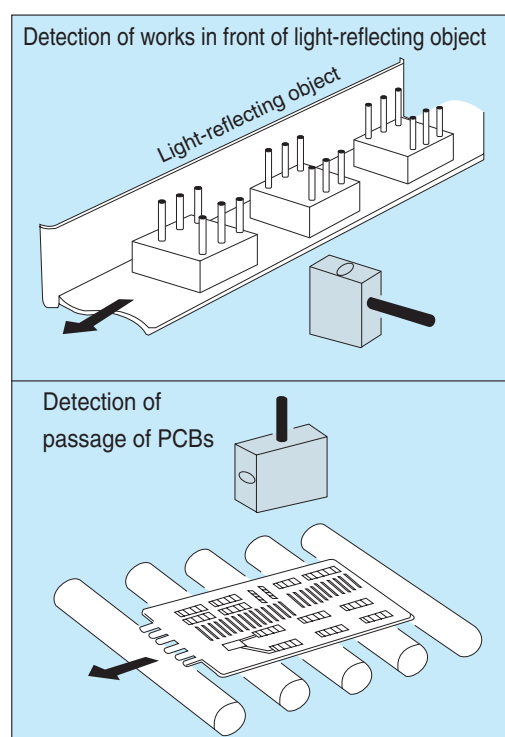
Detection method	Detecting distance	Model	Operation mode	Output mode
 Limited reflection type	 10~30mm	<b>DLZ-S30</b>	Light-ON	NPN open collector
		<b>DLZ-S30D</b>	Dark-ON	
		<b>DLZ-S30-PN</b>	Light-ON	PNP open collector
		<b>DLZ-S30D-PN</b>	Dark-ON	

### Activation area characteristics(Typical Example)



This product is a reflective type sensor and the detecting distance varies depending on the detection object. To install the sensor first check the distance using the object to confirm.

### Sample Applications



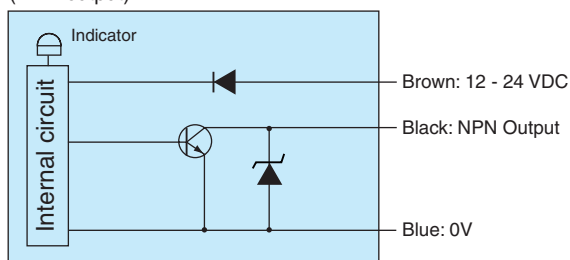
## Rating/Performance/Specification

Model		DLZ-S30	DLZ-S30D	DLZ-S30-PN	DLZ-S30D-PN
Rating/performance	Detection method	Limited reflection type (specular reflection)			
	Detecting distance	About 30mm (50 x 50 mm white drawing paper)			
	Detection object	φ 10 max.			
	Power supply	12 - 24V DC ±10% / Ripple 10% max.			
	Current consumption	30mA max.			
	Output mode	NPN open collector		PNP open collector	
	Rating	Sink current 100 mA (30 VDC) max.		Source current 100 mA (30 VDC) max.	
	Operation mode	Light-ON	Dark-ON	Light-ON	Dark-ON
	Response time	0.5ms max.			
	Hysteresis	2% max.			
Specification	Light source	Infrared LED (wavelength: 880 nm)			
	Indicator	Operation indicator (red LED)			
	Short circuit protection	Provided			
	Material	Case	Polyarylate		
		Lens	Polycarbonate		
	Connection	Permanently attached cord (outer dimension: dia. 4) 0.2 sq. 3 core 2 m length			
	Mass	About 70 g			
	Ambient light	5,000 lx max.			
	Ambient temperature	-25 - +55°C (non-freezing)			
	Ambient humidity	35 - 85%RH (non-condensing)			
Protective structure	IP65				

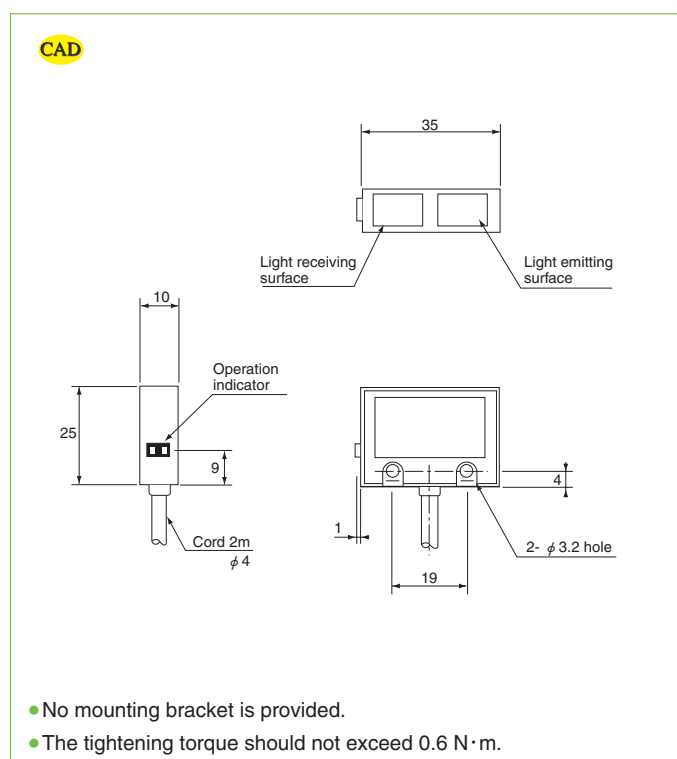
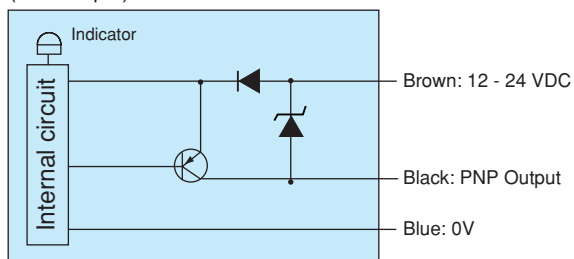
## Input/Output Circuit and Connection

## Dimensions (in mm)

(NPN output)



(PNP output)



- The output transistor turns off when load short circuit or overload occurs.  
Check the load and turn the power back on.