

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

SG BODY BIG BASE SG BODY BIG MUTING



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]
--	--	--	--	--	--

GENERAL DATA

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

ELECTRICAL DATA

Power supply (Vdd)	24 Vdc $\pm$ 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 ^A				20 ... 24 ms depending on model ^A
Cables length (for power supply)	70 m max.				

MECHANICAL AND ENVIRONMENTAL DATA

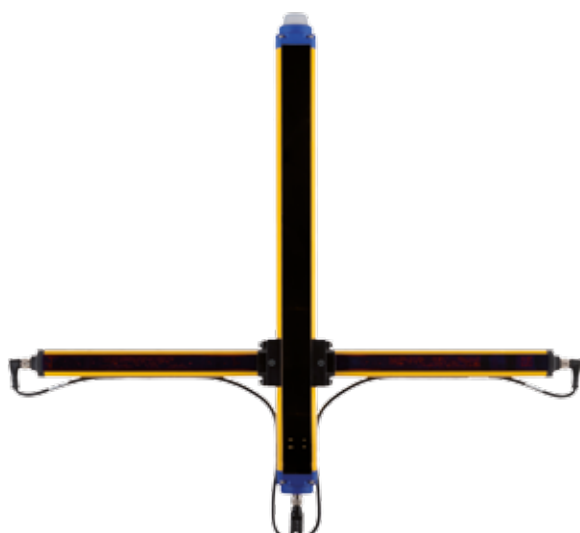
Operating temperature	0 ... +55 °C				
Humidity	15 ... 95 % (no condensation)				
Mechanical protection	IP 65 (EN 60529)				

FUNCTIONS

	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 engage input	---	Muting engage input	---
	---	Override status output	---	Override status output	---
	---	Muting lamp output	---	Muting lamp output	---

NOTES

^A For detailed informations refer to related Product Datasheet or Manual



SG BODY BIG BASE SG BODY BIG MUTING

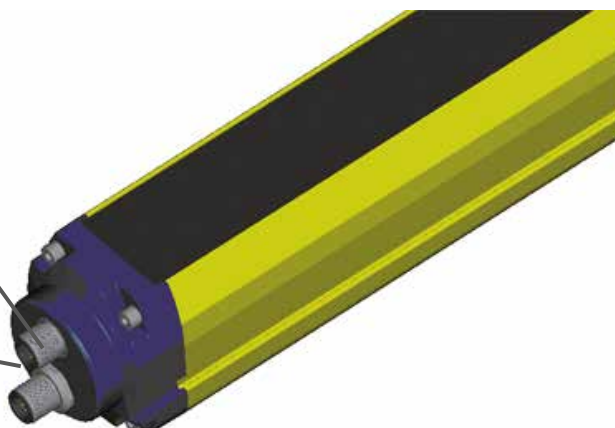


CONNECTIONS

	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

SECONDARY CONNECTOR

MAIN CONNECTOR



SG BODY BIG BASE SG BODY BIG MUTING



ACCESSORIES

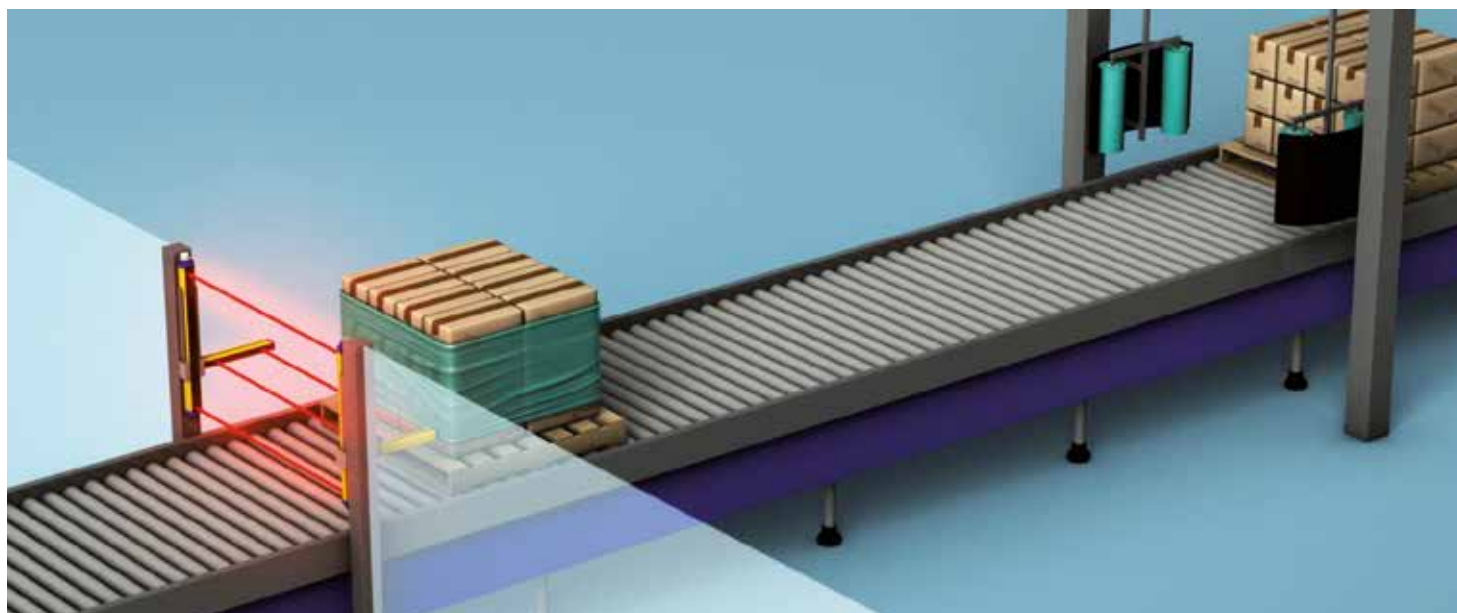
	SG BODY BIG BASE [SG2/4-Bx-xxx-00-E]	SG BODY BIG MUTING [SG2/4-Bxxx-xxx-00-W-C]	SG4 LONG RANGE BASE [SG4-40-xxx-00-E]
BRACKETS			
Included with the light curtain		None	
Standard angled brackets (4 pcs)		ST-K4STD-SG-BODY BIG	
Rear fixing bracket mounting (4 pcs)		ST-K4REAR-SG BODY BIG	
Rotating brackets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

NOTES

^B Not possible with T or L muting arms mounted

^c Use 6 brackets for light curtains with length ≥ 1200 mm

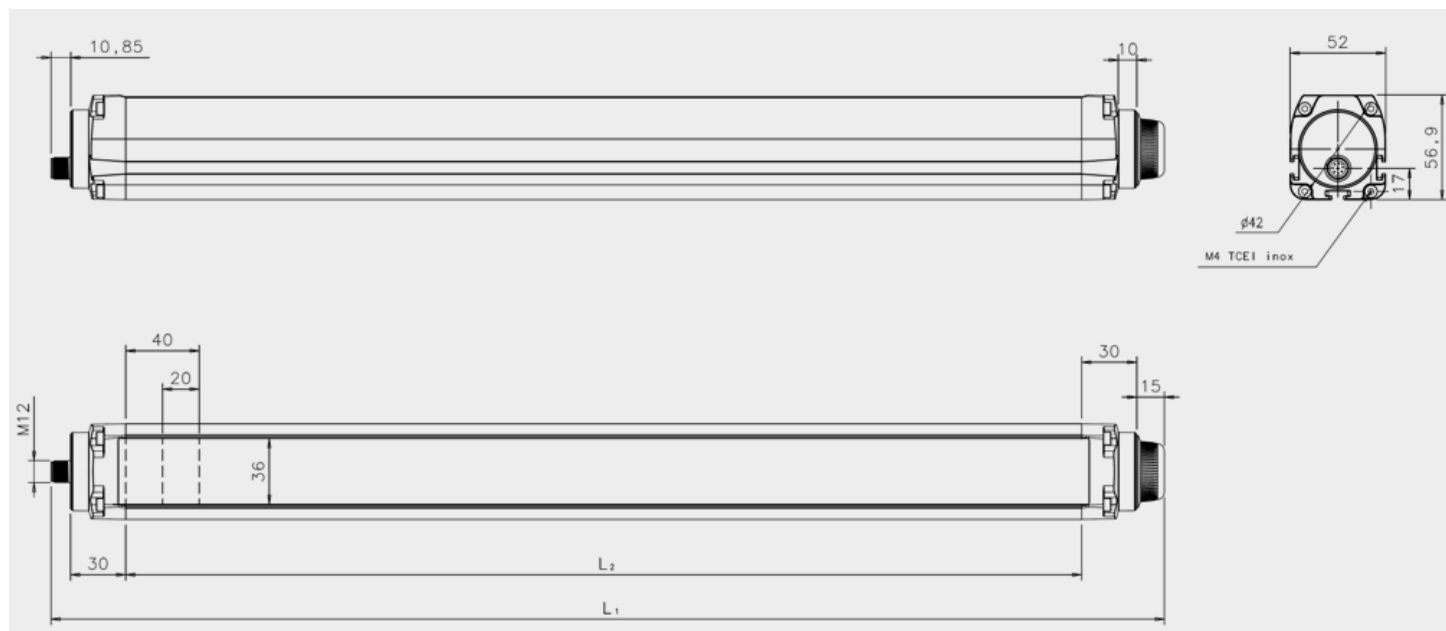
^d When using EDM Relay Box or Muting connection box, connect EDM input, and be sure EDM function is active on the safety light curtain



SG BODY BIG BASE SG BODY BIG MUTING

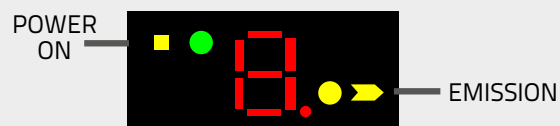
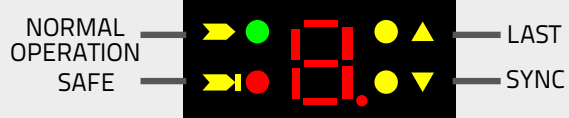


DIMENSIONS (mm)



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		SG4-40-060-00-E	957851570
	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	3	95ASE 1170
	CS -A1-03-U-05	5	95ASE 1180
	CS -A1-03-U-10	10	95ASE 1190
	CS -A1-03-U-15	15	95ASE 1200
	CS -A1-03-U-25	25	95ASE 1210
	CS -A1-03-U-50	50	95A252700

NOTES

All cables have axial connectors