

SS10 · SS20 · SS40 series Light Curtain Sensors



- Light axis interval: 10/20/40mm
- Anti Interference feature for parallel installation (M/S switching)
- Longest -in-class detecting distance of 7m (SS20/SS40 Series)

Type

Series	Detection method	Detecting distance	Light axis interval	No. of light axes	Detecting width	Set model No.	Operation mode	Detecting object		
SS10	Through-beam type	2m	10mm	16	150mm	SS10-T16	<ul style="list-style-type: none"> • A/O switching A: output transistor activated when light beams of all axes are received (all axes ON) • O: output transistor activated when light beam of any axis is received (any axis ON) • M/S switching M: master S: slave (For prevention of interference between adjacently installed units) 	Opaque object of ϕ 17mm min		
				24	230mm	SS10-T24				
				32	310mm	SS10-T32				
				48	470mm	SS10-T48				
				64	630mm	SS10-T64				
				80	790mm	SS10-T80				
96	950mm	SS10-T96								
SS20	Through-beam type	7m	20mm	8	140mm	SS20-T8		<ul style="list-style-type: none"> • A/O switching A: output transistor activated when light beams of all axes are received (all axes ON) • O: output transistor activated when light beam of any axis is received (any axis ON) • M/S switching M: master S: slave (For prevention of interference between adjacently installed units) 	Opaque object of ϕ 32mm min	
				12	220mm	SS20-T12				
				16	300mm	SS20-T16				
				20	380mm	SS20-T20				
				24	460mm	SS20-T24				
				32	620mm	SS20-T32				
				40	780mm	SS20-T40				
				48	940mm	SS20-T48				
SS40	Through-beam type	7m	40mm	4	120mm	SS40-T4			<ul style="list-style-type: none"> • A/O switching A: output transistor activated when light beams of all axes are received (all axes ON) • O: output transistor activated when light beam of any axis is received (any axis ON) • M/S switching M: master S: slave (For prevention of interference between adjacently installed units) 	Opaque object of ϕ 52mm min
				6	200mm	SS40-T6				
				8	280mm	SS40-T8				
				10	360mm	SS40-T10				
				12	440mm	SS40-T12				
				16	600mm	SS40-T16				
				20	760mm	SS40-T20				
				24	920mm	SS40-T24				

- **Number of axes**
Models with numbers of axes other than mentioned in the "Type" table are available. See "Dimensions of portions" in "Dimensions." Contact Takex for details.
- **Types with unnecessary light axis disabled**
Sensors with the light axes for non-detecting area disabled are available on request.
- **Types allowing installation in contact with glossy surface**
Products with countermeasures provided for possible faulty operation due to light from the transmitter reflected on the surrounding floor or wall going around the detection object to reach the receiver are available for all models.
Type and model
• Products with countermeasure are provided for lateral reflection: "-BH" added at the end of the standard model No. (with countermeasure for horizontal light)

SS10·SS20·SS40

Rating/Performance/Specification

Series	SS10 series	SS20 series	SS40 series	
Rating/performance	Detection method	Through-beam		
	Detecting distance	2m max.	7m max.	
	Detecting object	Opaque object of ϕ 17mm min.	Opaque object of ϕ 32mm min	Opaque object of ϕ 52mm min
	No. of light axes	(See "Type.")		
	Detecting width	(See "Type.")		
	Light axis interval	10mm	20mm	40mm
	Power supply	12-24V DC \pm 10% / Ripple 10% max.		
	Output mode	NPN open collector (*) Rating: sink current 100mA (30VDC) max.		
	Operation mode	A/O and M/S switching (with switch)		
	Response time	30ms max.	15ms max.	
Specification	Light source (wavelength)	Infrared LED (860nm)	Infrared LED (950nm)	
	Light-sensitive element	Photo transistor		
	Indicator	Transmitter: M/S indicator (red LED) / Power indicator (green LED) Receiver: Stable light reception indicator (green LED) / Operation indicator (red LED)		
	Auxiliary functions	Output short circuit protection, Anti Interference feature provided for adjacent installation		
	Switch	Transmitter: M/S mode switch (M: master / S: slave); integrated under screw on the back Receiver: Operation mode switch (A: illuminated when beams of all axes are received / O: activated when beam of any axis is received); integrated under screw on the back		
	Material	Case: aluminum / Front cover/lens: Acrylic		
	Connection	Permanently attached cord with connector (cord length: 0.2m) / Cord with connector Cord: with four 0.5mm ² cores (Outer dimension: dia.6.8)		
	Mass	About 250-800g max. (transmitter/receiver)		
	Accessory	Cord with connector (cord length: 5m), mounting brackets, operation manual		
Notes	(*) PNP open collector output type (source current: 100mA max.) is also available.			

Environmental Specification

Ambient light	9,000lx max.
Ambient temperature	-10 - +55°C (non-freezing)
Ambient humidity	35 - 85%RH (non-condensing)
Protective structure	IP66
Vibration	10-55Hz / 1.5mm amplitude / 2 hours each in 3 directions

Current consumption by model

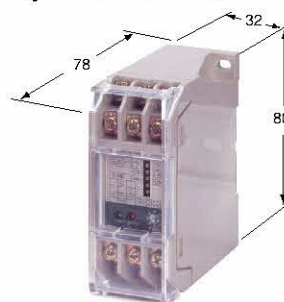
Model	Current consumption
SS10-T16	90mA max.
SS10-T24	103mA max.
SS10-T32	116mA max.
SS10-T48	142mA max.
SS10-T64	168mA max.
SS10-T80	194mA max.
SS10-T96	220mA max.
SS20-T8	70mA max.
SS20-T12	80mA max.
SS20-T16	90mA max.
SS20-T20	100mA max.
SS20-T24	110mA max.
SS20-T32	130mA max.
SS20-T40	150mA max.
SS20-T48	170mA max.
SS40-T4	50mA max.
SS40-T6	55mA max.
SS40-T8	60mA max.
SS40-T10	65mA max.
SS40-T12	70mA max.
SS40-T16	80mA max.
SS40-T20	90mA max.
SS40-T24	100mA max.

Optional Parts

- Cord with connector (10m)
- For transmitter: SS-H10L (gray covering)
- For receiver: SS-H10R (black covering)

Applicable power supply unit

PS Series
High capacity of 200mA at 12VDC



(General-purpose type)
PSSN
PS3N-SR
(Multifunctional type)
PS3F
PS3F-SR

Indicator Operation

	Name	Color	Description
Transmitter	Power indicator	Green	Illuminated when power is supplied
	M/S indicator	Red	Illuminated to indicate M mode Dis-illuminated to indicate S mode
Receiver	Stable light reception indicator	Green	Illuminated when the receive light intensity level is 120% or more of the cooperation level
	Operation indicator	Red	Illuminated when output transistor is activated A: illuminated when light beams of all axes are received O: illuminated when light beam of any axis is received

