

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



APPLICATIONS

- Automatic machines
- Robots
- Automatic assembly lines
- Palletizers and depalletizers
- Material handling

INDUSTRIES

- Food & Beverage
- Metalworking
- Automotive
- Wood
- Ceramics

	FINGER	HAND	ARM	BODY
Type 2				x
Type 4			x	x

SG 2 - 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 (4 beams)
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)

SG 4 - 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]
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 ± 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)				
Housing Material	Painted aluminium, PBT				
Window material	PMMA				
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 enable input	---	Muting enable input	---
	---	Override status output	---	Override status output	---
	---	Muting lamp output	---	Muting lamp output	---

NOTES

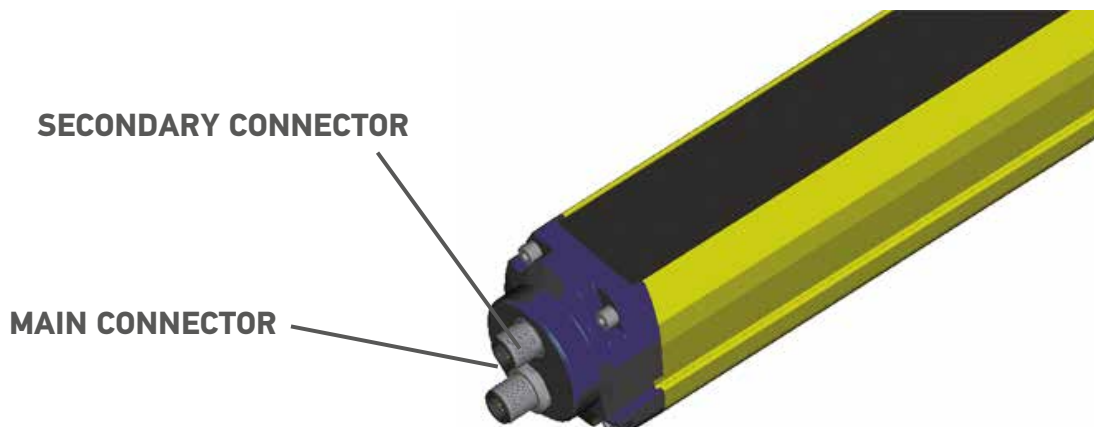
^A For detailed informations refer to related Product Datasheet or Manual



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



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

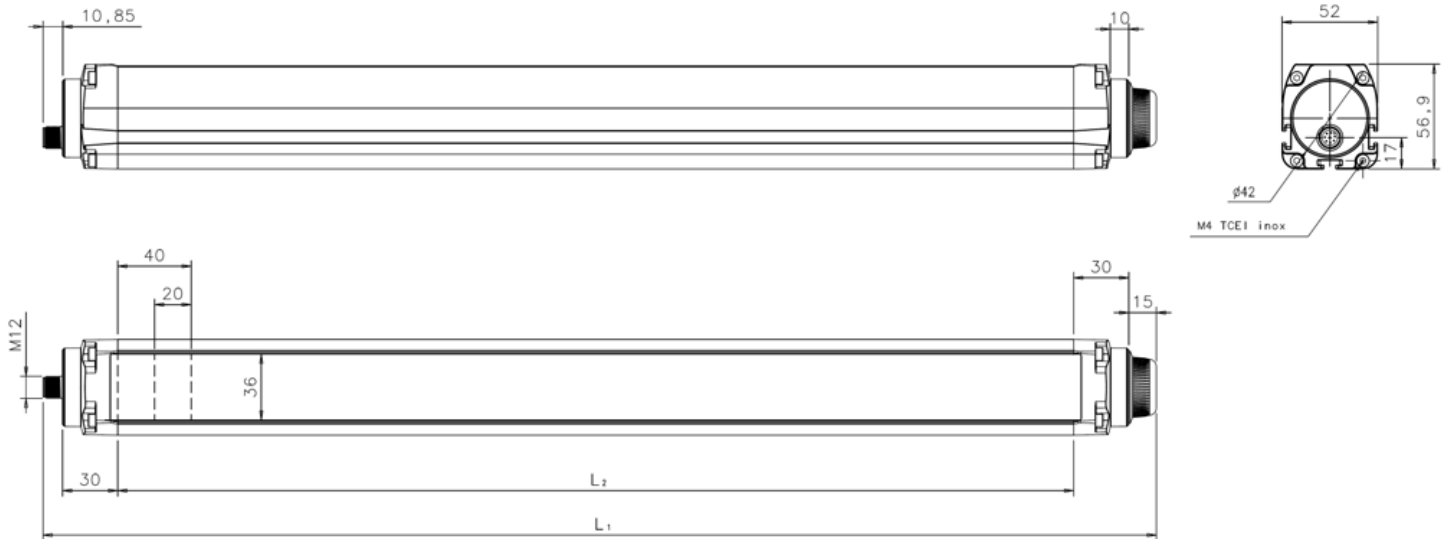
^B Not possible with T or L muting arms mounted

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

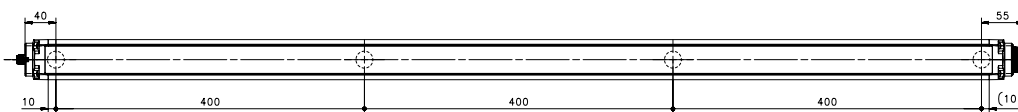
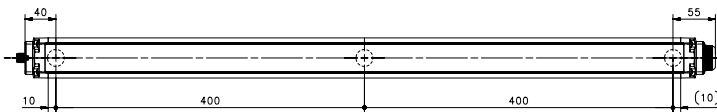
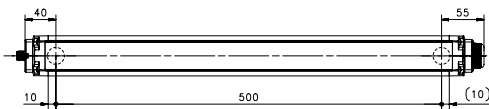
^D When using EDM Relay Box or Muting connection box, connect EDM input, and be sure EDM function is active on the safety light curtain



DIMENSIONS (MM)

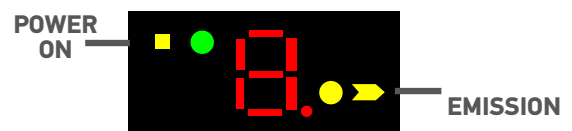
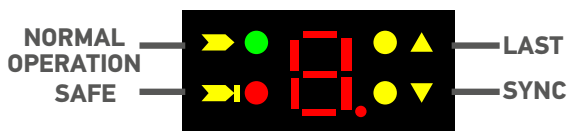


DIMENSIONS (MM)



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



MODEL SELECTION AND ORDER INFORMATION

BODY PROTECTION					ARM PROTECTION PRESENCE DETECTION	
	WITHOUT MUTING		WITHOUT MUTING	LONG RANGE		
	SG2 BODY BIG BASE [SG2-BX-XXX-00-E]	ORDER CODE		SG4 BODY BIG BASE [SG4-BX-XXX-00-E]	ORDER CODE	SG4 LONG RANGE BASE [SG4-40-XXX-00-E]
WITHOUT MUTING	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	SHORT RANGE		SHORT RANGE			
	SG2 BODY BIG MUTING [SG2-BXXX-XXX-00-W-C]	ORDER CODE	SG4 BODY BIG MUTING [SG4-BXXX-XXX-00-W-C]	ORDER CODE		
	SG2-B2-050-00-W-C	957851320	SG4-BSR2-050-00-W-C	957851400	---	---
	SG2-B3-080-00-W-C	957851330	SG4-BSR3-080-00-W-C	957851410	---	---
	SG2-B4-090-00-W-C	957851340	SG4-BSR4-090-00-W-C	957851420	---	---
	SG2-B4-120-00-W-C	957851350	SG4-BSR4-120-00-W-C	957851430	---	---
	---	---	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)	LENGTH (m)	ORDER CODE
	RECEIVER CABLE (SECONDARY CONNECTOR)		
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

The company endeavours to continuously improve and renew its products; for this reason the technical data and contents of this catalogue may undergo variations without prior notice. For correct installation and use, the company can guarantee only the data indicated in the instruction manual supplied with the products. Rev. 07, 05/2020