

Description

- 1-10 metre sensing range
- 16 to 56 parallel beams
- Active height of 695 mm to 2535 mm
- Detector length of 850 mm to 2800 mm
- Cable or plug connection
- Automatic sensitivity adjustment
- Water-resistant slim line (12x30 mm), detector housing
- Power, output and signal status indicators
- 12-36 V dc supply voltage
- 5 wire, solid state relay output
- Asynchronous digital output (streaming output)



The SG 25 light curtain series 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 sturdy, weather-resistant aluminium profile with a slim line design (12 x 30 mm).

The SGR is supplied with a 12-36 V dc power supply with a 4 wire, PNP asynchronous digital output.

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. Transmitter and receiver detectors are electrically synchronised.

The SG 25 system has an asynchronous digital (streaming) output that continuously provides, as the light curtain is scanning the channels, the status of each channel. Each scanning sequence is defined by a start sequence pulse.

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			
		SGT	SGR
Supply voltage		12-36 V dc	
Current consumption		Max. 100 mA	50 mA
Max output load		–	200 mA / 36 V dc
Short circuit protected		–	Yes
Reverse polarity protected		Yes	
Light source		Infrared (880 nm)	–
Number of channels (diodes per detector)		16, 24, 32, 40, 48 or 56	
Number of parallel beams		16, 24, 32, 40, 48 or 56	
Active height		695, 1065, 1430, 1800, 2165 or 2535 mm	
Cycle spacing		46 mm	
Bottom spacing to channel 1		25 mm	
Response time		–	16/24 chs: 24 ms 32 chs: 30 ms 40 chs: 37 ms 48 chs: 43 ms 56 chs: 49 ms
Power on indicator		Green LED	
Output indicator		–	Yellow LED
System status indicator		–	Red LED
Time-out function		–	
Housing dimensions (w x d)	Slim Line	12 x 30 mm	
	Profile	Aluminium (black anodised)	
	Lens cover	Polycarbonate	
Connection		5 m fixed cable or 5 pin, M12 plug	
Cable, PVC Ø 4,9 mm		3 x 0,20 mm ²	5 x 0,20 mm ²

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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									
Water-Resistant Slim Line C									
Transmitter Detector	Housing Length	Active Height	Number of Channels	Beam Spacing	Connection		5 m cable	0.5 m cable with 5 pin, M12 plug	Range
					Output		Order Reference		
	850 mm	695 mm	16	46 mm	-	-	SGT 25-085-016-A1-C-S1-5	SGT 25-085-016-A1-C-S1-0.5-J5	10 m
	1250 mm	1065 mm	24				SGT 25-125-024-A1-C-S1-5	SGT 25-125-024-A1-C-S1-0.5-J5	
	1600 mm	1430 mm	32				SGT 25-160-032-A1-C-S1-5	SGT 25-160-032-A1-C-S1-0.5-J5	
	2000 mm	1800 mm	40				SGT 25-200-040-A1-C-S1-5	SGT 25-200-040-A1-C-S1-0.5-J5	
	2400 mm	2165 mm	48				SGT 25-240-048-A1-C-S1-5	SGT 25-240-048-A1-C-S1-0.5-J5	
	2800 mm	2535 mm	56				SGT 25-280-056-A1-C-S1-5	SGT 25-280-056-A1-C-S1-0.5-J5	
Receiver Detector	850 mm	695 mm	16	46 mm	PNP	LO (NC)	SGR 25-085-016-A1-C-S1-5	SGR 25-085-016-A1-C-S1-0.5-J5	1-10 m
	1250 mm	1065 mm	24				SGR 25-125-024-A1-C-S1-5	SGR 25-125-024-A1-C-S1-0.5-J5	
	1600 mm	1430 mm	32				SGR 25-160-032-A1-C-S1-5	SGR 25-160-032-A1-C-S1-0.5-J5	
	2000 mm	1800 mm	40				SGR 25-200-040-A1-C-S1-5	SGR 25-200-040-A1-C-S1-0.5-J5	
	2400 mm	2165 mm	48				SGR 25-240-048-A1-C-S1-5	SGR 25-240-048-A1-C-S1-0.5-J5	
	2800 mm	2535 mm	56				SGR 25-280-056-A1-C-S1-5	SGR 25-280-056-A1-C-S1-0.5-J5	

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

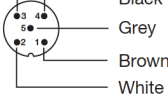
Connections		
	Cable	M12 Plug / Cable
Supply +	Brown	Pin 1 / Brown
Common 0V	Blue	Pin 3 / Blue
SGR output	Black	Pin 4 / Black
Common synchronisation	White	Pin 2 / White

5 pin, M12

Sensor Plug (Male)



Cable Plug (Female)



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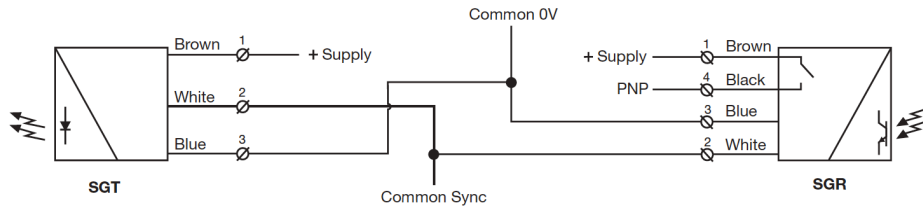
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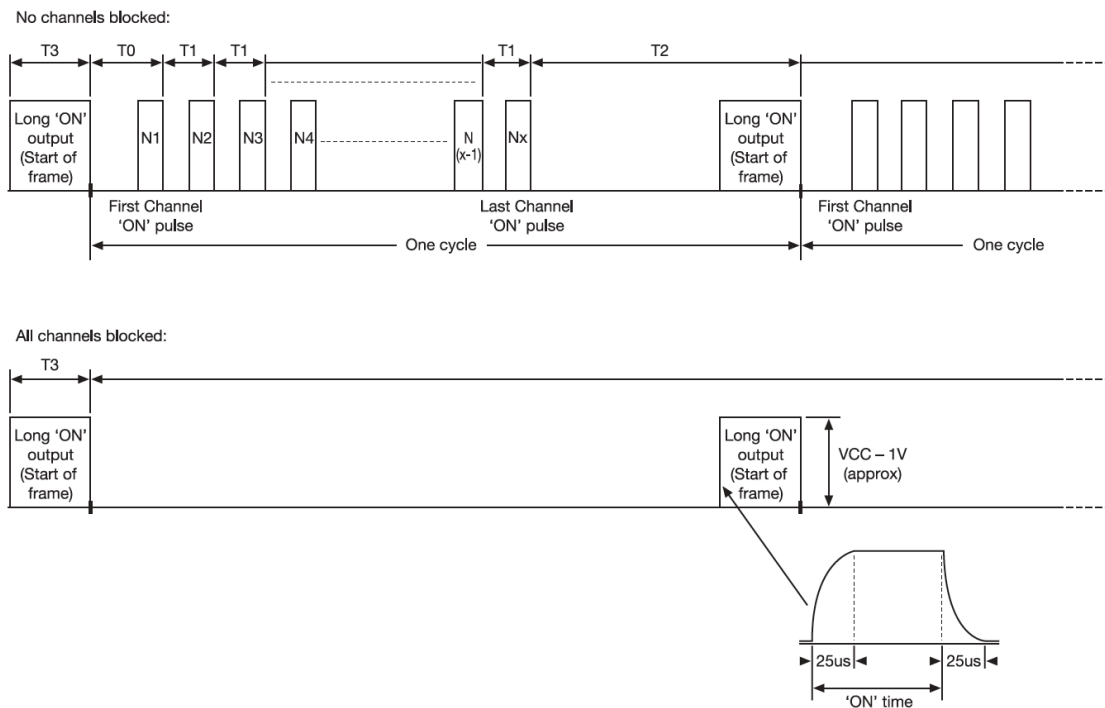
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Wiring Diagrams



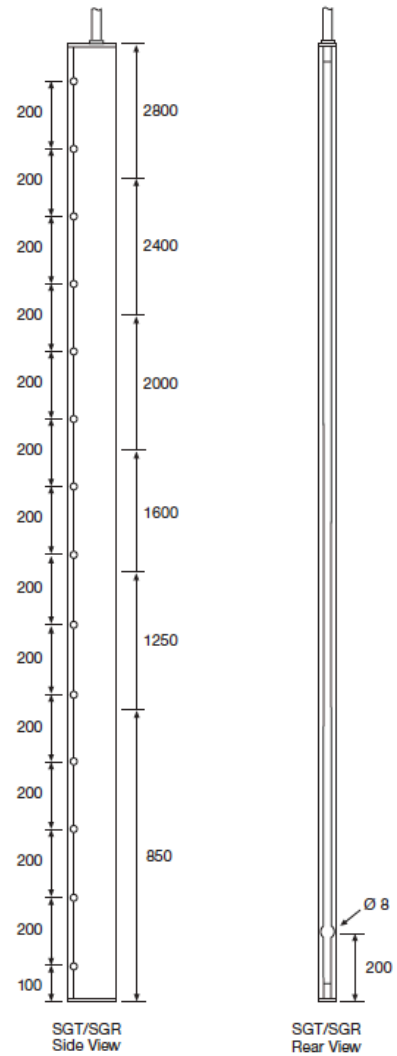
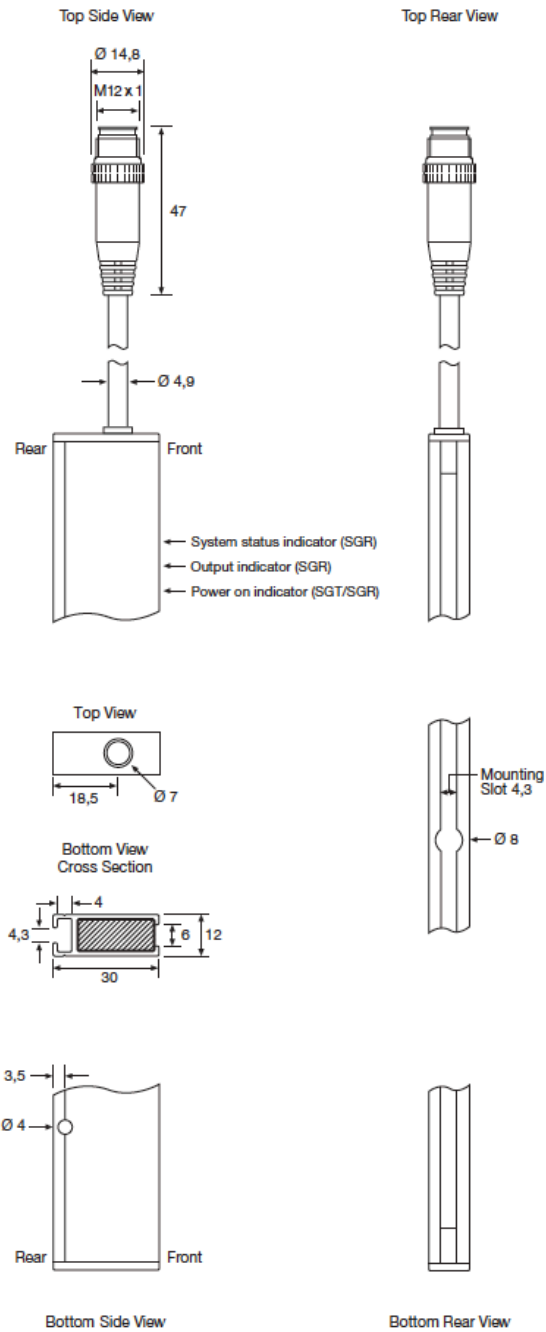
Timing Diagram



Dimensions and Descriptions

Water-Resistant Slim Line C

Details



Note: Drawing shows model with M12 plug

(Units in mm)

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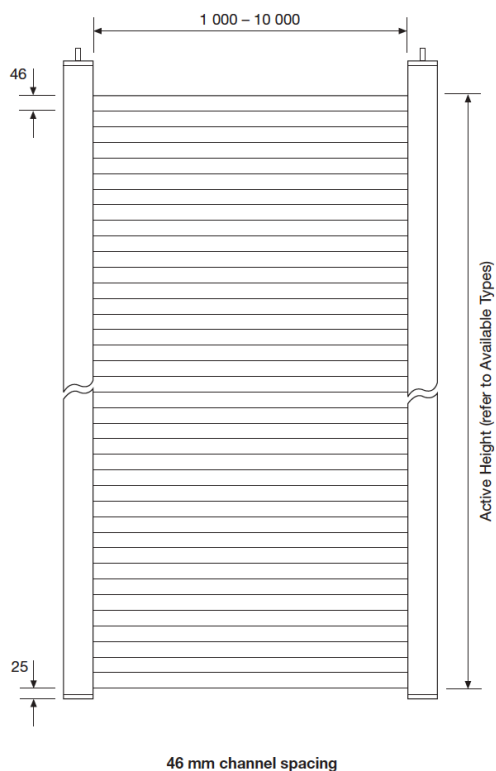
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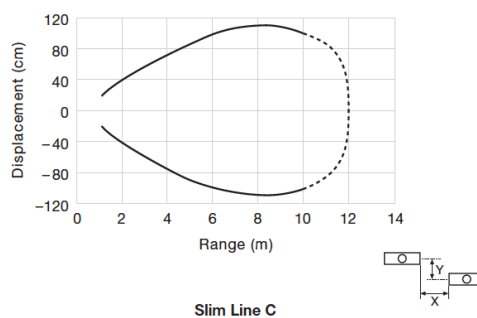
Beam Patterns



(Units in mm)

Sensing Characteristics

Parallel Displacement



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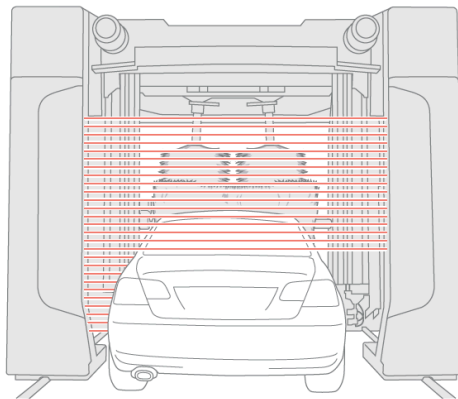
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Applications



CARWASH
Vehicle contouring

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