

# PHOTOELECTRIC DEVICES FOR SAFETY

## SE4 series

Type 4 *SAFEasy*<sup>™</sup> Base and Plus safety light curtains

- 150 to 1650 mm controlled heights
- 14, 20, 30, 35 mm resolution and 2, 3, 4 beams
- Finger, hand or body protection
- Versions with Blanking and EDM functions
- Cascade Master/Slave versions and EDM



### COMPLETE SERIES

The SE4 series offers the widest range of Type 4 safety light curtains, including standard Base versions and Plus models with Blanking, Master and Slave Cascadable and EDM functions. Models with 150 - 1650 mm controlled heights are available, with 14, 20, 30 or 35 resolution for finger or hand protection and with 2, 3 or 4 beams for body protection. The Restart and Muting configuration is made using dip-switches protected via HW and SW. The Fixed or Floating Blanking function allows to avoid the detection of objects in a fixed position or in a repetitive movement inside the detection area. The Master and Slave versions can be connected in cascade, forming for example vertical and horizontal 'L-shaped' light curtain systems. The EDM controls also the external relay.

## SE4-R series

Type 4 *SAFEasy*<sup>™</sup> Retroreflex safety light curtains

- 500 mm controlled height
- 2 beam model for body protection
- Passive unit with mirrors or reflectors
- Operating distance up to 7.5 m (linear version) or up to 3 m ('L' and 'T' versions)
- 'L' and 'T' versions with integrated Muting sensors



### NEW PERFORMANCES

The Type 4 retroreflex safety light curtains of the SE4-R series is formed by the active SE4-RA1 unit and by the passive unit with mirrors integrated in the SE4-RDB light curtain or with two SE4-RSM accessory deviating mirrors. The detection height is 500 mm and the operating distance reaches 7.5 m for the linear version or 3 m for the 'L' and 'T' versions. The Restart, EDM and Muting functions are integrated and selectable through the dip-switches on the active unit. 'L' or 'T' shaped versions are available for applications requiring the Muting function. The SE4-R light curtains represent a reliable and cost-effective alternative to light curtains with active units on emitter and receiver sides thanks to reduced costs and installation time as well as the advantage of cabling only the active unit.

## SE4T-L series

Type 4 *SAFEasy*<sup>™</sup> safety light curtains with SE4 T/L Muting functions

- 500 or 800 mm controlled heights
- Models with 2 or 3 beams for body protection
- Integrated sensor and Muting lamp
- 'L' (one-way) or 'T' (two-way) system
- Linear model for external Muting sensors



### NEW PERFORMANCES

The Type 4 safety light curtains of the SE4T-L series have the Muting function completely integrated, thanks to the use of pre-assembled, pre-wired and pre-aligned sensors. Models with 'T' integrated Muting sensors for two-way Muting, 'L' integrated Muting sensors for one-way Muting and linear versions without integrated Muting sensors are available. Versions with 2 or 3 safety beams, with 500 and 800 mm. The operating distances reaches 3 m for the 'T' and 'L' versions using retroreflex arms and 7 m with through beam arms. The linear versions have 25 m operating distances. Integrated Muting lamp and configuration carried-out by dip-switches protected HW and SW distinguish this product series. Muting is necessary when the material has to pass through the dangerous area as for example in palletisers/ depalletisers.

## SG2 series

Type 2 *SAFEasy*<sup>TM</sup> safety light curtains with the best performance/cost ratio

- 2 models: BASE and EXTENDED
- Resolution 30, 50 and 90 mm
- Operating distance up to 19 m and controlled height reaching 1800 mm
- Plus functions for EXTENDED models: EDM, Anti-Interference system, selectable Manual/Automatic Restart



### NEW SERIES

The new SG2 Type 2 safety light curtains represent the natural evolution of the SF2 series. Two models are available, SG2-B 'Base' and SG2-E 'Extended', in order to guarantee replacement of the SF2 series (SG2-B) and the availability of advanced functions for a Type 2 safety light curtain, such as EDM and Anti-Interference (SG2-E). Other distinctive features include the operating distance reaching 19 m, controlled heights ranging from 150 to 1800 mm, one of the best response times available today, as well as the more functional new profile. The product is also prearranged for the use of new 'TOP-BOTTOM' rotating fixing brackets that simplify and speed the alignment of the TX and RX units, also at long distances and in applications with deviating mirrors.

## SG4 series

Type 4 *SAFEasy*<sup>TM</sup> safety light curtains with base functions

- Resolution: 14 and 30 mm
- Operating distance reaching 19m (for 30mm versions) and controlled heights reaching 1800 mm
- Integrated functions for Type 4 base device: EDM, Manual/Automatic Restart

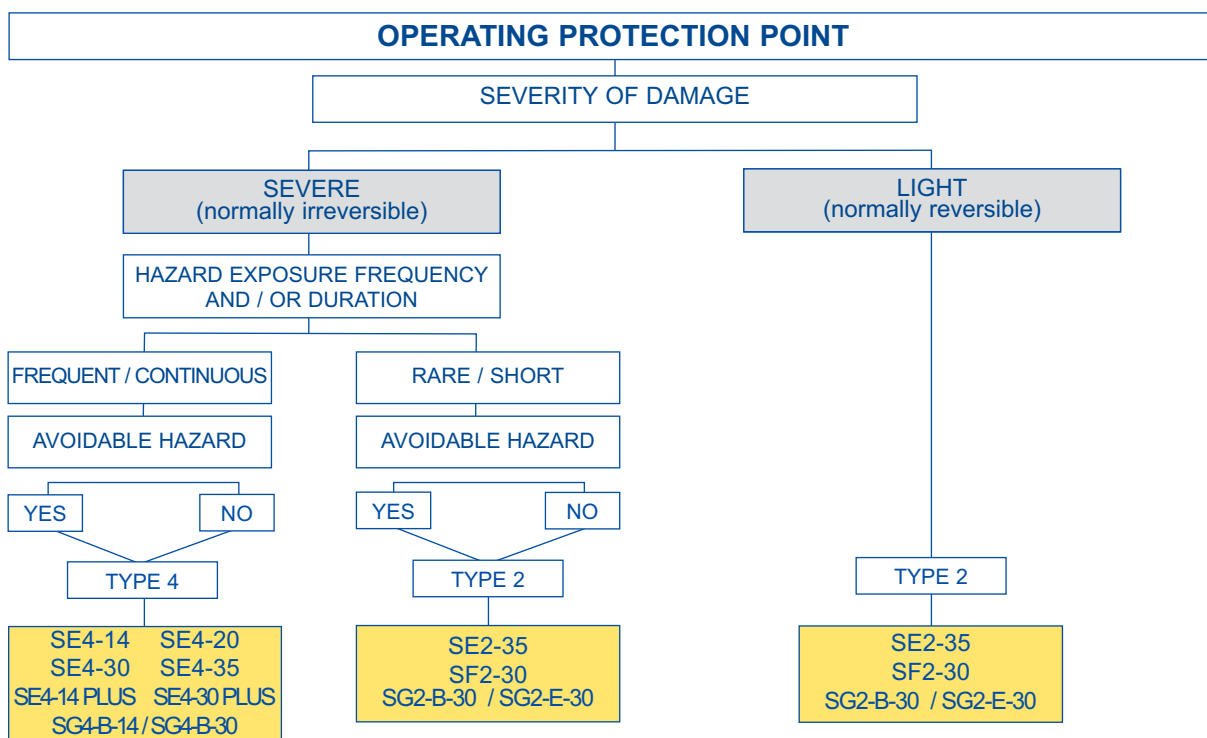


### NUOVA SERIE




The new series of *SAFEasy*<sup>TM</sup> SG4-B safety light curtains widens the existing SG range, whilst representing an evolution of the SE4-PLUS line, offering a Type 4 safety light device for finger protection with base functions. Ideal for applications that do not require complementary functions such as Muting, Cascade and blanking. Improved response time and operating distance, respect to the SE4-PLUS series distinguish this series and make it one of the best performing light curtains available today on the market. All models, with heights ranging from 150 to 1800mm, have 14 and 30 mm resolution for finger and hand protection. The EDM function can be easily activated by wire selection, like the Restart function in manual or automation configuration. The 7-segment display helps the user in understanding the diagnostic messages and product alignment.

# PHOTOELECTRIC DEVICES FOR SAFETY

## Selection guide

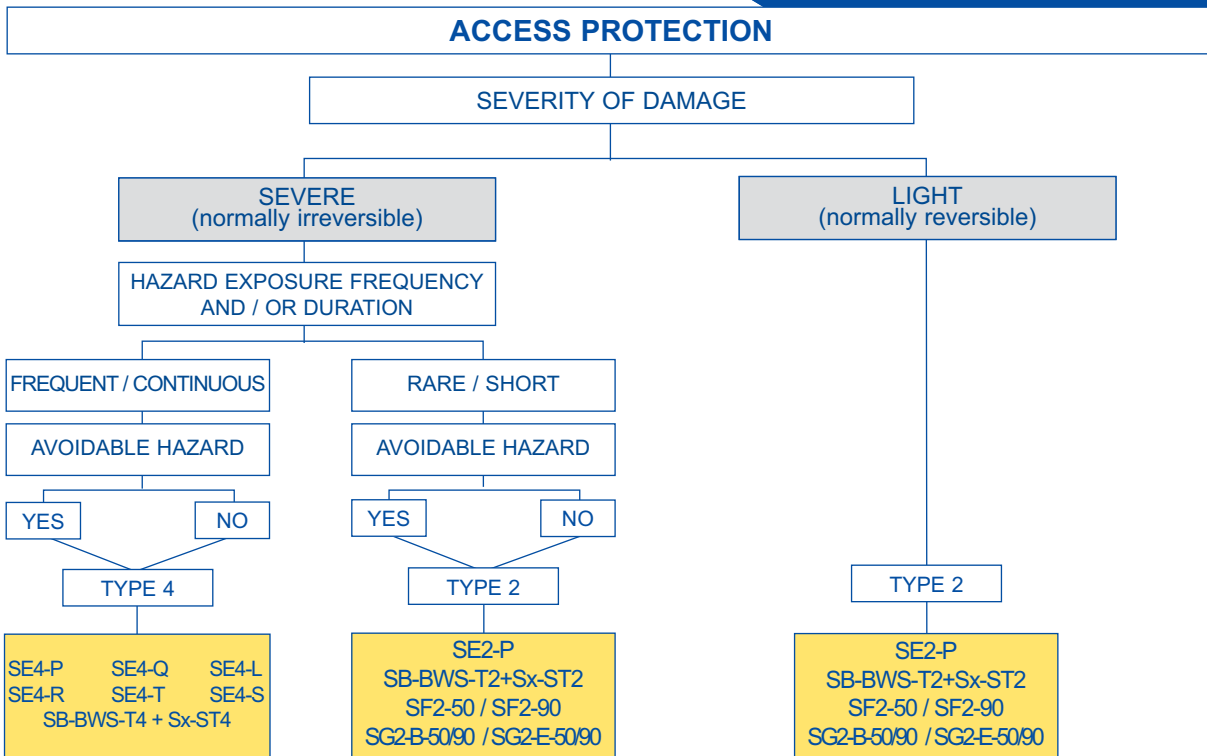


Note: The given information is indicative and synthetic; it is compulsory to refer to the complete **EN 954** standard for a correct risk and safety type evaluation.






	RESOLUTION (mm)	OPERATING RANGE (m)		
	SF2-30	30	15	
	SG2-B-30	30	19	
	SG2-E-30	30	9 / 19*	
			* selectable maximum distance: 9 m or 19 m	
	SE2-35	35	15	
	SG4-B-14	14	6	
	SE4-14	14	6	
	SE4-14 PLUS	14	6	
	SE4-20	20	6	
		SE4-30	30	15
		SE4-30 PLUS	30	15
	SE4-35	35	15	
	SG4-B-30	30	19	

TYPE 2

TYPE 4



Note: The given information is indicative and synthetic; it is compulsory to refer to the complete **EN 954** standard for a correct risk and safety type evaluation.

	RESOLUTION (mm)	OPERATING RANGE (m)	
 Type 2	SE2-P	515 - 415 - 315	50
	SF2-B-50 / 90	50 / 90	15
	SG2-B-50 / 90	50 / 90	19
 Type 2	SG2-E-50 / 90	50 / 90	9 / 19*
	SB-BWS-T2+Sx-ST2	-	up to 50*
			* 8 m with S5/S10-ST2; 50 m with S30-ST2
	SE4-Q	515 - 415 - 315	25
	SE4-P	515 - 415 - 315	50
 Type 4	SE4-T	515 - 415	3
	SE4-L	515 - 415	3
	SE4-S	515 - 415	25
 Type 4	SE4-R 'T'	515	3   7 * 3 m for '-W' versions; 7 m for '-T' versions
	SE4-R 'L'	515	3   7 * 3 m for '-W' versions; 7 m for '-T' versions
	SE4-R Linear	515	7.5
 Type 4	SB-BWS-T4 + Sx-ST4	-	up to 50*
			* 8 m with S5/S10-ST4; 40 m with SL5-ST4; 50 m with S30-ST4

TYPE 2

TYPE 4

# PHOTOELECTRIC DEVICES FOR SAFETY

## Selection guide

Note: The reference Standard is the **EN 999 'Safety of machinery - the positioning of protective equipment in respect of approach speeds of parts of the human body'**. The given information is indicative and synthetic; it is compulsory to refer to the complete **EN 999** standard for a correct safety distance calculation.

The minimum distance  $S$  in mm between the hazardous area and the detection point is expressed by the formula:

$$S = (K \times T) + C$$

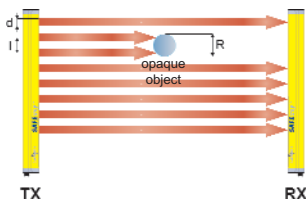
$K$  is a parameter (mm/sec) linked to the approach speed of the human body or parts








$T$  is the total time (sec) necessary to stop the machine, where  $T = t_1 + t_2$

$t_1$  = max. time between the detection actuation and the change of the device switching status

$t_2$  = max. machine response time

$C$  is an additional distance (mm) based on the device typology used in terms of resolution, where the resolution is the minimum dimension of an opaque object able to obscure at least one of the beams of the sensitive detection area.



$R \leq 40$ mm	Finger or hand protection				<b>R=resolution</b>
$R > 70$ mm	Body protection				
$R < 116$ mm	Presence detection				

### NORMAL APPROACH TO THE DETECTION AREA

#### Safety light curtains with 40 mm maximum resolution

$$S = (K \times T) + C$$

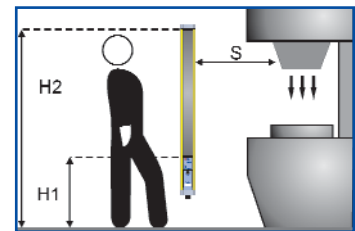
where  $K = 2000$  mm/sec,  $C = 8(d - 14)$  mm but not smaller than 0,

$d$  = device resolution (mm)

This formula is valid for safety distances  $S$  up to 500 mm.

If the result of the formula gives  $S$  higher than 500 mm,  $K = 1600$  mm/sec

and  $S = (1600 \text{ mm/sec} \times T) + 8(d - 14)$  mm



#### Safety light curtains with 40 to 70 mm resolution

$$S = (K \times T) + C$$

where  $K = 1600$  mm/sec,  $C = 850$  mm

In all cases, the highest beam height is  $\geq 900$  mm and the lowest beam is  $\leq 300$  mm.

#### Safety light grid with separate multiple beams

$$S = (K \times T) + C$$

where  $K = 1600$  mm/sec,  $C = 850$  mm

A light grid with 2, 3, 4 separate beams is often used to detect the intrusion of the human body or parts in a specific area; the number of beams and the distance between them depends on the risk estimation made and by specific machine applications. Risks such as slipping under the lower beam, passing over the higher beam, passing through two beams have to be considered. The following table provides the heights from the ground or from reference plane for different beams.

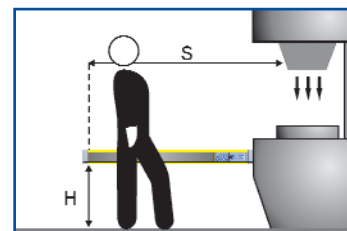
Number of beams	Heights of single beams from the plane (mm)
4	300, 600, 900, 1200
3	300, 700, 1100
2	400, 900

In case of use of a single beam, in an industrial environment, a height of 750 mm is considered appropriate, with the device positioned at a machine distance, where **S = (1600 mm/sec x T) + 1200 mm.**

**PARALLEL APPROACH TO THE DETECTION AREA**

**S = (K x T) + C**

where K = 1600 mm/sec, C = (1200 mm - 0,4 H), not less than 850 mm  
 Hmax = 1000 mm, Hmin = 15 (d - 50 mm), where d = resolution of the safety light curtain



**ANGLED APPROACH RESPECT TO THE DETECTION AREA**

For foreseeable approach angles bigger than 30°, follow the normal approach procedure, while for angles inferior to 30° follow the parallel approach procedure.

**Note:** The reference Standard is the **EN 999 ‘Safety of machinery - the positioning of protective equipment in respect of approach speeds of parts of the human body’**. The given information is indicative and synthetic; it is compulsory to refer to the complete **EN 999** standard for a correct safety distance calculation.

# PHOTOELECTRIC DEVICES FOR SAFETY

## Finger protection



TECHNICAL DATA

### SERIES

According to  
IEC 61496-1  
IEC 61496-2  
Power supply



### SE4-14

Type 4  
integrated light curtains

24 Vdc

14 mm

0.2...6 m

150...900 mm

18...39 ms

2 PNP transistor

Rx: M12 8-poles  
Tx: M12 4-poles

35 x 40

Test  
Manual/auto Restart selection  
Total/partial Muting selection  
Override



### SE4-14 PLUS

Type 4  
integrated light curtains

24 Vdc

14 mm

0.2...6 m

150...1200 mm

21...68 ms  
14...41 ms EDM Models

2 PNP transistor

Rx: M12 8-poles; Tx: M12 4-poles  
Rx: M12 5-poles; Tx: M12 5-poles

35 x 40

Test  
Manual/auto Restart selection  
EDM selection



Resolution

Operating range

Controlled height

Response time

OSSD output

Connection

Dimensions (mm)









Device functions

Certifications

Plus functions

4 models available:  
EDM  
Fixed/Floating Blanking EDM  
Cascading EDM  
Cascading/Blanking EDM



SE4-20	SG4-B-14
Type 4 integrated light curtains	Type 4 integrated light curtains
24 Vdc	24 Vdc
20 mm	14 mm
0.2...6 m	0.2...6 m
150...1650 mm	150 ... 1800 mm
16...39 ms	10...51 ms
2 PNP transistor	2 PNP transistor
Rx: M12 8-poles Tx: M12 4-poles	Rx: M12 8-poles Tx: M12 4-poles
35 x 40	32 x 37
Test Manual/auto Restart selection Total/partial Muting selection Override	Test Manual/auto Restart selection EDM selection
   	   








# PHOTOELECTRIC DEVICES FOR SAFETY









## Hand protection



TECHNICAL DATA

SERIES		SE2-35	SF2-30
According to IEC 61496-1 IEC 61496-2 Power supply		Type 2 integrated light curtains	Type2 integrated light curtains
Resolution		24 Vdc	24 Vdc
Operating range		35 mm	30 mm
Controlled height		0.2...15 m	0.2...15 m
Response time		150...1650 mm	150...1500 mm
OSSD output		15...32 ms	24 ms max.
Connection		2 PNP transistor	2 PNP transistor
Dimensions (mm)		Rx: M12 8-poles Tx: M12 4-poles	Rx: M12 5 poles Tx: M12 4 poles
Device functions		35 x 40	31 x 32
Certifications		Test Manual/auto Restart selection Total/partial Muting selection Override	Test Manual Restart Automatic Restart
Plus functions		   	   












SG2-B-30	SG2-E-30
Type2 integrated light curtains	Type2 integrated light curtains
24 Vdc	24 Vdc
30 mm	30 mm
0.2...19 m	0.2...9 m / 0.2...19 m selectable
150...1800 mm	150...1800 mm
8...24 ms	8...24 ms
2 PNP transistor	2 PNP transistor
Rx: M12 5-poles Tx: M12 4-poles	Rx: M12 8-poles Tx: M12 4-poles
32 x 37	32 x 37
Test Automatic Restart	Test Manual/auto Restart selection
   	   
	EDM selectable Selectable max. distance: 9 m or 19 m

# PHOTOELECTRIC DEVICES FOR SAFETY

## Hand protection



TECHNICAL DATA

SERIES		SE4-20	SE4-30
According to IEC 61496-1 IEC 61496-2 Power supply		Type 4 integrated light curtains	Type 4 integrated light curtains
Resolution		24 Vdc	24 Vdc
Operating range		20 mm	30 mm
Controlled height		0.2...6 m	0.2...15 m
Response time		150...1650 mm	150...1650 mm
OSSD output		16...39 ms	15...32 ms
Connection		2 PNP transistor	2 PNP transistor
Dimensions (mm)		Rx: M12 8-poles Tx: M12 4-poles	Rx: M12 8-poles Tx: M12 4-poles
Device functions		35 x 40	35 x 40
Certifications		Test Manual/auto Restart selection Total/partial Muting selection Override	Test Manual/auto Restart selection Total/partial Muting selection Override
Plus functions		   	   












SE4-30 PLUS	SE4-35	SG4-B-30
Type 4 integrated light curtains	Type 4 integrated light curtains	Type 4 integrated light curtains
24 Vdc	24 Vdc	24 Vdc
30 mm	35 mm	30 mm
0.2...15 m	0.2...15 m	0.2...19 m
150...1650 mm	150...1650 mm	150 ... 1800 mm
16...43 ms 12...26 ms EDM Models	15...32 ms	9...28 ms
2 PNP transistor	2 PNP transistor	2 PNP transistor
Rx: M12 8-poles; Tx: M12 4-poles Rx: M12 5-poles; Tx: M12 5-poles	Rx: M12 8-poles Tx: M12 4-poles	Rx: M12 8-poles Tx: M12 4-poles
35 x 40	35 x 40	32 x 37
Test Manual/auto Restart selection EDM selection	Test Manual/auto Restart selection Total/partial Muting selection Override	Test Manual/auto Restart selection EDM selection
4 models available: EDM Fixed/Floating Blanking EDM Cascading EDM Cascading/Blanking EDM		

# PHOTOELECTRIC DEVICES FOR SAFETY

## Body protection and presence control



TECHNICAL DATA

SERIES	SE2-P	SB-BWS-T2+Sx-ST2
According to IEC 61496-1 IEC 61496-2 Power supply <div style="display: flex; justify-content: space-around; margin-top: 5px;">    </div>	Type 2 integrated light curtains	Type 2 control unit and sensors
	24 Vdc	24 Vdc
N° beams / resolution	2 - 3 - 4	up to 2
Operating range	0.5...50 m	up to 50 m
Controlled height	500 - 800 - 900 - 1200 mm	
Response time	14 ms	22 ms max
OSSD output	2 PNP transistor	2 relay
Connection	Rx: M12 8-poles Tx: M12 4-poles	terminal block
Dimensions (mm)	35 x 40	75 x 100 x 75
Device functions	Test Manual/auto Restart selection Total/partial Muting selection Override	Test Manual Restart
Certifications	   	 
Plus functions		






SF2-50 / SF2-90	SG2-B-50 / SG2-B-90	SG2-E-50 / SG2-E-90
Type 2 integrated light curtains	Type 2 integrated light curtains	Type 2 integrated light curtains
24 Vdc	24 Vdc	24 Vdc
50 / 90 mm	50 / 90 mm	50 / 90 mm
0.2... 15 m	0.2...19 m	0.2...9 m / 0.2...19 m selectable
300...1500 mm	300...1800 mm	300...1800 mm
15...24 ms	8...20 ms (50 vers.) 8...19 ms (90 vers.)	8...20 ms (50 vers.) 8...19 ms (90 vers.)
2 PNP transistor	2 PNP transistor	2 PNP transistor
Rx: M12 5-poles Tx: M12 4-poles	Rx: M12 5-poles Tx: M12 4-poles	Rx: M12 8-poles Tx: M12 4-poles
31 x 32	32 x 37	32 x 37
Test Manual Restart Automatic Restart	Test Automatic Restart	Test Manual/auto Restart selection
   	   	   
		EDM selectable Selectable max. distance: 9 m or 19 m

# PHOTOELECTRIC DEVICES FOR SAFETY

## Body protection



TECHNICAL DATA

SERIES		SE4-P	SE4-Q
According to IEC 61496-1 IEC 61496-2 Power supply		Type 4 integrated light curtains	Type 4 integrated light curtains
N° beams		2 - 3 - 4	2 - 3 - 4
Operating range		4...50 m	0.5...25 m
Controlled height		500 - 800 - 900 - 1200 mm	500 - 800 - 900 - 1200 mm
Response time		14 ms	14 ms
OSSD output		2 PNP transistor	2 PNP transistor
Connection		Rx: M12 8-poles Tx: M12 4-poles	Rx: M12 8-poles Tx: M12 4-poles
Dimensions (mm)		35 x 40	35 x 40
Device functions		Test Manual/auto Restart selection Total/partial Muting selection Override	Test Manual/auto Restart selection Total/partial Muting selection Override
Certifications			
Plus functions			



**SB-BWS-T4+Sx-ST4**

Type 4  
control unit and sensors

24 Vdc

up to 4

up to 50 m

32 ms max

2 relay

terminal block

73 x 152 x 118

Test  
Manual/auto Restart selection  
Total/partial Muting selection  
Muting time-out selection  
Double Muting/Override








# PHOTOELECTRIC DEVICES FOR SAFETY

## Body protection with integrated Muting



TECHNICAL DATA

SERIES		SE4-T	SE4-L
According to IEC 61496-1 IEC 61496-2 Power supply		Type 4 integrated light curtains with Muting sensors 24 Vdc	Type 4 integrated light curtains with Muting sensors 24 Vdc
N° beams		2 - 3	2 - 3
Operating range		0.5...3 m ('-W' models) 0.5...7 m ('-T' models)	0.5...3 m ('-W' models) 0.5...7 m ('-T' models)
Controlled height		500 - 800 mm	500 - 800 mm
Response time		14 ms	14 ms
OSSD output		2 PNP transistor	2 PNP transistor
Connection		Rx: M12 8-poles/M12 5-poles Tx: M12 4-poles ('-W' models) Tx: M12 4-poles/M12 4-poles ('-T' mod.)	Rx: M12 8-poles/M12 5-poles Tx: M12 4-poles ('-W' models) Tx: M12 4-poles/M12 4-poles ('-T' mod.)
Dimensions (mm)		35 x 40	35 x 40
Device functions		Two-way Muting Test Manual/auto Restart selection Muting time-out selection EDM selection Override	One-way Muting Test Manual/auto Restart selection Muting time-out selection EDM selection Override
Certifications			
Plus functions			



**SE4-S**

Type 4  
integrated light curtains  
for external Muting sensors  
24 Vdc

2 - 3

0.5...25 m

500 - 800 mm

14 ms

2 PNP transistor

Rx: M12 8-poles/M12 5-poles  
Tx: M12 4-poles ('-W' models)  
Tx: M12 4-poles/M12 4-poles ('-T mod.)

35 x 40

One-way or two-way Muting  
Test  
Manual/auto Restart selection  
Muting time-out selection  
EDM selection  
Override






# PHOTOELECTRIC DEVICES FOR SAFETY

## Body protection with passive unit and integrated Muting



TECHNICAL DATA

SERIES	SE4-R-'T'	SE4-R-'L'
According to IEC 61496-1 IEC 61496-2 Power supply	Type 4 retroreflex light curtains	Type 4 retroreflex light curtains
	24 Vdc	24 Vdc
N° beams	2	2
Operating range	0.5...3 m	0.5...3 m
Controlled height	500 mm	500 mm
Response time	14 ms	14 ms
OSSD output	2 PNP transistor	2 PNP transistor
Connection	active unit: M12 5-poles / M12 8-poles passive unit: non connected	active unit: M12 5-poles / M12 8-poles passive unit: non connected
Dimensions (mm)	active unit: 35 x 40 passive unit: 52 x 55	active unit: 35 x 40 passive unit: 52 x 55
Device functions	Two-way Muting Test Manual/auto Restart selection Muting time-out selection EDM selection Override	One-way Muting Test Manual/auto Restart selection Muting time-out selection EDM selection Override
Certifications		
Plus functions		



**SE4-R LINEAR**

Type 4  
retroreflex light curtains

24 Vdc

2

0.5...25 m

500 mm

14 ms

2 PNP transistor

active unit: M12 5-poles / M12 8-poles  
passive unit: non connected

active unit: 35 x 40  
passive unit: 52 x 55

One-way or two-way Muting  
Test  
Manual/auto Restart selection  
Muting time-out selection  
EDM selection  
Override



# PHOTOELECTRIC DEVICES FOR SAFETY

## Accessories

### Shielded connector cables

#### CV SERIES

The use of shielded cables is compulsory for the safety devices of the SE2, SE4 light curtains and for the Sx-ST2/ST4 safety sensor series.

- M12 axial or radial connector and cable with 4, 8 poles
- Cable length: 3, 5, 10, 15, 25 m
- Cable material: PVC



### Unshielded connector cables

#### CS SERIES

M12 4-pole unshielded connectors are available for the connection of the Muting sensors. M12 4, 5 and 8-pole UL2464 cable connectors are available for SG2 and SG4-B series.

- M12 axial or radial connector and cable with 3, 4, 5, 8 poles
- Cable length : 3, 5, 7, 10, 15, 25 m
- Cable material: PVC

### Fixing brackets

#### ST SERIES

The fixing brackets are supplied together with the safety light curtains of the SE2, SE4 and SF2 series.

Standard fixing brackets (4 pcs kit) are available as accessories for the SE2 and SE4 safety light curtains, as well as orientable, anti-vibration supports. Standard fixing brackets (12 pcs kit) and anti-scratch fixing brackets (4 pcs kit) are available for the SF2 safety light curtains.



The TOP-BOTTOM rotating fixing brackets help the user in the alignment phase even in the most critical conditions thanks to an 180° rotating angle and a  $\pm 10^\circ$  fine adjustment angle. The rotating bracket kit is supplied together with the SG2-E light curtains and is available as an accessory for the entire SG2-B and SG4-B series.



## Safety relays

### SE - SR2 SERIES

To be used with the SE2, SF2, SE4, SG2 and SG4 safety light curtain series.

- Type 4 safety relays
- Safety contacts: 3 NO 1 NC.



## Test pieces

### TP SERIES

Light curtain test pieces with 14, 20, 30, 35, 40, 50 and 90 mm diameter.



## Muting devices

### LMS SERIES

Muting lamps: standard, tower modular, with horizontal and vertical mounting.

Muting sensors: all DATASENSOR non-safety sensors can be used.



## EDM relay box

### CS SERIES

The connection box has been developed with 3 NO contacts and 1 NC contact for signal feedback in order to simplify and ease EDM connection of the Type 2 and Type 4 safety light curtains integrated with EDM function.

- Module for Type 2 and Type 4 light curtains
- Output contacts: 3 NO safety contacts and 1 NC feedback/EDM contact



## Connection box

### SE - SRT SERIES

Connection box for light curtains with integrated Muting function, allowing a rapid activation of the Override function using key switches and Test / Start commands via the specific push-button. Compatible with the SE4T-L and SE4-R light curtains.

# PHOTOELECTRIC DEVICES FOR SAFETY

## Accessories

### Column and floor stands

#### SE - S SERIES

To be used with the SE2, SE4, SF2 light curtains and SE-DM deviating mirror series.

Available in different heights: 800, 1000 and 1200 mm with 30 x 30 mm profile dimensions. 1500 and 1800 mm with 45 x 45 mm profile dimensions. Ground fixing plate dimensions: 240 x 240 mm.



### Deviating mirrors

#### SE - DM SERIES

To be used with the SE2, SE4, SF2 light curtains and mono-beam

Sx-ST2/ST4 safety sensor series.

Available in different heights ranging 150 mm to 1800 mm.

Deviating mirror dimension: 124 mm width, 6 mm depth.

### Protective stands and deviating mirrors

#### SG - PS / SG - DM SERIES

Sturdy aluminium column stands for shock protection of the mirrors and safety light curtains. All the SE and SG light curtain series can be mounted inside the support as well as the SG-DM mirror series. The fixing system supplied and spherical spirit level at the stainless steel base guarantee fast installation and precise alignment.

*Note: please carefully follow the instructions supplied in the user manual relative to the operating distances for the correct use fo the deviating mirrors.*



## Laser pointer

### SE - LP SERIES

To be used with the SE2, SE4 and SF2 to support emitter and receiver alignment.

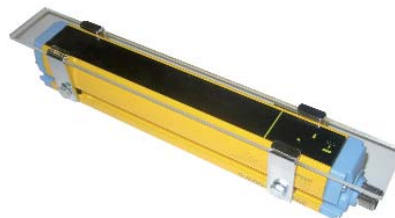


## Lens shield

### SG - LS SERIES

PMMA plate to mount on the front glass of the light curtain to protect it against dust, splinters and/or drops of incandescent material.

Lens shield is available for safety light curtain with a 150-1800 mm controlled height.



## IP69K protection

### SG - IP69K SERIES

Tubular profile for SG light curtains to guarantee IP67/IP69K protection, ideal for the typical "food" industry applications where strong detergents or aggressive agents are frequently used. Accessory is available for safety light curtain with a 150-1800 mm controlled height.



## Protective stands

### SE - P SERIES

To be used with the SE2, SE4 and SF2 safety light curtains. Available in different heights ranging from 273 to 1743 mm.