

# SG BODY BIG BASE SG BODY BIG MUTING



*Robust housing for harsh environments  
Long operating range for perimeter control  
Rapid solution for access control with muting  
Easy installation and alignment*

- 2, 3, 4 beams for body protection
- 40 mm resolution for arm protection and presence detection
- Controlled heights 500, 800, 900 and 1200 mm
- Long operating distance: up to 60 m
- Simple configuration through DIP switches
- Integrated muting lamp (only muting models)
- Anti-interference coding
- External muting enable signal
- Edged or triggered muting dependent override



SAFETY

## APPLICATIONS

- Automatic machines
- Robots
- Automatic assembling lines
- Palletizers and Depalletizers
- Automatic warehouses
- Protecting perimeter areas



## INDUSTRIES

Food & Beverage, Metalworking, Automotive, Wood, Ceramics

	FINGER	HAND	ARM	BODY
TYPE 2				▪
TYPE 4			▪	▪

# SG2-B2-050-00-E

TYPE	
2	Type 2
4	Type 4

MONITORED HEIGHT	
050	500 mm (2 beams)
080	800 mm (3 beams)
090	900 mm (4beams)
120	1200 mm (4 beams)

VERSION	
E	Base: without muting function
W-C	Muting: with integrated muting function

BEAMS AND RANGE	
B2	2 Beams
B3	3 Beams
B4	4 Beams
BSR2	2 Beams Short Range (only type 4)
BSR3	3 Beams Short Range (only type 4)
BSR4	4 Beams Short Range (only type 4)
BLR2	2 Beams Long Range (only type 4)
BLR3	3 Beams Long Range (only type 4)
BLR4	4 Beams Long Range (only type 4)

# SG4-40-060-00-E

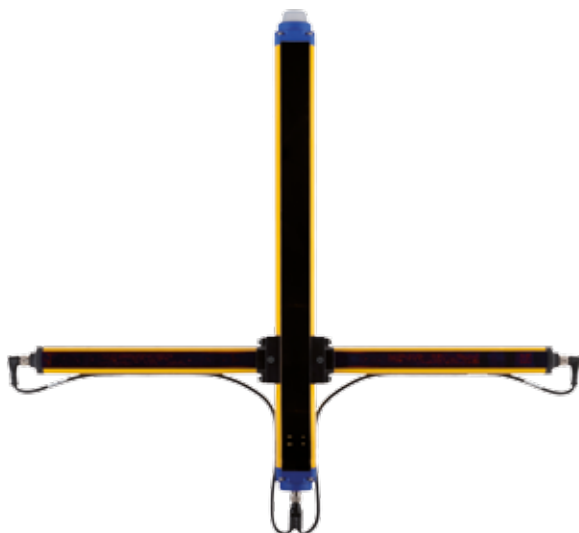
MONITORED HEIGHT	
060	660 mm
090	960 mm
120	1260 mm

## TECHNICAL DATA

	SG2 BODY BIG BASE [ SG2-Bx-xxx-00-E ]	SG2 BODY BIG MUTING [ SG2-Bxxx-xxx-00-W-C ]	SG4 BODY BIG BASE [ SG4-Bx-xxx-00-E ]	SG4 BODY BIG MUTING [ SG4-Bxxx-xxx-00-W-C ]	SG4 LONG RANGE BASE [ SG4-40-xxx-00-E ]
<b>GENERAL DATA</b>					
Type (EN61496-1-2)	2		4		
PL (EN ISO 13849-1)	c		e		
SIL (IEC 61508)	1		3		
Resolution	319,75 mm (4 beams) 419,75 mm (3 and 4 beams) 519,75 mm (2 beams)				40 mm
Operating distance	0.5 ... 60 m		6 ... 60 m	0.5 ... 30 m (Short Range model) 6 ... 60 m (Long Range model)	6 ... 60 m
Retroreflective muting arms operating distance (not included)	---	0.5 ... 3 m	---	0.5 ... 3 m (Only for Short Range model)	---
Emitter-Receiver muting arms operating distance	---	0.5 ... 7 m	---	0.5 ... 7 m	---
Protected height	500 mm (2 beams) 800 mm (3 beams) 900 mm or 1200 (4 beams)				660 mm 960 mm 1260 mm
<b>ELECTRICAL DATA</b>					
Power supply (Vdd)	24 Vdc ± 20%				
Outputs	2 PNP				
Output current	0.5 A max/each output				
Capacitive load	2,2 uF max at 25°C				
Response time	11 ... 24 ms depending on model <sup>A</sup>				20 ... 24 ms depending on model <sup>A</sup>
Cables length (for power supply)	70 m max.				
<b>MECHANICAL AND ENVIRONMENTAL DATA</b>					
Operating temperature	0 ... +55 °C				
Humidity	15 ... 95 % (no condensation)				
Mechanical protection	IP 65 (EN 60529)				
<b>FUNCTIONS</b>					
	Test input				
	Manual/Automatic restart				
	External Device Monitoring (EDM)				
	Coding selection with DIP-SW				
	---	T-Muting/L-Muting	---	T-Muting/L-Muting	---
	---	Muting timeout: 10 min. or ∞	---	Muting timeout: 10 min. or ∞	---
	---	Integrated muting lamp	---	Integrated muting lamp	---
	---	Override	---	Override	---
	---	Muting enable input	---	Muting enable input	---
	---	Override status output	---	Override status output	---
	---	Muting lamp output	---	Muting lamp output	---

### NOTES

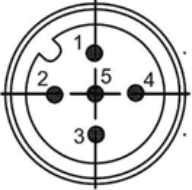
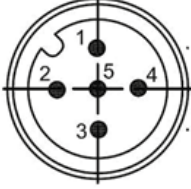
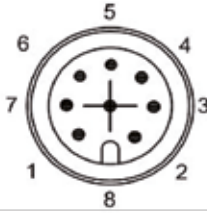
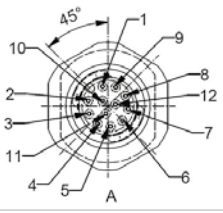
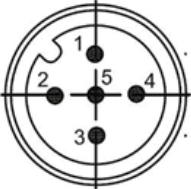
<sup>A</sup> For detailed informations refer to related Product Datasheet or Manual

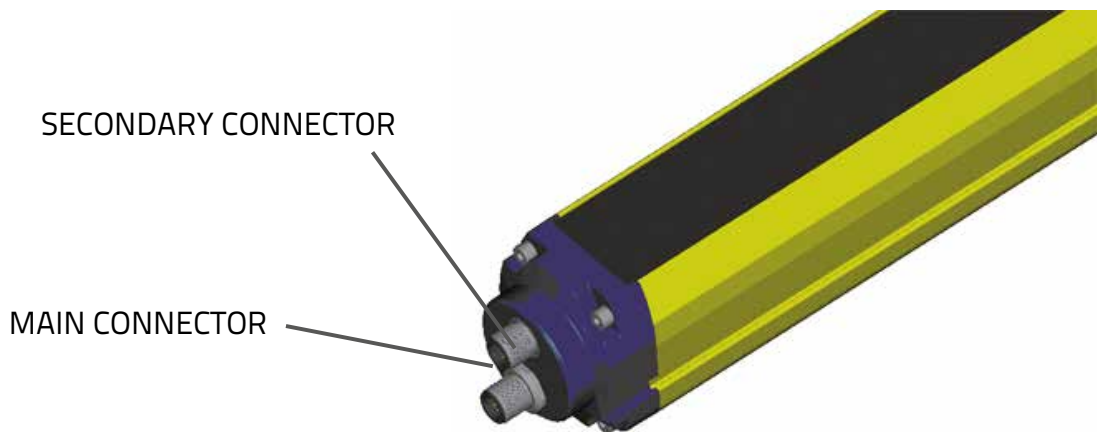


# SG BODY BIG BASE SG BODY BIG MUTING



## CONNECTIONS

	SG BODY BIG BASE [ SG2/4-Bx-xxx-00-E ] SG4 LONG RANGE BASE [ SG4-40-xxx-00-E ]	SG BODY BIG MUTING [ SG2/4-Bxxx-xxx-00-W-C ]
	M12, 5 poles, male 1 = brown = 24Vdc; 2 = white = TEST; 3 = blue = 0V; 4 = black = EARTH	
EMITTER MAIN CONNECTOR		
EMITTER SECONDARY CONNECTOR	---	M12, 5 poles, male 1 = brown = 24Vdc; 3 = blue = 0V
		
RECEIVER MAIN CONNECTOR	M12, 8 poles, male 1 = white = RESET/RESTART/RESTART MODE; 2 = brown = 24Vdc; 3 = green = EDM ENABLE; 4 = yellow = EDM; 5 = grey = OSSD1; 6 = pink = OSSD2; 7 = blue = 0V; 8 = red = EARTH	M12 12-pole connector 1 = Brown = 24Vdc; 2 = Blue = 0V; 3 = White = RESET/RESTART/RESTART MODE; 4 = Green = OVERRIDE 1; 5 = Pink = OSSD 2; 6 = Yellow = EDM; 7 = Black = MUTING ENABLE; 8 = Grey = OSSD 1; 9 = Red = OVERRIDE 2; 10 = Violet = LAMP OUTPUT; 11 = Grey-Pink = OVERRIDE STATUS; 12 = Red-Blue = EARTH
		
RECEIVER SECONDARY CONNECTOR	---	M12, 5 poles, male 1 = brown = 24Vdc; 2 = white = MUTING2; 3 = blue = 0V; 4 = black = MUTING 1
		



# SG BODY BIG BASE SG BODY BIG MUTING



## ACCESSORIES

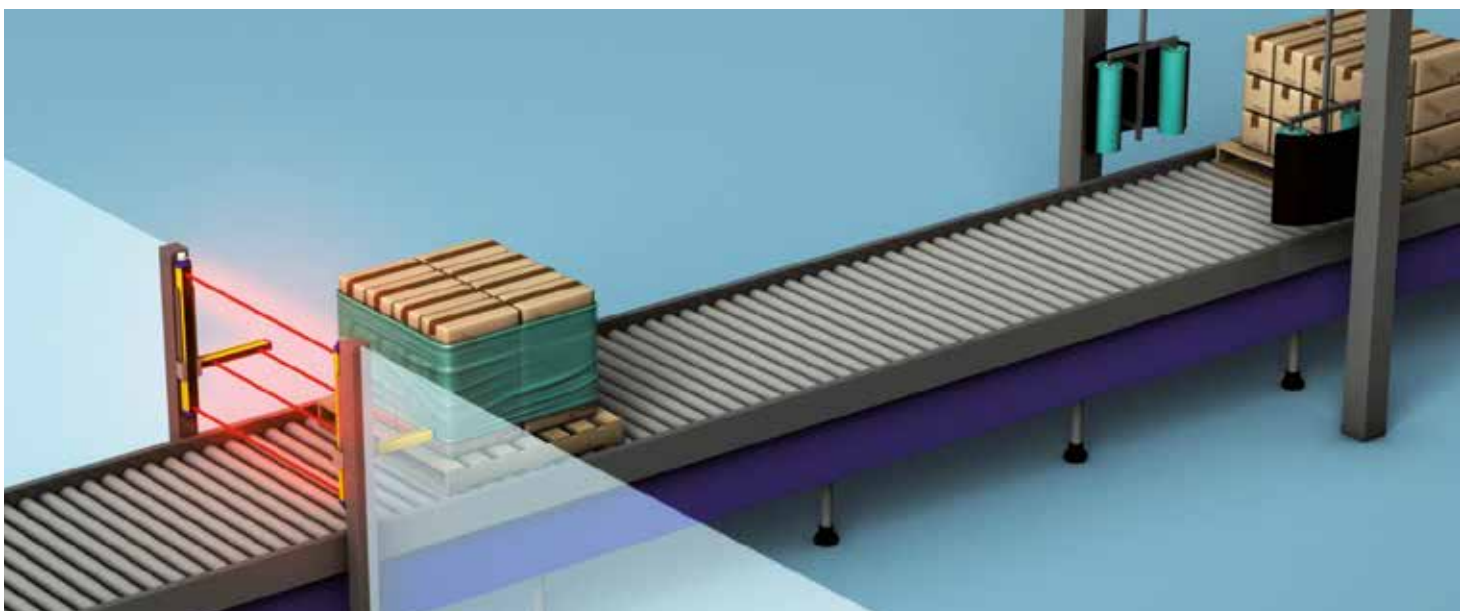
	SG BODY BIG BASE [ SG2/4-Bx-xxx-00-E ]	SG BODY BIG MUTING [ SG2/4-Bxxx-xxx-00-W-C ]	SG4 LONG RANGE BASE [ SG4-40-xxx-00-E ]
<b>BRACKETS</b>			
Included with the light curtain		None	
Standard angled brackets (4 pcs)		ST-K4STD-SG-BODY BIG	
Rear fixing bracket mounting (4 pcs)		ST-K4REAR-SG BODY BIG	
Rotating brackets (4 pcs)		ST-K4ROT-SG BODY BIG	
Antivibration support (4 pcs/6 pcs) <sup>c</sup>		ST-K4AV ST-K6AV	
Plastic brackets (4 pcs/6 pcs) <sup>c</sup>		ST-KP4MP ST-KP6MP	
<b>PROTECTION TUBES, STANDS</b>			
IP67/IP69K tubes		---	
Protective stands		SG-PSB series <sup>B</sup>	
Stand plate for SG-PSB		SG-P	
Protective stands mounting brackets (4 Pcs/6 pcs) <sup>c</sup>		ST-PS4-SG BODY ST-PS6-SG BODY	
Floor columns		SE-S Series	
<b>MIRRORS</b>			
Protective stands with single mirrors	SG-PSM series		---
Deviating mirrors mounting kit for SG-PSB		ST-PS-DM	
Deviating mirrors		SG-DM series	
Mirror mounting bracket		ST-DM	
<b>SAFETY UNIT</b>			
Safety unit		SE-SR2	
Edm relay box <sup>d</sup>		CS ME-03VU24-Y14	
Safety control unit for single beams and SLC		SG-BWS-T4-MT	
<b>ALIGNMENT TOOL</b>			
Laser pointer		SG-LP	
<b>ACCESSORIES FOR MUTING</b>			
Muting arms, brackets and cables	---	See page 70	---
Muting connection box <sup>d</sup>	---	SG-SRT-1	---
External muting lamps	---	LMS series	---

### NOTES

<sup>B</sup> Not possible with T or L muting arms mounted

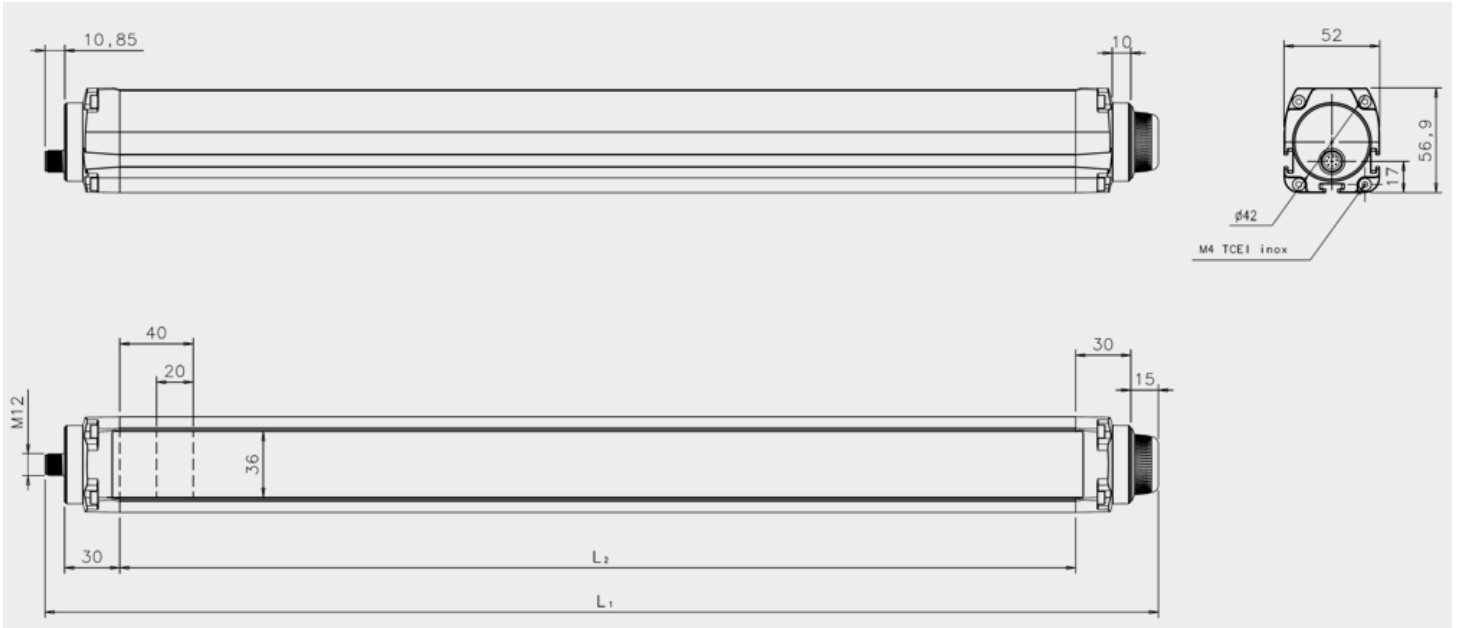
<sup>c</sup> Use 6 brackets for light curtains with length  $\geq$  1200 mm

<sup>d</sup> When using EDM Relay Box or Muting connection box, connect EDM input, and be sure EDM function is active on the safety light curtain



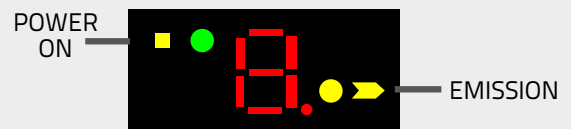
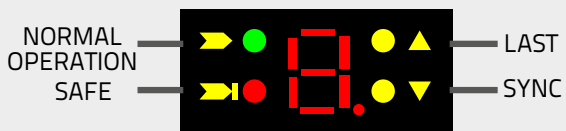
# SG BODY BIG BASE SG BODY BIG MUTING

## DIMENSIONS (mm)



MODEL	L1 [mm]	L2 [mm]
SGx-B2-050-00-E	606,35	520,5
SGx-B3-080-00-E	906,35	820,5
SGx-B4-090-00-E	1006,35	920,5
SGx-B4-120-00-E	1306,35	1220,5
SG4-40-060-00-E	783,35	700,5
SG4-40-090-00-E	1083,35	1000,5
SG4-40-120-00-E	1383,35	1300,5
SGx-Byy2-050-00-W-C	609,35	520,5
SGx-Byy3-080-00-W-C	909,35	820,5
SGx-Byy4-090-00-W-C	1009,35	920,5
SGx-Byy4-120-00-W-C	1309,35	1220,5

## INDICATORS



# SG BODY BIG BASE SG BODY BIG MUTING



## MODEL SELECTION AND ORDER INFORMATION

BODY PROTECTION					ARM PROTECTION PRESENCE DETECTION			
WITHOUT MUTING	SG2 BODY BIG BASE [ SG2-BX-XXX-00-E ]	ORDER CODE	WITHOUT MUTING	SG4 BODY BIG BASE [ SG4-BX-XXX-00-E ]	ORDER CODE	LONG RANGE	SG4 LONG RANGE BASE [ SG4-40-XXX-00-E ]	ORDER CODE
		SG2-B2-050-00-E		957851240			SG4-B2-050-00-E	957851280
	SG2-B3-080-00-E	957851250		SG4-B3-080-00-E	957851290		SG4-40-090-00-E	957851580
	SG2-B4-090-00-E	957851260		SG4-B4-090-00-E	957851300		SG4-40-120-00-E	957851590
	SG2-B4-120-00-E	957851270		SG4-B4-120-00-E	957851310		---	---
WITH INTEGRATED MUTING	SG2 BODY BIG MUTING [ SG2-BXXX-XXX-00-W-C ]	ORDER CODE	SHORT RANGE	SG4 BODY BIG MUTING [ SG4-BXXX-XXX-00-W-C ]	ORDER CODE			
		SG2-B2-050-00-W-C		957851320	SG4-B5R2-050-00-W-C	957851400	---	---
		SG2-B3-080-00-W-C		957851330	SG4-B5R3-080-00-W-C	957851410	---	---
		SG2-B4-090-00-W-C		957851340	SG4-B5R4-090-00-W-C	957851420	---	---
		SG2-B4-120-00-W-C	957851350	SG4-B5R4-120-00-W-C	957851430	---	---	
		---	---	LONG RANGE	SG4-BLR2-050-00-W-C	957851360	---	---
		---	---		SG4-BLR3-080-00-W-C	957851370	---	---
		---	---		SG4-BLR4-090-00-W-C	957851380	---	---
	---	---	SG4-BLR4-120-00-W-C		957851390	---	---	

## CABLES

	TRANSMITTER CABLE (MAIN CONNECTOR)	LENGTH (m)	ORDER CODE	
SG BODY BIG BASE [ SG2-Bx-xxx-00-E ] [ SG4-Bx-xxx-00-E ]	CS -A1-03-U-03	3	95ASE 1170	
	CS -A1-03-U-05	5	95ASE 1180	
SG4 LONG RANGE BASE [ SG4-40-xxx-00-E ]	CS -A1-03-U-10	10	95ASE 1190	
	CS -A1-03-U-15	15	95ASE 1200	
SG BODY BIG MUTING [ SG2-Bx-xxx-00-W-C ] [ SG4-Bxxx-xxx-00-W-C ]	CS -A1-03-U-25	25	95ASE 1210	
	CS -A1-03-U-50	50	95A252700	
	RECEIVER CABLE (MAIN CONNECTOR)	LENGTH (m)	ORDER CODE	
SG BODY BIG BASE [ SG2-Bx-xxx-00-E ] [ SG4-Bx-xxx-00-E ]	CS -A1-06-U-03	3	95ASE1220	
	CS -A1-06-U-05	5	95ASE1230	
	CS -A1-06-U-10	10	95ASE1240	
SG4 LONG RANGE BASE [ SG4-40-xxx-00-E ]	CS -A1-06-U-15	15	95ASE1250	
	CS -A1-06-U-25	25	95ASE1260	
	CS -A1-06-U-50	50	95A252710	
SG BODY BIG MUTING [ SG2-Bx-xxx-00-W-C ] [ SG4-Bxxx-xxx-00-W-C ]	CS -A1-10-U-03	3	95A252720	
	CS -A1-10-U-05	5	95A252730	
	CS -A1-10-U-10	10	95A252740	
	CS -A1-10-U-15	15	95A252750	
	CS -A1-10-U-25	25	95A252760	
	CS -A1-10-U-50	50	95A252770	
	TRANSMITTER CABLE (SECONDARY CONNECTOR)	RECEIVER CABLE (SECONDARY CONNECTOR)	LENGTH (m)	ORDER CODE
SG BODY BIG MUTING [ SG2-Bx-xxx-00-W-C ] [ SG4-Bxxx-xxx-00-W-C ]	CS -A1-03-U-03	CS -A1-03-U-03	3	95ASE 1170
	CS -A1-03-U-05	CS -A1-03-U-05	5	95ASE 1180
	CS -A1-03-U-10	CS -A1-03-U-10	10	95ASE 1190
	CS -A1-03-U-15	CS -A1-03-U-15	15	95ASE 1200
	CS -A1-03-U-25	CS -A1-03-U-25	25	95ASE 1210
	CS -A1-03-U-50	CS -A1-03-U-50	50	95A252700

### NOTES

All cables have axial connectors