

GSI 40 – Type 4 safety light curtains	473
GSI 40 – Multi-beam safety light curtains	474
Miniature safety light curtains	475
deTec2 Core - Type 2 safety light curtains	476
deTec4 Core - Type 4 safety light curtains	477
deTec4 Prime - Type 4 safety light curtains	478
IP69K safety light curtains	479
SLC440COMM safety light curtains	480



Safety light curtains explained ...

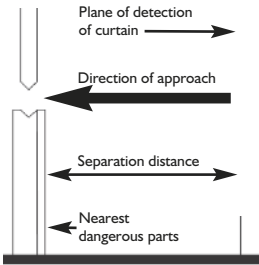


Light curtains have assured the safety of operators working at, or near, dangerous machinery for many years. The system works by creating a detection plane across the danger area. Any intrusion into the plane sends a stop signal to the machine, removing the danger element.

However, it is essential that light curtains are correctly specified for the level of risk involved, both in terms of safety category as well as curtain configuration.

The interface with the control circuit must conform to the appropriate safety category.

Vertical configuration safety distances



A light curtain is not a physical barrier. It can only protect the operator by stopping dangerous machinery before it causes harm.

Any machine takes an amount of time to stop, so the light curtain must be positioned at a certain distance from the machine – the safety or separation distance (S). This allows the machine to stop before the person who has broken the detection plane can reach the moving parts. Additional safety protection may be required if a person could stand between the curtain and the dangerous machinery.

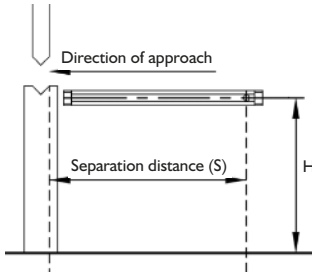
Detection capabilities

- 14mm Finger detection
- 30mm Hand detection
- 70mm Torso detection

Horizontal light curtain configurations

When a light curtain is mounted horizontally and is the only or main presence sensing device, the separation distance to the farthest detection point depends on the mounting height:

$$S(\text{mm}) = 1.6 \times T + (1200 - 0.4H)$$



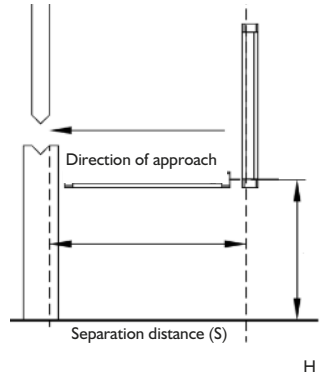
Note: The minimum value for (1200-0.4H) is 850mm. It is necessary to ensure that the height of the sensing field does not exceed 1000mm. If H is greater than 300mm (200mm for detecting children) there is a risk of inadvertent access underneath the detection zone. The lowest allowable height is:

$$H(\text{mm}) = 15(d-40)$$

Horizontal and vertical light curtain configurations

If vertical and horizontal light curtains are used together (for example, where the vertical curtain is the main trip curtain and the horizontal curtain performs presence sensing), the separation distance calculations for the vertical curtain are used.

However, the detection capability calculations of the horizontal curtain, with respect to its height, must also be observed.



European Standard EN ISO 13855 Determination of separation distances

For vertical curtains with a detection capability of 40mm or less (i.e. detection of fingers or hands)

$$S(\text{mm}) = 2 \times T + 8 (d - 14)$$

T = overall response time in milliseconds (response time of machine + response time of safety system)

d = detection capability of the curtain with a minimum S of 100mm

For vertical curtains with a detection capability of more than 40mm (i.e. for torso detection)

$$S(\text{mm}) = 1.6 \times T + 850$$

T = overall response time in milliseconds (response time of machine + response time of safety system)

GS140 – Type 4 safety light curtains



The GS140 is ideal for high-risk applications and is available in a variety of curtain lengths and detection capabilities.

Reset functions and relay outputs can be provided by the SRUS control unit.

Features

- Type 4
- EC type examined
- British design and manufacture
- 14, 30 or 70mm detection
- Built-in Blueview™ alignment aid (not 14mm detection curtains)
- Robust aluminium construction
- Compact cross section



Technical specification

Detection capability

14mm	..... Finger detection
30mm	..... Hand detection
70mm	..... Torso detection

Curtain lengths up to 1800mm

Operating range

14mm detection	..... 6m
30mm detection	..... 15m
70mm detection	..... 15m

Cross section 36 x 45mm

Response times < 18mS

Wavelength 880nm

Enclosure rating IP65

Effective aperture angle ±2.5°

Safety outputs 2 x Solid state PNP
100mA maximum

Supply voltage 24V d.c.

Power consumption < 12VA

EN 954-1 Category	Cat 4
EN ISO 13849-1 Performance Level	PLe
EN 62061 SIL Claim	SIL CL 3
EN 16496-1 Type	4

6m range

(Blueview™ alignment not included)

Length	14mm detection	
	Order Code	List Price
200mm	GS140/LCA/0200/14	£1,150.20
300mm	GS140/LCA/0300/14	£1,342.12
400mm	GS140/LCA/0400/14	£1,534.05
600mm	GS140/LCA/0600/14	£1,918.93
800mm	GS140/LCA/0800/14	£2,302.80
900mm	GS140/LCA/0900/14	£2,494.72
1000mm	GS140/LCA/1000/14	£2,686.65
1200mm	GS140/LCA/1200/14	£3,071.53

15m range

Length	30mm detection		70mm detection	
	Order Code	List Price	Order Code	List Price
200mm	GS140/LCA/0200/30	£990.42	—	—
300mm	GS140/LCA/0300/30	£1,111.80	—	—
400mm	GS140/LCA/0400/30	£1,231.12	GS140/LCA/0400/70	£990.42
600mm	GS140/LCA/0600/30	£1,469.73	GS140/LCA/0600/70	£1,111.80
800mm	GS140/LCA/0800/30	£1,708.35	GS140/LCA/0800/70	£1,290.25
900mm	GS140/LCA/0900/30	£1,827.63	—	—
1000mm	GS140/LCA/1000/30	£1,946.95	GS140/LCA/1000/70	£1,379.47
1200mm	GS140/LCA/1200/30	£2,185.57	GS140/LCA/1200/70	£1,469.73
1400mm	GS140/LCA/1400/30	£2,465.67	GS140/LCA/1400/70	£1,648.17
1600mm	GS140/LCA/1600/30	£2,761.35	GS140/LCA/1600/70	£1,858.77
1800mm	GS140/LCA/1800/30	£3,072.58	GS140/LCA/1800/70	£2,079.75

ORDER CODES COMPRISE OF: 1 x receiver unit and 1 x emitter unit

Cables and connectors

Description	Length	Order Code	List Price
Emitter cable 5-way	10m	EMITTER-CABLE-10M	£33.60
Receiver cable 8-way	10m	RECEIVER-CABLE-10M	£40.40

Accessories

Description	Order Code	List Price
SRUS safety light curtain control unit	SRUS	£139.82
LA-SE laser alignment tool	LA-SE	£148.67
Beam blanking unit	BPU/4	£381.22

Includes . . .

Blueview™ Alignment*

(*30 or 70mm detection only)

Includes . . .

Diagnostic Display

GS140 – Multibeam safety light curtains



Where the risk assessment allows the use of individual beams the system is ideal for access and perimeter guarding.

Because the system is often applied with large distances between emitter and receiver, the Blueview™ alignment aid is fitted on each beam to assist installation, or re-alignment if the curtain is seriously disturbed. Reset functions and relay outputs can be provided by the SRUS control unit.



Essential safety notes from EN ISO 13855

If the risk assessment shows that it is only necessary to detect a person's body when walking into an area, it may be possible to use a system which consists of multiple beams.

In this case the beams should be positioned as follows:

No of beams	Heights above the floor (mm)
2	400, 900
3	300, 700, 1100
4	300, 600, 900, 1200

See page 472 for full details of the calculation of separation distances.

Technical specification

Detection capability	... 2, 3 or 4 beams
Beam spacing	
2 beams	... 500mm
3 beams	... 400mm
4 beams	... 300mm
Operating range	... 0.5-15m or 10-30m
Cross section	... 36 x 45mm
Response time	... < 18mS
Wavelength	... 880nm
Enclosure rating	... IP65
Effective aperture angle	... ±2.5°
Safety outputs	... 2 x solid state, PNP 100mA maximum
Supply voltage	... 24V d.c.
Power consumption	... < 12VA

EN 954-1 Category	Cat 4
EN ISO 13849-1 Performance Level	PLe
EN 62061 SIL Claim	SIL CL 3
EN 16496-1 Type	4

Features

- British design and manufacture
- 2, 3 or 4 beam units
- Built-in Blueview™ alignment aid
- Robust aluminium construction
- Compact cross section
- Range of curtain lengths

	0.5 to 15m range		10 to 30m range	
Detection	Order Code	List Price	Order Code	List Price
2 beams (500 centres)	GS140/LCA/2/15	£631.47	GS140/LCA/2/30	£631.47
3 beams (400 centres)	GS140/LCA/3/15	£708.23	GS140/LCA/3/30	£708.23
4 beams (300 centres)	GS140/LCA/4/15	£732.10	GS140/LCA/4/30	£732.10

ORDER CODES COMPRISE OF: 1 x receiver unit and 1 x emitter unit

Includes . . .

Blueview™ Alignment

Includes . . .

Diagnostic Display

Cables and connectors

Description	Length	Order Code	List Price
Emitter cable 5-way	10m	EMITTER-CABLE-10M	£33.60
Receiver cable 8-way	10m	RECEIVER-CABLE-10M	£40.40

Accessories

Description	Order Code	List Price
SRUS safety light curtain control unit	SRUS	£139.82
LA-SE laser alignment tool	LA-SE	£148.67
Beam blanking unit	BPU/4	£381.22

Miniature safety light curtains

The miniTwin safety light curtain is named for its miniature size and twin stick principle. With a cross section of 15 x 32mm, it is by far the smallest safety light curtain on the market.

With a wide range of lengths available, the miniTwin can be precisely matched to the size of the area needing protection.



Features

- Sender/receiver functions built into one stick (2 identical sticks create a functional pair)
- End to end protection coverage with no dead zone
- Flexible machine integration with easy wiring
- Simplified installation using application specific brackets
- Rapid alignment through coloured LEDs and LED guided start up
- Intelligent configuration without software
- Built-in alignment aid, automatic configuration and beam coding
- Uses standard M12 x 5 cables

Includes:

- 1 x miniTwin light curtain stick
- 1 x Standalone system plug inc. connecting cable with male connector M12 x 4 + FE
- 2 x C-fix brackets with L-fix bracket including 4 screws M5 (DIN 7984/6912)
- 1 x Test rod with diameter corresponding to the physical resolution of the safety light curtain
- 1 x Label Marked "Important information"
- 1 x Operating instructions CD

Technical specification

Supply voltage 24V d.c.
 Outputs (OSSD) PNP 300mA
 Indication ... LED alignment, clear fields and diagnostics
 Connection type 160mm cable to 5 pin M12 connector
 Protection IP65
 Ambient temperature ... -20 to +55°C
 Housing cross section 15 x 32mm
 Protective field height:
 Up to 180mm 160mm length
 Up to 540mm 350mm length
 Up to 1200mm 700mm length

miniTwin – Type 2

EN ISO 13849-1 Category	Cat 2
EN ISO 13849-1 Performance Level	PLc
EN 62061 SIL Claim	SIL CL 1

miniTwin – Type 4

EN ISO 13849-1 Category	Cat 4
EN ISO 13849-1 Performance Level	PLe
EN 62061 SIL Claim	SIL CL 3

REMINDER

Please remember that you will need to purchase 2 x identical miniTwin sticks to create a functional pair.

miniTwin type 2 – Up to 6m scanning range

Protective Field Height	14mm resolution		24mm resolution		34mm resolution	
	Order Code	List Price	Order Code	List Price	Order Code	List Price
Up to 180mm	C2MT-01814BBC03BE0	£350.64	C2MT-01824BBC03BE0	£335.02	C2MT-01834BBC03BE0	£308.66
Up to 300mm	C2MT-03014BBC03DE0	£418.04	C2MT-03024BBC03DE0	£382.88	C2MT-03034BBC03DE0	£354.56
Up to 480mm	C2MT-04814BBC03DE0	£517.66	C2MT-04824BBC03DE0	£453.19	C2MT-04834BBC03DE0	£421.94
Up to 600mm	C2MT-06014BBC03FE0	£585.05	C2MT-06024BBC03FE0	£501.06	C2MT-06034BBC03FE0	£467.84
Up to 780mm	C2MT-07814BBC03FE0	£684.69	C2MT-07824BBC03FE0	£571.39	C2MT-07834BBC03FE0	£535.26
Up to 900mm	C2MT-09014BBC03FE0	£751.09	C2MT-09024BBC03FE0	£618.28	C2MT-09034BBC03FE0	£580.16
Up to 1200mm	C2MT-12014BBC03FE0	£917.15	C2MT-12024BBC03FE0	£735.48	C2MT-12034BBC03FE0	£692.49

miniTwin type 4 – Up to 4m scanning range

Protective Field Height	14mm resolution		24mm resolution		34mm resolution	
	Order Code	List Price	Order Code	List Price	Order Code	List Price
Up to 180mm	C4MT-01814ABB03BE0	£725.91	C4MT-01824ABB03BE0	£655.32	C4MT-01834ABB03BE0	£610.33
Up to 300mm	C4MT-03014ABB03DE0	£866.75	C4MT-03024ABB03DE0	£754.10	C4MT-03034ABB03DE0	£707.15
Up to 480mm	C4MT-04814ABB03DE0	£1,068.71	C4MT-04824ABB03DE0	£900.81	C4MT-04834ABB03DE0	£850.92
Up to 600mm	C4MT-06014ABB03FE0	£1,204.28	C4MT-06024ABB03FE0	£999.60	C4MT-06034ABB03FE0	£947.76
Up to 780mm	C4MT-07814ABB03FE0	£1,406.24	C4MT-07824ABB03FE0	£1,146.30	C4MT-07834ABB03FE0	£1,091.55
Up to 900mm	C4MT-09014ABB03FE0	£1,540.88	C4MT-09024ABB03FE0	£1,244.11	C4MT-09034ABB03FE0	£1,187.39
Up to 1200mm	C4MT-12014ABB03FE0	£1,884.98	C4MT-12024ABB03FE0	£1,488.64	C4MT-12034ABB03FE0	£1,427.03

Cables NEW cables added

Description	5m		10m	
	Order Code	List Price	Order Code	List Price
PVC connection cable with M12 5 pin straight connector	2096240	£10.47	2096241	£15.33

deTec2 Core – Type 2 safety light curtains

The deTec2 Core safety light curtains make it easier than ever before to cost-effectively protect hazardous zones and access points. The deTec family is easy to integrate, quick to install and safe, offering best in class safety light curtain performance.



Typical applications include:

- Machine tool industry
- Automotive
- Food & beverage
- Handling & warehouse systems
- Consumer goods
- Packaging industry

Features

- Type 2
- Absence of blind zones
- Quick commissioning due to integrated LED display and automatic calibration
- Rugged and reliable
- Enclosure rating of IP67

You will need to order . . .

Light curtains:

- 1 x **Sender**
- 1 x **Receiver**

Accessories

- 2 x **M12 5-pin connection leads**
- 1 x **FlexFix brackets (pack of 4)**
- 1 x **Safety relay (see page 489)**

T-junction connector

Plugs directly into the receiver, splits the single home run from control cabinet between sender and receiver.



Technical specification

Detection capability	14mm Finger detection
	30mm Hand detection
Curtain lengths	. . . . . up to 2100mm
Operating range	14mm detection 7m
	30mm detection 10m
Cross section	. . . . . 34 x 30.7mm
Protection rating	. . . . . IP65 and IP67
Safety outputs	. . . . . 2 x PNP short circuit protection

Supply voltage	. . . . . 24V d.c.
Power consumption	
Sender	. . . . . Up to 1.68W
Receiver	. . . . . 3.36W
Ambient temperature	. . . . . -30 to +55°C
Connection	. . . . . 5-pin M12, 200mm flying lead – FlexLoop compatible

PfHs	3.7 x 10 ⁻⁸
EN ISO 13849-1 Performance Level	PLC
EN 62061 SIL Claim	SIL CL 1
Mission Time	20 years

14mm detection – 7m range

Protective Field Height	Sender		Receiver	
	Order Code	List Price	Order Code	List Price
300mm	C2C-SA03010A10000	£277.72	C2C-EA03010A10000	£366.98
450mm	C2C-SA04510A10000	£351.11	C2C-EA04510A10000	£440.38
600mm	C2C-SA06010A10000	£424.51	C2C-EA06010A10000	£513.78
750mm	C2C-SA07510A10000	£497.91	C2C-EA07510A10000	£587.17
900mm	C2C-SA09010A10000	£571.30	C2C-EA09010A10000	£660.57
1050mm	C2C-SA10510A10000	£644.71	C2C-EA10510A10000	£733.97
1200mm	C2C-SA12010A10000	£718.10	C2C-EA12010A10000	£807.36

30mm detection – 10m range

Protective Field Height	Sender		Receiver	
	Order Code	List Price	Order Code	List Price
300mm	C2C-SA03030A10000	£221.19	C2C-EA03030A10000	£310.45
450mm	C2C-SA04530A10000	£276.73	C2C-EA04530A10000	£366.00
600mm	C2C-SA06030A10000	£331.28	C2C-EA06030A10000	£420.54
750mm	C2C-SA07530A10000	£375.23	C2C-EA07530A10000	£470.75
900mm	C2C-SA09030A10000	£441.38	C2C-EA09030A10000	£530.64
1050mm	C2C-SA10530A10000	£496.92	C2C-EA10530A10000	£586.19
1200mm	C2C-SA12030A10000	£551.47	C2C-EA12030A10000	£640.73
1350mm	C2C-SA13530A10000	£607.01	C2C-EA13530A10000	£696.28
1500mm	C2C-SA15030A10000	£661.56	C2C-EA15030A10000	£750.84
1650mm	C2C-SA16530A10000	£717.11	C2C-EA16530A10000	£806.37
1800mm	C2C-SA18030A10000	£771.66	C2C-EA18030A10000	£860.92
1950mm	C2C-SA19530A10000	£827.21	C2C-EA19530A10000	£916.47
2100mm	C2C-SA21030A10000	£881.75	C2C-EA21030A10000	£971.03

Accessories NEW cables added

Description	Order Code	List Price
10m cable with M12, 5-pin right angle connector	2095774	£24.12
10m cable with M12, 5-pin straight connector	2096241	£15.33
T-junction connector	6030664	£22.79
FlexFix brackets (pack of 4)	2066614	£40.63
Safety relay (see page 489)	RLY3-OSSD2	£168.30



deTec4 Core – Type 4 safety light curtains

The deTec4 Core safety light curtains make it easier than ever before to cost-effectively protect hazardous zones and access points. The deTec family is easy to integrate, quick to install and safe, offering best in class safety light curtain performance.



Technical specification

Detection capability
 14mm Finger detection
 30mm Hand detection
 Curtain lengths up to 2100mm
 Operating range
 14mm detection 7m
 30mm detection 10m
 Cross section 34 x 30.7mm
 Protection rating IP65 and IP67
 Safety outputs 2 x PNP short circuit protection

Supply voltage 24V d.c.
 Power consumption
 Sender Up to 2.4W
 Receiver 4.8W
 Ambient temperature -30 to +55°C
 Connection 5-pin M12, 200mm flying lead – FlexiLoop compatible

PFHb	3.7 x 10 ⁻⁹
EN ISO 13849-1 Performance Level	PLe
EN 62061 SIL Claim	SIL CL 3
Mission Time	20 years

Typical applications include:

- Machine tool industry
- Automotive
- Food & beverage
- Handling & warehouse systems
- Consumer goods
- Packaging industry

Features

- Type 4
- Absence of blind zones
- Quick commissioning due to integrated LED display and automatic calibration
- Rugged and reliable
- Enclosure rating of IP67

You will need to order . . .

Light curtains:

1 x **Sender**

1 x **Receiver**

Accessories

2 x **M12 5-pin connection leads**

1 x **FlexFix brackets (pack of 4)**

1 x **Safety relay (see page 489)**

T-junction connector

Plugs directly into the receiver, splits the single home run from control cabinet between sender and receiver.



14mm detection – 7m range

Protective Field Height	Sender		Receiver	
	Order Code	List Price	Order Code	List Price
300mm	C4C-SA03010A10000	£507.91	C4C-EA03010A10000	£675.96
450mm	C4C-SA04510A10000	£643.29	C4C-EA04510A10000	£811.35
600mm	C4C-SA06010A10000	£778.67	C4C-EA06010A10000	£946.73
750mm	C4C-SA07510A10000	£914.06	C4C-EA07510A10000	£1,082.10
900mm	C4C-SA09010A10000	£1,049.42	C4C-EA09010A10000	£1,217.49
1050mm	C4C-SA10510A10000	£1,184.80	C4C-EA10510A10000	£1,352.86
1200mm	C4C-SA12010A10000	£1,320.19	C4C-EA12010A10000	£1,488.24

30mm detection – 10m range

Protective Field Height	Sender		Receiver	
	Order Code	List Price	Order Code	List Price
300mm	C4C-SA03030A10000	£403.33	C4C-EA03030A10000	£571.39
450mm	C4C-SA04530A10000	£506.05	C4C-EA04530A10000	£674.10
600mm	C4C-SA06030A10000	£608.75	C4C-EA06030A10000	£776.80
750mm	C4C-SA07530A10000	£711.44	C4C-EA07530A10000	£879.50
900mm	C4C-SA09030A10000	£814.14	C4C-EA09030A10000	£1,031.31
1050mm	C4C-SA10530A10000	£916.85	C4C-EA10530A10000	£1,084.91
1200mm	C4C-SA12030A10000	£1,019.55	C4C-EA12030A10000	£1,187.60
1350mm	C4C-SA13530A10000	£1,122.25	C4C-EA13530A10000	£1,290.30
1500mm	C4C-SA15030A10000	£1,224.94	C4C-EA15030A10000	£1,393.00
1650mm	C4C-SA16530A10000	£1,327.65	C4C-EA16530A10000	£1,495.71
1800mm	C4C-SA18030A10000	£1,502.55	C4C-EA18030A10000	£1,678.33
1950mm	C4C-SA19530A10000	£1,533.05	C4C-EA19530A10000	£1,701.11
2100mm	C4C-SA21030A10000	£1,635.76	C4C-EA21030A10000	£1,803.81

Accessories

Description	Order Code	List Price
10m cable with M12, 5-pin right angle connector	2095774	£24.12
10m cable with M12, 5-pin straight connector	2096241	£15.33
T-junction connector	6030664	£22.79
FlexFix brackets (pack of 4)	2066614	£40.63
Safety relay (see page 489)	RLY3-OSSD2	£168.30

deTec4 Prime – advanced Type 4 safety light curtains

The deTec4 Prime safety light curtain offers advanced functionality in the same housing as the deTec4 Core, making it ideal for a wider range of applications.



It is configured via four different M12 plugs without the need for a computer. A protective field range of up to 21 m can be measured automatically and the alignment displays, equipped with four LEDs, ensure that the commissioning of the light curtain is quick and safe.

Cascading up to three deTec4 Prime safety light curtains minimises wiring complexity and means that fewer safety capable inputs are required in the control cabinet.

Features

- Extended sensing range up to 21 m
- Option of cascading up to 3 light curtains reduces wiring time
- Restart interlock, external device monitoring, status output, beam coding
- Integrated laser alignment aid for easy commissioning
- Flexi Loop compatible

You will need to order . . .

Light curtains:

- 1 x **Sender**
- 1 x **Receiver**

Accessories

2 x **M12 8-pin connection leads**

- 1 x **FlexFix brackets (pack of 4)**
- 1 x **Safety relay (see page 489)**

NOTE: The light curtains are supplied with a M12 8-pin system connector for standalone use. If the application requires the curtains to be cascaded you will need to replace the standard system connector with the 2076835 connector.

Technical specification

Detection capability	14mm Finger detection	Safety outputs	2 x PNP
	30mm Hand detection		short circuit protection
Curtain lengths	up to 2100mm	Supply voltage	24V d.c.
Operating range		Power consumption	
	14mm detection 0-10m	Sender	Up to 2.4W
	30mm detection 0-21m	Receiver	4.8W
Cross section	34 x 30.7mm	Ambient temperature	-30 to +55°C
Protection rating	IP65 and IP67	Connection*	M12 8-pin system plug (1200) standalone, reset EDM and ADO

*Application diagnostic output

PFHs	9.6 x 10 ⁻³	EN 62061 SIL Claim	SIL CL 3
EN ISO 13849-1 Performance Level	PLe	Mean Time	20 years

14mm detection – 10m range

Protective Field Height	Sender		Receiver	
	Order Code	List Price	Order Code	List Price
300mm	C4P-SA03010A001200	£689.10	C4P-EA03010A001200	£822.80
450mm	C4P-SA04510A001200	£838.70	C4P-EA04510A001200	£1,009.80
600mm	C4P-SA06010A001200	£988.30	C4P-EA06010A001200	£1,196.80
750mm	C4P-SA07510A001200	£1,137.90	C4P-EA07510A001200	£1,383.80
900mm	C4P-SA09010A001200	£1,287.50	C4P-EA09010A001200	£1,570.80
1050mm	C4P-SA10510A001200	£1,437.10	C4P-EA10510A001200	£1,757.80
1200mm	C4P-SA12010A001200	£1,586.70	C4P-EA12010A001200	£1,944.80

30mm detection – 21m range

Protective Field Height	Sender		Receiver	
	Order Code	List Price	Order Code	List Price
300mm	C4P-SA03030A001200	£589.99	C4P-EA03030A001200	£703.12
450mm	C4P-SA04530A001200	£702.19	C4P-EA04530A001200	£838.70
600mm	C4P-SA06030A001200	£814.39	C4P-EA06030A001200	£974.27
750mm	C4P-SA07530A001200	£926.59	C4P-EA07530A001200	£1,109.85
900mm	C4P-SA09030A001200	£1,038.79	C4P-EA09030A001200	£1,245.42
1050mm	C4P-SA10530A001200	£1,150.99	C4P-EA10530A001200	£1,381.00
1200mm	C4P-SA12030A001200	£1,263.19	C4P-EA12030A001200	£1,516.57
1350mm	C4P-SA13530A001200	£1,375.39	C4P-EA13530A001200	£1,652.15
1500mm	C4P-SA15030A001200	£1,487.59	C4P-EA15030A001200	£1,787.72
1650mm	C4P-SA16530A001200	£1,599.79	C4P-EA16530A001200	£1,923.30
1800mm	C4P-SA18030A001200	£1,711.99	C4P-EA18030A001200	£2,058.87
1950mm	C4P-SA19530A001200	£1,824.19	C4P-EA19530A001200	£2,194.45
2100mm	C4P-SA21030A001200	£1,936.39	C4P-EA21030A001200	£2,330.02

Description	Order Code	List Price
System connection M12, 8-pin and extension connection M12, 5-pin	2076835	£97.75
10m cable with M12, 5-pin straight female connector	2095619	£24.12
10m cable with M12, 5-pin right angle female connector	2095773	£14.77
10m cable with M12, 8-pin straight female connector	2095654	£36.65
10m cable with M12, 8-pin right angle female connector	2095781	£36.65
10m cable with M12, 5-pin straight male connector	2096011	£28.05
Illuminated reset pushbutton, quick disconnect, 1 x NO, 5-pin, M12 plug	ER12-SB3C5	£67.25
T-junction connector	6030664	£22.79
FlexFix brackets (pack of 4)	2066614	£40.63
Safety relay (see page 489)	RLY3-OSSD2	£168.30

IP69K light curtains for washdown applications



Features

- Type 4 to IEC/EN 61496-1, -2
- Failsafe transistor outputs
- Fixed and floating blanking function
- LED indication of guard status
- 7 segment display for status and diagnostics

Light curtain features

- 14 or 30mm detection
- 0.3m to 10m range
- Protection field heights 170 to 1450mm

Light grid features

- 2, 3 or 4 beam light grids
- 0.3 to 10m range
- Total length 2 beam 747mm
3, 4 beam 1067mm

Technical specification

Operating temperature	... -10 to +50°C
Storage temperature	... -25 to +70°C
Protection rating	... IP69K
Design of output switching element OSSD	... PNP
Power consumption	
Transmitter	... 4W
Receiver	... 8W
Voltage type	... DC
Switching voltage of the OSSD in high state	... 24V ±20%
Max. output current at safety output	... 500mA
Safety semi-conductor outputs	... 2

EN 954-1 Category	Cat 4
EN ISO 13849-1 Performance Level	PLe
EN 62061 SIL Claim	SIL CL 3
Mission Time	20 years

These light curtains are designed to be used in areas where both hot and cold water jets are used for cleaning machines during wash down cycles. The light curtain is protected by a tube to prevent any water entering the enclosure with end seals to prevent water vapour getting into electronic circuits. They are ideal for food, beverage and pharmaceutical installations. Light grid versions are available in 2, 3 or 4 beam variations and are suitable for perimeter guarding.

Type 4 light curtain with integrated blanking

Description	Order Code	List Price
14mm resolution – 7m range		
250mm protection height	SLC420-E/R-0250-14-69-RFB	£1,338.46
490mm protection height	SLC420-E/R-0490-14-69-RFB	£1,653.85
890mm protection height	SLC420-E/R-0890-14-69-RFB	£2,184.62
1050mm protection height	SLC420-E/R-1050-14-69-RFB	£2,346.15
1210mm protection height	SLC420-E/R-1210-14-69-RFB	£2,553.85
1450mm protection height	SLC420-E/R-1450-14-69-RFB	£2,961.54
30mm resolution – 10m range		
250mm protection height	SLC420-E/R-0250-30-69-RFB	£1,215.38
490mm protection height	SLC420-E/R-0490-30-69-RFB	£1,384.62
890mm protection height	SLC420-E/R-0890-30-69-RFB	£1,723.08
1050mm protection height	SLC420-E/R-1050-30-69-RFB	£1,869.23
1210mm protection height	SLC420-E/R-1210-30-69-RFB	£1,984.62
1450mm protection height	SLC420-E/R-1450-30-69-RFB	£2,146.15
Light grid – 10m range		
500mm 2 beam light grid	SLG420-E/R-0500-02-69-RF	£1,138.46
800mm 3 beam light grid	SLG420-E/R-0800-03-69-RF	£1,230.77
900mm 4 beam light grid	SLG420-E/R-0900-04-69-RF	£1,330.77

ORDER CODE COMPRISES OF: 1 x receiver unit and 1 x emitter unit

Accessories

Description	Order Code	List Price
Mounting brackets	MS-1038	£114.71
10m emitter cable, 4 pole connector	KA-0805	£43.31
20m emitter cable, 4 pole connector	KA-0808	£78.45
10m receiver cable, 8 pole connector	KA-0905	£78.06
20m receiver cable, 8 pole connector	KA-0908	£137.20

... for recommended **SRB series safety relays**  See pages 486-488

SLC440COM – Safety light curtains



NEW



Light curtain features

- Adaptable to any application
- Integrated set-up with large status display
- Reliable safety concept in case of interferences (EMC, welding sparks)
- High protection class for safe and reliable operation. Suitable for rough ambient conditions
- Compact dimensions and very light
- Range 0.3m to 12m
- Response time 10-20ms
- Conforms to standards: EN 61496-1; EN ISO 13849

Light grid features

- Type 4 to IEC 61496-1
- 2, 3 or 4 beam
- 0.3 to 12m range
- Integrated set-up tool, no tools required
- Reliable safety concept in case of interferences (EMC, welding sparks)
- Process safety with highest availability

Technical specification

Operating temperature ... -10 to +50°C
 Storage temperature ... -25 to +70°C
 Protection rating ... IP67
 Design of output switching element OSSD ... PNP
 Power consumption
 Transmitter ... <5W
 Receiver ... <10W
 Voltage type ... DC
 Switching voltage of the OSSD in high state ... 24V ± 10%
 Max. output current at safety output ... 250mA
 Safety semi-conductor outputs ... 2

EN 954-1 Category	Cat 4
EN ISO 13849-1 Performance Level	PLe
EN 62061 SIL Claim	SIL CL 3
Mission Time	20 years

Schmersal's new safety light curtains offer more safety control so that personnel are protected from injury and at the same time machines are protected from damage through the use of advanced integrated diagnostics and parameter setting.

They come in many options in order to provide the right safety system for unique environments.

... for recommended **SRB series safety relays**



See pages 486-488

Description	Order Code	List Price
14mm resolution – 0.3 to 7m range		
330mm protection height	SLC440COM-ER-0330-14	£910.02
650mm protection height	SLC440COM-ER-0650-14	£1,191.43
970mm protection height	SLC440COM-ER-0970-14	£1,475.69
1290mm protection height	SLC440COM-ER-1290-14	£1,770.21
1530mm protection height	SLC440COM-ER-1530-14	£2,012.14
1770mm protection height	SLC440COM-ER-1770-14	£2,265.20
1930mm protection height	SLC440COM-ER-1930-14	£2,442.49
30mm resolution – 0.3 to 10m range		
330mm protection height	SLC440COM-ER-0330-30	£792.35
650mm protection height	SLC440COM-ER-0650-30	£999.51
970mm protection height	SLC440COM-ER-0970-30	£1,202.21
1290mm protection height	SLC440COM-ER-1290-30	£1,406.41
1530mm protection height	SLC440COM-ER-1530-30	£1,566.00
1770mm protection height	SLC440COM-ER-1770-30	£1,746.12
1930mm protection height	SLC440COM-ER-1930-30	£1,874.01
Light grids		
500mm 2 beam light grid	SLG440COM-ER-0500-02	£721.46
800mm 3 beam light grid	SLG440COM-ER-0800-03	£817.75
900mm 4 beam light grid	SLG440COM-ER-0900-04	£853.15

ORDER CODE COMPRISES OF: 1 x receiver unit and 1 x emitter unit

Accessories

Description	Order Code	List Price
Mounting brackets	MS-1038	£114.71
10m emitter cable, 4 pole connector	KA-0805	£43.31
20m emitter cable, 4 pole connector	KA-0808	£78.45
5m receiver cable, 5 pole connector	A-K5P-M12-S-G-5M-BK-2-X-A-1	£50.15
15m receiver cable, 5 pole connector	A-K5P-M12-S-G-15M-BK-2-X-A-1	£93.92