

- Excellent resistance to biggest problem in outdoor use: sunlight

- Dual sensor integration
- Ideal for detecting the passage of vehicles and people

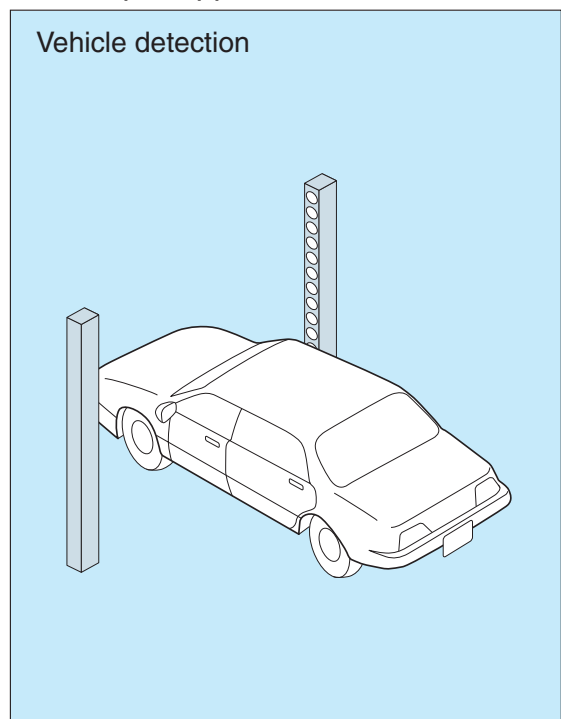
Type

Detection method	Detecting distance	Set model	No. of light axes	Detecting width	Operation mode	Output mode
Through-beam type	 7m	LST-T112	12	900mm	Dark-ON (one output for sensor A/B)	NPN open collector
		LST-T116	16	1220mm	Stability (one output for sensor A/B)	
		LST-T120	20	1540mm	Stability (one output for sensor A/B)	

The LST Series light curtain sensors overcome the weakness of photo sensors vulnerability to faulty operation caused by intense sunlight. One case contains both the transmitter and receiver so that objects passing between the sensor units can be reliably detected by combining the output of one of the two sensors even if the receiver of the other fails due to sunlight.

Sample Application

Vehicle detection



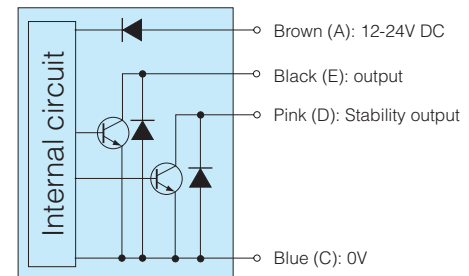
Timing chart



Rating/Performance/Specification

Model	Sensor A	LST-T112A	LST-T116A	LST-T120A
	Sensor B	LST-T112B	LST-T116B	LST-T120B
	Set	LST-T112	LST-T116	LST-T120
	Detection method	Through-beam type (scanning pulsed illumination, matching with consecutive 2 pulses)		
Detecting distance	7m			
Detection object	Opaque object of light blocking width of 100 mm min.			
Light axis interval	80mm			
No. of light axes	12	16	20	
Detecting width	900mm	1220mm	1540mm	1
Operation mode	Dark-ON mode (detection output: 1 each for Sensors A and B)			
Stability output	Provided (1 each for Sensors A and B)			
Output mode	100 mV (30 VDC) max. for each output			
Power supply	24V DC \pm 10% / Ripple 10% max.			
Current consumption	160 mA max.	180 mA max.	200 mA max.	
Response time	12ms	15ms	18ms	
Specification	Light source	Infrared LED		
	Light-sensitive element	Photodiode		
	Indicator	Detection indicator: 1 red LED (Sensor A/B) Stability indicator: 1 green LED (Sensor A/B)		
	Material	Case: aluminum / Front cover: acrylic / Lens: acrylic		
	Connection	Connector (TRC116-12A 10-5F 10.5 provided by Tajimi Electronics)		
Environment	Mass (Sensor A/B)	1.2 kg	1.5 kg max.	2 kg max.
	Ambient light	Direct radiation on light receiving surface 50,000 max. (with halogen lamp)		
	Ambient temperature	- 30 - +60 °C (non-freezing, non-condensing) (Cold start at - 30 °C available)		
	Ambient humidity	20-95%RH (Sensor must be enclosed in case not subject to dew condensation.)		
	Protective structure	IP54		

Input/Output Circuit and Connection



- Output circuit is the same for detection outputs of Sensors A and B and stability output.
- Output is NPN open collector and provided with short circuit protection.

Dimensions (in mm)

