

Photocell curtain MS

SG10



Description

- 1-10 metre sensing range
- 74 to 154 cross scanning beams
- Active height of 650mm to 1430mm
- Detector length of 850mm to 1600mm
- Cable or plug connection
- Automatic sensitivity adjustment
- Water-resistant, slim line (12x30mm) detector housing
- Power, output and signal status indicators
- 12 – 36 V dc supply voltage
- Master/Slave synchronisation and multiplexing
- 5 wire, solid state relay output
- Electrically synchronised

The SG 10 M/S light curtain system consists of a self-contained transmitter detector, SGT and receiver detector, SGR, which are to be positioned opposite of each other. The detectors are housed in a water resistant, aluminium profile available in a slim line design (12 x 30 mm).

The SGR is supplied with a 12 – 36 V dc power supply with a 5 wire, solid-state relay output, in light operated function. The system offers a Master set and Slave set which can be wire connected together to form a system of two light curtain sets which are synchronised and multiplexed, ensuring that optical cross-talk between the two sets is prevented. The Master set can also operate as a stand alone system. Transmitter and receiver detectors are electrically synchronised.

The advanced automatic signal-tracking (AST) feature ensures that no onsite set up or adjustments are required. The signal level of each individual channel is adjusted automatically, which compensates for misalignment and contamination during operation. Specialised signal processing technology, designed for outdoor environments, reduces the risk of false detections of water, rain or snow that may pass between the detectors during operation. Both the transmitter and receiver detectors are protected against reverse polarity of power supplies, control input and output signals. The output is also protected against short circuit and inductive loads.

Technical data	46mm channel spacing	
	SGT	SGR
Supply Voltage	12 – 36 V dc	
Current consumption	max. 100 mA	50 mA
Output rating (solid state)	-	200 mA
Short circuit protected	-	yes
Reverse polarity protected	yes	
Light source	-	infrared (880nm)
Number of channels (diodes per detector)	16, 24, 32 or 40	
Numbers of cross scanning beams	74, 114 or 154	
Active height	695, 1065 or 1430	
Channel spacing	Between 1 channel and bottom of housing: 25mm, or 46mm between other channels	
Pinch point beam spacing	23mm	
Response time	-	<170ms
Power on indicator	green LED	
Output indicator	-	yellow LED
Systems status indicator	-	red LED
Time-out function	-	
Housing dimensions (w x d)(slim line)	12 x 30mm	
Housing material	Profile	Aluminium (black anodised)
	Lens cover	Polycarbonate
Connection	5m fixed cable or 0,5m cable with 5 pin	
Cable PVC (Ø4,9mm)	3 x 0,20mm ²	5 x 0,20mm ²

Environmental data	
Light immunity 5° incidence	> 100 000 lux
Temperature, operation	-20 to +65 °C
Temperature, storage	-40 to 80 °C
Sealing class (C housing)	IP 67
Approvals	CE

Available types

Slime Line C

MASTER

Transmitter detector	Housing length	Active height	Number of channels	Number of beams	Beam spacing	Connection		Range	
						Output			
	850mm	695mm	16	74	46mm	-	-	10m	14m
	1250mm	1065mm	24	114	46mm				
1600mm	1430mm	32	154	46mm					
Receiver detector	850mm	695mm	16	74	46mm	Solid state relay	Light (NC)	1- 10m	10- 14m
	1250mm	1065mm	24	114	46mm				
	1600mm	1430mm	32	154	46mm				

SLAVE

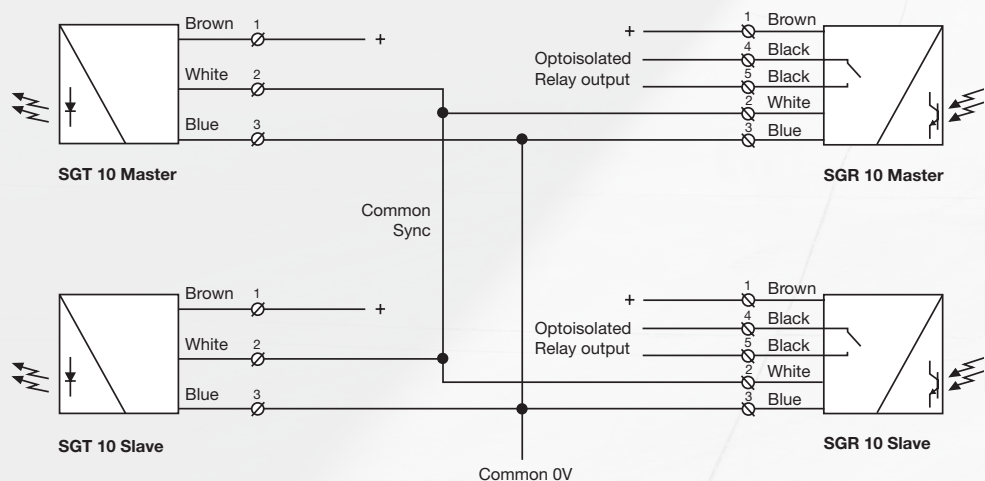
Transmitter detector	Housing length	Active height	Number of channels	Number of beams	Beam spacing	Connection		Range	
						Output			
	850mm	695mm	16	74	46mm	-	-	10m	14m
	1250mm	1065mm	24	114	46mm				
	1600mm	1430mm	32	154	46mm				
Receiver detector	850mm	695mm	16	74	46mm	Solid state relay	Light (NC)	1- 10m	10- 14m
	1250mm	1065mm	24	114	46mm				
	1600mm	1430mm	32	154	46mm				

*Note: The transmitter SGT and receiver SGR set must have the same number of channels and beam spacing.

Connections

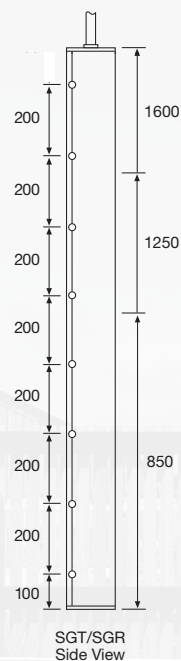
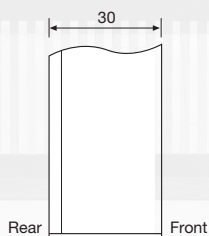
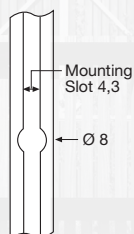
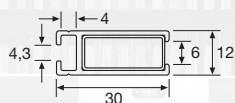
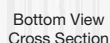
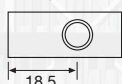
	Cable
Supply +	Brown
Common 0V	Blue
SGR output	Black
SGR output	Black
Common synchronisation	White

Wiring diagrams



Slime Line C

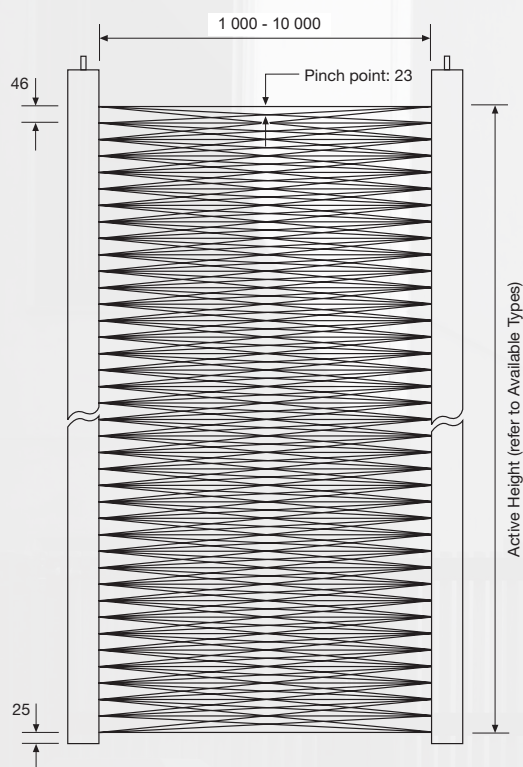
Top Side View



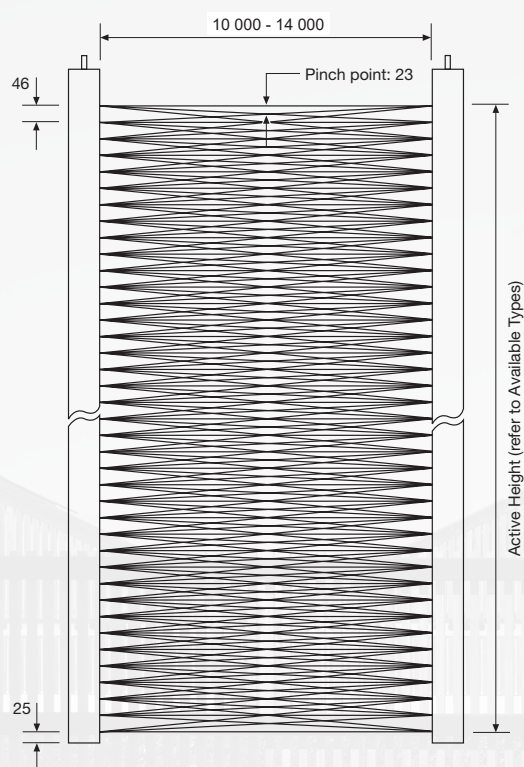
Parallel displacement



Beam patterns



46 mm channel spacing

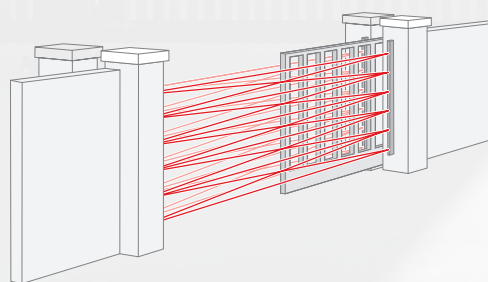


46 mm channel spacing

Applications



INDUSTRIAL DOOR
Vehicle and pedestrian detection



GATES
Vehicle and pedestrian detection